

SCHEDULE 4.3 OPERATIONAL SERVICES

EXHIBIT 4.3.8 MINIMUM ACCEPTABLE SERVICE LEVELS (MASLs)

1 MINIMUM ACCEPTABLE SERVICE LEVELS (MASLS)

1.1 MASL Overview

Each MASL has been created to identify key performance measures that will be used to evaluate Provider’s delivery of the requested Services. The overriding goal in developing MASLS is to support the County’s desire to manage Contractor by monitoring and measuring performance on the County’s most-important business requirements. The County expects that new MASLS may be added to reflect changing or new business requirements. The County expects continuous improvement in Contractor’s provision of Service and, therefore, expects to review MASLS at least yearly and, where appropriate, to adjust the MASLS to reflect continuous improvement in Contractor’s provision of Service.

1.2 MASL Weighting Factor Summary

The Contractor is required to deliver services which meet or exceed MASL requirements.

The MASLS are summarized below. MASL Weighting Factors apply as indicated in the summary chart (and per the Fee Reductions in Schedule 16.8). The County may adjust Weighting Factors in accordance with Schedule 16.8.

Weighting Factors		
MASL#	Title	Weighting
1	Call Waiting	1.5%
2	Call Waiting	1.5%
3	BreakFix (B/F) Resolution Notice	0.0%
4	Call Abandonment	1.5%
5	Password Resets	1.0%
6	Password Resets	1.0%
7	Call Pick-Up	1.0%
8	Call Pick-Up	1.0%
9	Overall System Availability	0.0%
10	System Availability	0.0%
11	Transaction Response Time	0.0%
12	Transaction Response Time	0.0%
13	Transaction Response Time	0.0%
14	Transaction Response Time	0.0%
15	Transaction Response Time	0.0%
16	Transaction Response Time	1.0%
17	Transaction Response Time	1.0%
18	Backups	0.0%

19	Backups	0.0%
20	Voice System	0.0%
21	System Availability	0.0%
22	System Availability	0.0%
23	System Availability	0.0%
24	System Availability	0.0%
25	Transaction Response Time	0.0%
26	Transaction Response Time	0.0%
27	Restore	0.0%
28	Restore	0.0%
29	Output Services	1.0%
29	Output Services	0.0%
30	Backup completion	4.0%
31	System Availability	0.0%
32	System Availability	0.0%
33	System Availability	0.0%
34	B/F Test Servers	0.5%
35	Work Request	0.0%
36	Work Request	0.0%
37	Work Request	0.0%
38	Work Request	0.0%
39	Work Request	0.0%
40	Work Request	0.0%
41	B/F	13.0%
42	B/F	9.0%
43	B/F	3.0%
44	B/F	11.0%
45	B/F	7.0%
46	B/F	2.0%
47	B/F	7.0%
48	B/F	3.0%
49	B/F	1.0%
50	B/F	7.0%
51	B/F	2.0%
52	B/F	1.0%
53	B/F	11.0%
54	B/F	7.0%
55	B/F	3.0%
56	Service Repair Scheduling	1.0%
57	Creation of User IDs	2.0%

58	Creation of User IDs	2.0%
59	Creation of User IDs	2.0%
60	Restore	2.0%
61	Restore	2.0%
62	Restore	0.0%
63	Restore	0.0%
64	Proposal Request	0.0%
65	Proposal Request	0.0%
66	Moves	4.0%
67	Moves	4.0%
68	Add	4.0%
69	Add	4.0%
70	Remove	4.0%
71	Remove	4.0%
72	New Device Install	4.0%
73	New Device Install	4.0%
74	Surveys	0.0%
75	Surveys	0.0%
76	Help Desk Handoff	0.0%
77	System Availability	5.0%
78	System Availability- Applications Server	5.0%
79	System Availability-Infrastructure Server	5.0%
80	Rework	7.0%
81	New WR Budget MASL	8.0%
82	New WR Schedule MASL	8.0%
83	Budgetary Estimate Request	1.0%
84	Transaction Response Time	
85	Customer Sat Survey	15.0%
TOTAL		200.0%

1.3 MASL Detail

This Section provides more detailed information on the MASLs.

1.3.1 Portfolio Applications Category Codes

- Category 1a Application** – Full MASL where Contractor maintains the subcontract relationship with the 3rd party vendor or has done the development. Includes applications that have been formally transitioned from the 3rd party

vendor to the Contractor. Must have a contingent work order or service request.

- **Category 1b Application** – MASL only on the Contractor custom developed software where the County has the subcontract relationship with the 3rd party vendor.
- **Category 2 Application** – No MASL; may have a contingent work order or service request.

1.3.2 Break-Fix MASL Priorities

Priority 1 problems are those outages affecting the Life, Safety and Health Applications (or supporting hardware) that impact multiple End-Users. This Priority encompasses life threatening/security concerns at the highest level, and critical health care/services systems. This includes:

- All voice down at any site (entire voice system, including Off-Net only)
- Polinsky Center (entire site Data System) or Auto Attendant
- Rosecrans Psych Hospital (entire site Data System)
- Edgemoor Hospital (entire site Data System)

Priority 2 problems are those outages affecting Mission Critical Applications (or supporting hardware) that impact multiple End-Users. These encompass outages that prevent a department or division from conducting primary business functions, or when systems essential to providing services to County residents are unavailable. These include:

- All data down at a Type 1, 2 or 3 Site (entire data system)
- Business Functionality Auto Attendants or ACDs
- Video Teleconferencing Systems located at the Courts, Probation, and Public Defender
- Internet access (entire County)
- File Services (any file server)

- Print Services (any print server)
- E-mail (any e-mail server)
- Any Interactive Voice Response (IVR) systems/applications
- 800 Number Problems
- Remote Access via VPN or AS5300 (any AS5300 by location or the entire service)
- County Badge Reader System (entire system only)
- All On-Net voice down at Type 1, 2 or 3 sites

Priority 3 problems are any outages falling into the Priority 1 or Priority 2 levels, except that they affect a single End-User rather than multiple End-Users. These include:

- Intranet access (entire County)
- Jail Blue Phones
- All data down at a Type 4, 5, or 6 Site (entire data system)
- Informational Only Auto Attendants or ACDs
- Voice Mail System (entire County)
- Audio systems
- All other Video Conferencing Systems
- Alarm Circuits
- SCADA monitoring Circuits
- All On-Net voice down at Type 4, 5 & 6 sites
- Any Multiple User Outage of a Non-Mission Critical Application

Priority 4 problems are those outages affecting business function Applications (or supporting hardware) that impacts multiple End-Users.

Priority 5 problems are any outages falling into the Priority 4 level, except that they affect a single End-User rather than multiple End-Users.

Priority 6 problems are any outages affecting single or multiple End-Users, but where End-User production is not affected.

Priority 7 problems are comprised of any IMAR, or CSRF that is the subject of an Work Request.

1.3.3 Break-fix MASL Reporting Exclusions

Tickets pertaining to the following shall not be included in the calculations for the Break-fix MASLs:

- **Status Tickets**
- **Internal Contractor Tickets**
- Wireless – including Cell Phones, Paging, and Blackberry equipment
- **Audio Equipment** – including Microphones, Overhead speakers, paging systems amplifiers and mixers, digital/analog voice recorders, public address systems, visit phones (jail/detention centers), Audio BoS squak boxes, and Polycom speaker phones,
- **Internet Video Streaming** – external internet video multi-cast streaming (Nine Systems) including video streaming for the Board of Supervisors and weddings on the Web.
- **Call Recording Solutions** – specialized software including Blue pumpkin and Nice.
- **Security Systems** for cameras, monitors, badge/door readers, and associated wiring.
- **Cable TV Systems** – Cox, Time Warner, County TV Network (CTN), Monitors, TV equipment, coaxial cable, splitters.

Contractor Access Limitations - When Contractor access can not be provided or a scheduled visit needs to be rescheduled, the Contractor will contact CoSD IT Operations to obtain the authority to freeze a ticket.

Power Outages – When a power outage occurs and problem tickets are generated, the power outage time will be excluded from the MASL reporting window unless the Contractor affected the power outage issue. Following any power restoration, any issues identified would be reported within the MASLs.

1.3.4 Output Delivery Schedules

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

Location Description	Trips/Day	Drop Points per Location	Delivery days	Delivery Time(s) No Later Than
County Administration Center 1600 Pacific Coast Highway Rooms 211, 77, 72, & 92	4	2	Monday – Sunday	6:00 a.m., 10:00 a.m., 2:00 p.m., 4:00 p.m.
County Operations Center 5555 Overland Road Building 2 & 11	1	2	Monday - Friday	7:30 a.m.
Sheriff-Marshall's Data Center 1301 Front Street	1	1	Monday - Friday	7:30 a.m.
Ruffin Road Annex Suite C	1	1	Monday - Friday	7:30 a.m.
Downtown Courthouse 220 West Broadway	1	1	Monday - Friday	7:30 a.m.
Kearny Mesa Traffic Court	1	1	Monday - Friday	7:30 a.m.

1.3.5 Detailed MASL Specification

1.3.5.1. Call Waiting

Identification Number	1.0 and 2.0
Name	Call Waiting
Definition	Length of time for caller to reach a live human voice.

Applicability	All Incoming Calls
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$\frac{(\text{Sum}(\text{total calls answered within 90 seconds by an analyst}))}{\text{Sum}(\text{agent calls})} \times 100$ $\frac{(\text{Sum}(\text{total calls answered within 180 seconds by an analyst}))}{\text{Sum}(\text{agent calls})} \times 100$
Base Measures	<p>Includes: Calls answered by Help Desk analysts</p> <p>Excludes: VRU calls - Status/Break-Fix message VRU calls - Automation (e.g. password reset) Voice mails</p>
Performance Requirement	<p>90% within 90 seconds 99% within 180 seconds</p> <p>Additional considerations: If MASL 2 is equal to or greater than 96% and MASL 4 is equal to or less than 3%, MASL 2 will have 'passed'. If MASL 2 is equal to or greater than 96% and MASL 4 is greater than 3%, MASL 2 will have 'failed'.</p>
Data Creation	Measured as the amount of time the phone rings plus the amount of time spent waiting in the queue before an analyst picks up the call. Excludes calls that are satisfied by the IVR system, calls abandoned, and voice mail.

1.3.5.2. Break-Fix Resolution Confirmation Notice

Identification Number	3.0
Name	Break-Fix Resolution Confirmation Notice
Definition	Total time elapsed to provide all resolution confirmation notice via automated email notification and/or telephone call to the End-User. Help Desk may leave a message with a phone number to call back with any questions. For Break-Fix Tickets, if a message is left, the Break-Fix Ticket should remain open in a pending closure status for 24 hours to allow the End-User the opportunity to confirm the Break-Fix incident is Resolved.
Applicability	All Break-Fix tickets and Work Requests
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$100 * \frac{(\text{\#Tickets-Work Requests with resolution confirmed within 30 minutes})}{\text{\# Tickets-Work Requests}}$
Base Measures	<p>Includes: Problem change orders only</p> <p>Excludes: Problems Resolved via automation (e.g. password reset), Problems Resolved on the first call, ICMS Work Requests</p>

Performance Requirement	99% within 30 minutes of Break-Fix resolution
Data Creation	Measured as the amount of time that elapses between the time the Ticket is Resolved and the time the End-User is notified of resolution.

1.3.5.3. Call Abandonment

Identification Number	4.0
Name	Call Abandonment
Definition	Frequency of caller hang-ups prior to reaching a live human voice
Applicability	All Incoming Calls
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$\frac{\text{Number of Calls Abandoned}}{\text{Total Incoming Calls}}$
Base Measures	Includes: Calls answered by Help Desk analysts Excludes: VRU calls - Status/Break-Fix message VRU calls - Automation (e.g. password reset) Voice mails
Performance Requirement	No more than 5% call abandonment rate
Data Creation	Help Desk Technical Support Analyst (TSA) answers phones and phone switch tracks abandoned calls

1.3.5.4. Password Resets

Identification Number	5.0 and 6.0
Name	Password Resets
Definition	Length of time between password reset request and completion.
Applicability	All Requests.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$100 \times \frac{(\sum \text{Total System Admin Events} < 30 \text{ mins.})}{(\sum \text{Total System Admin Events for Month})}$
Base Measures	Note- Sys Admin event may be completed by: a) authorized Help Desk staff (passwords, etc.), or b) designated Framework staff (Database rights, etc.)

Performance Requirement	95% within 30 minutes 99% within 60 minutes
Data Creation	Help Desk Technical Support Analyst (TSA) enters, updates, and closes a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.5. Call Pick-Up

Identification Number	7.0 and 8.0
Name	Call Pick-Up
Definition	Length of time for caller to reach a live human voice.
Applicability	All calls to County Operator (e.g. 411 or 0)
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$\frac{\text{Sum}(\text{total calls answered within 30 seconds by an agent})}{\text{Sum}(\text{agent calls})} \times 100$ $\frac{\text{Sum}(\text{total calls answered within 60 seconds by an agent})}{\text{Sum}(\text{agent calls})} \times 100$
Base Measures	Calls to County Operators such as 411.
Performance Requirement	95.0% within 30 seconds 97.5% within 60 seconds
Data Creation	Measured as the amount of time the phone rings plus the amount of time-spent waiting in the queue before an operator picks up the call. Excludes calls that abandoned, and voice mail.

1.3.5.6. Overall System Availability

Identification Number	9.0
Name	Overall System Availability
Definition	<p>[Note: The County will update this specification (other than the Performance Requirement) in consultation with Contractor during Transition to reflect the contemplated architecture for the network.]</p> <p>Percentage of time that key voice, data systems, and LAN switches are operational and available, excluding planned County-approved outages.</p> <p>The Voice System, Data Network system, and LAN Availability will be measured on a per Site basis. Each Type 1, 2, and 3 Site will be included in network Availability. The network equipment located at the San Diego Data Center (SDDC) has been eliminated from this MASL and not included. The circuits connecting the SDDC to the WAN have been moved to the Server Availability MASL.</p> <p>The Centralized Voice Mail system Availability will be counted on a single site basis. The centralized voice mail platform, the Access Lines from Site 1, and</p>

	<p>the Access Lines from Site 2 will be included in network Availability.</p> <p>The Conversant IVR platforms will each be counted as individual sites and included in the network Availability. As of 6/6/2003 there are five IVR platforms and are located at Sites 1, 2, 3, 4, and 53.</p> <p>The Call Management System (CMS) platforms will each be individually counted as individual sites and included in the network Availability. As of 6/6/2003 there are two CMS platforms and are located at Sites 1 and 2.</p> <p>The Availability of each site will be separately reported as per the algorithm below. For each site that falls below the Availability Requirement, 1/140 of the sum of the applicable Fee Reductions (Telecommunications-System Availability-All Systems (3.1.1.a) plus Local Area Network-System Availability-LAN Segments (4.1.1.a.)) will apply.</p> <p>The measure is the aggregate of voice, data, and LAN Availability. Availability is calculated by summing the Total Available Hours¹ for all of the key network components (PBX, WAN circuits, data router, core switches, ATM switches, LAN switches, Voice Mail System and Access Lines, Conversant IVR systems, and CMS servers) per site and subtracting the Total Downtime² of all key components for each site.³</p> <p>Note 1: Total Available Hours are dependant upon the Site Type, components being included. and the services provided at the Site</p> <p>Note 2: Total Downtime is calculated depending upon the type of Site, Services provided per site, and location.</p> <p>Note 3: Where redundant network capability exists at a site, only a single pathway's Availability hours will be counted in the total hours available. Correspondingly, system downtime hours will only be counted if redundant pathways fail (i.e. if one Lightstream ATM switch fails, thus swinging all traffic to the redundant ATM switch), the system will be deemed operational and no Break-Fix incidents hours will be included in the Total Downtime. LAN switch Break-Fix incidents will be counted individually in Total Downtime hours.</p>
Applicability	Key network components include PBX, WAN circuits, data router, core switches, ATM switches, LAN switches, Voice Mail System and Access Lines, Conversant IVR systems, and CMS servers.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	<p>Sn Availability =</p> $\frac{\text{Sn Total Hours Available} - \text{Sn Total Hours Down}}{\text{Sn Total Hours Available}} \times 100$ <p>Legend: Sn = Site Type (n = 1, 2, or 3)</p> <p>Total Voice, WAN, & LAN Component Hours (Available)¹ – Total Voice & WAN & LAN Component Hours (Down) / Total Voice, WAN & LAN Component Hours (Available) 1 x 100</p> <p>Note : Total Voice, WAN, & LAN Component Hours (Available) = Total Voice, WAN, & LAN Component Hours for the Month minus planned Outage hours for the site.</p>

Base Measures	AHD system, Telecom Performance Monitoring Systems
Performance Requirement	99.8%
Data Creation	A Problem record is created in the Help Desk's Problem tracking system when a Problem is detected. Telecom monitoring systems record system Break-Fix incidents. A monthly Break-Fix review meeting will be held between Contractor and County staff to determine the impact and duration of each Break-Fix incident.

1.3.5.7. System Availability - Internet/Intranet Access

Identification Number	10.0
Name	System Availability – Internet/Intranet Access
Definition	<p>Percentage of times that Internet/Intranet Systems are available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance), are not included in the Availability calculation.</p> <p>The Availability of each Server will be separately reported as per the algorithm below. Fee Reductions will be assessed on an individual Server basis with 1/xxx of the applicable Fee Reduction accumulated with each Server Failure (xxx = total number of internet/intranet servers in operation) .</p> <p>The start time for a Break-Fix is the earliest of the timestamp from the Server log, the time the failure was detected by the monitoring tools or the time of the first user Break-Fix incident call. It is expected that the start time may be adjusted after the failure when all the facts are known.</p> <p>The end time for the failure is the time at which full Server functionality is made available to the End-Users.</p> <p>The system Break-Fix time is equal to the difference between the start and end times. System Break-Fix time will be reviewed in the monthly MASL review meeting and may be adjusted.</p>
Applicability	Internet/Intranet Access. This includes Web, Proxy, DHCP, DNS and Firewall servers. Servers that provide support for contractor service delivery (e.g. software distribution servers) are excluded from measurement. Both Intel and Unix Internet/Intranet Production Servers that are Contractor supported will be included in this measure
Hours of Availability	24x7x365, excluding Planned Break-Fixes.
Measurement Period	Monthly
Algorithm	<p>System Break-Fix = SO minutes for each Server in each category</p> <p>Total Days per Month = WD</p> <p>Planned Break-Fix for each Server in each category for the Month = PO minutes.</p> <p>Total Uptime per Month per Server = [24 x 60 x WD] minutes – PO = TU</p>

	System Availability % per Server = $((TU - \sum SO) / TU) \times 100$
Base Measures	Overall Server and network Availability. Components are 1. Hardware Availability 2. OS and Application Availability. For those (newer) Servers where the Availability of services can be monitored then the Break-Fix time is the time that the services the Server provides were unavailable as reported by the monitoring tools. For older servers the downtime is assessed manually from the Server log or via a monitoring agent.
Performance Requirement	99%
Data Creation	A Problem record is created in the Help Desk's Problem tracking system when a Problem is detected. This can be via the GMC, NOC, Help Desk Technical Support Analyst (TSA) or via a customer call.

1.3.5.8. Transaction Response Time (Server Systems – Local Network)

Identification Number	11.0 and 12.0
Name	Transaction Response Time (Server Systems- Local Network)
Definition	Length of time host systems and networks transmit and process request and return data to End-User's screen. Response time will be measured using a defined sampling scheme, data transfer sizes and network locations.
Applicability	Server Systems – Local Network
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays.
Measurement Period	Monthly
Algorithm	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.
Base Measures	Time is measured from the instant a request is sent to the HOST system to the time the response is displayed on the End-User screen.
Performance Requirement	95% within 5 seconds 99% within 10 seconds
Data Creation	Created by enterprise monitoring tools

1.3.5.9. Transaction Response Time (Server Systems – Across WAN)

Identification Number	13.0 and 14.0
Name	Transaction Response Time (Server Systems – Across WAN)
Definition	Length of time host systems and networks transmit and process a request across the WAN and return data to End-User's screen.
Applicability	<p>The Wide Area Network is divided into 8 segments. Each segment contains a single Type 1 site and all of the other sites that connect through that Type 1.</p> <p>The response time for each segment will be separately reported as per the algorithm below. For each segment that falls below the response time Requirement, 1/8 of the applicable Fee Reduction will apply. For the purposes of calculating the percentage of total MASLs met or missed, in the event that (i) five or more clusters meet or exceed the system Availability measurement in the applicable Measurement Period, then the MASL is considered achieved, or (ii) if four or fewer clusters meet or exceed the system Availability measurement in the applicable Measurement Period, then the MASL is considered failed.</p> <p>Response time will be measured using a defined sampling scheme, data transfer sizes and network locations defined.</p>
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays
Measurement Period	Monthly
Algorithm	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 business days chosen 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.
Base Measures	
Performance Requirement	95% within 10 seconds 99% within 30 seconds
Data Creation	Created by enterprise monitoring tools

1.3.5.10 Transaction Response Time (E-mail systems)

Identification Number	15.0
Name	Transaction Response Time (E-mail Systems)
Definition	Length of time host systems and networks transmit and process request, and return data to End-User's screen.
Applicability	<p>E-mail systems in use by the County. Response will be measured between the following e-mail environments.</p> <p><u>Exchange to Exchange</u> Ten test messages shall be transmitted between each e-mail environment every hour of the workday and the average delivery time for each hour during</p>

	that workday shall be calculated. The Requirement applies to each mail system each hour of each day.
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	<p>1. Test transactions will be sent to each of the mail servers every 10 minutes between 6 am and 6 pm M-F.</p> <p>2. The algorithm shall be: Number of e-mail transactions (6) x number of hours checked per day (12) x number of days per Month. The percentage is derived from the number of acceptable transactions / number of possible transactions</p>
Base Measures	Time to deliver mail to another individual within the County organization using the mail systems managed by Contractor.
Performance Requirement	99.75% -- Internal e-mail delivered within 10 minutes
Data Creation	By the Mail System management tools

1.3.5.11 Transaction Response Time
(Internet/Intranet systems)

Identification Number	16.0 and 17.0
Name	Transaction Response Time (Internet/Intranet Systems)
Definition	Length of time host systems and networks transmit and process request across the Internet/Intranet and return data to End-User’s screen. Intranet/Internet response time will be measured by accessing the County Intranet (CWW)/Internet sites.
Applicability	Internet/Intranet systems. Response is measured from each site.
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	<p>1. Test transactions will be sent to designated County endpoints for Intranet/Internet locations every 15 minutes.</p> <p>2. These transactions will be tested 6 a.m. to 6 p.m. M-F.</p> <p>3. The algorithm shall be: Number of internet/internet transactions per hour (4) x number of hours checked per day (12) x number of days per Month. The percentage is derived from the number of passing transactions / number of possible transactions</p>
Base Measures	Time is measured using a defined sampling scheme, data transfer sizes and network locations.
Performance Requirement	Intranet -- 98% within 20 seconds Internet – 95% within 20 seconds

Data Creation	By Enterprise system management tools
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1.3.5.12 Back-ups (Production Environment)

Identification Number	18.0
Name	Back-ups (Production Environment)
Definition	Percentage of time that back-ups must complete successfully; frequency and minimum retention criteria for back-ups; actual data retention must meet County and/or legal requirements. Back-ups must be verified and re-run if unsuccessful.
Applicability	Completion
Hours of Availability	Not Applicable
Measurement Period	Monthly
Algorithm	All backup failures will be followed up with a Problem Ticket. All Problem Tickets relating to failed backup will be closed upon successful completion of backup. Total backups each Month = TB Failed backup that could not be rerun each Month = FB Performance = $\{(TB-FB)/TB\} * 100 \%$
Base Measures	All failed backups will have a Problem Ticket associated with them. All Tickets will be attended to and will be closed. Tape retention will be audited internally by Contractor and reported separately
Performance Requirement	99%
Data Creation	GMC technician managing backup of servers will open a Problem Ticket to indicate failed backup. Audit of tape retention will be conducted regularly by Contractor, and failure to comply with retention requirements will be reported to County.

1.3.5.13 Back-ups –Test Servers

Identification Number	19.0
Name	Back-ups (Test Servers)
Definition	Percentage of time that back-ups must complete successfully; frequency and minimum retention criteria for back-ups; Back-ups must be verified and re-run if unsuccessful.
Applicability	Completion – Backups will be performed weekly and backup tapes will be retained for one Month.
Hours of Availability	Not Applicable

Measurement Period	Monthly
Algorithm	All backup failures will be followed up with a Problem Ticket. All Problem Tickets relating to failed backup will be closed upon successful completion of backup. Total backups each Month = TB Failed backup that could not be rerun each Month = FB Performance = $\{(TB-FB)/TB\} * 100 \%$
Base Measures	All failed backups will have a Problem Ticket associated with them. All Tickets will be attended to and will be closed. Tape retention will be audited internally by Contractor and reported separately
Performance Requirement	90%
Data Creation	Project technician managing backup of servers will open a Problem Ticket to indicate failed backup. Audit of tape retention will be conducted regularly, and failure to comply with retention requirements will be reported.

1.3.5.14 Voice System Call Blocking

Identification Number	20.0
Name	Voice System Call Blocking
Definition	Percentage of calls blocked, or experiencing busy service, measured per trunk route.
Applicability	During busiest hour of Month.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	Number of calls blocked or experiencing service busy per hour / total calls attempted per hour x 100%. This metric will be calculated for each hour of the Month for each phone switch and performance for the highest value hour reported.
Base Measures	Status Logs provided by telecom equipment
Performance Requirement	Blocking not to exceed 1% of all calls during peak calling periods by route unless otherwise directed by the County
Data Creation	System status logs generated by the PBX telephone equipment create metric data.

1.3.5.15 System Availability - Mainframe

Identification Number	21.0
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Name	System Availability - Mainframe
Definition	[Note: The County will update this specification (other than the Performance Requirement) in consultation with Contractor during Transition to reflect the contemplated solution.] Percentage of time that Systems are Available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance) are not included in the Availability calculation.
Applicability	Mainframe
Hours of Availability	24x7x365, excluding Planned Break-Fixes.
Measurement Period	Monthly
Algorithm	LPAR SA16 minutes of scheduled Availability-outage minutes from AHD Tickets/LPAR SA16 minutes of scheduled Availability 2.LPAR SA17 minutes of scheduled Availability-outage minutes from AHD Tickets/LPAR SA17 minutes of scheduled Availability 3. Add results of steps 1 and 2 above, and divide by 2. The outages applied will be hardware, and/or foundational systems software. Foundational Systems Software is defined as ACF2, ADABAS, CA1, CA7, CICS, DB2, HSM, JES, OMEGAMON, MVS, SMS, TCP/IP, TSO or VTAM. <i>Note (a) –Outage minutes will be collected based upon the following two conditions:</i> 1) All Mainframe foundational system software or hardware outages except CICS, will be counted only when the entire system is considered down. 2) For CICS regions, outages will be collected when any single CICS region is considered down. In addition, when ever two regions are down during the same time, only one Break-Fix will be counted for purposes of this MASL.
Base Measures	Total number of hours for Month, number of hours unavailable for Month
Performance Requirement	99.9%
Data Creation	Metric data is created by recording system Break-Fixes incidents in the downtime-log Application.

1.3.5.16 System Availability - AS400/others

Identification Number	22.0
Name	System Availability-AS400/Others
Definition	Percentage of time that Systems are available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance) are not included in the Availability calculation. .
Applicability	AS400/Others
Hours of Availability	24x7x365, excluding Planned Outages.
Measurement Period	Monthly
Algorithm	Availability Measurement = ((Total Hours of Scheduled Availability – Downtime) / Total Hours Of Availability) x 100

Base Measures	Availability of the System to process information
Performance Requirement	99.8%
Data Creation	Metric data is created by recording system Break-Fixes in the downtime-log Application.

1.3.5.17 System Availability - VAX

Identification Number	23.0
Name	System Availability-VAX
Definition	Percentage of time that Systems are available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance) are not included in the Availability calculation.
Applicability	VAX
Hours of Availability	24x7x365, excluding planned outages.
Measurement Period	Monthly
Algorithm	Availability Measurement = ((Total Hours of Scheduled Availability – Downtime) / Total Hours Of Availability) x 100
Base Measures	Availability of system to process information
Performance Requirement	99.5%
Data Creation	Metric data is created by recording system Break-Fix incidents in the downtime_log Application.

1.3.5.18 System Availability - Mid-Range E10K

Identification Number	24.0
Name	System Availability – Mid-Range E10K
Compliance Date	10/04/2003
Definition	Percentage of time that each E10K system domain is available for use during scheduled uptime. Planned outages (e.g., for system maintenance) are not included in the availability calculation. The E10K system availability will be measured on a per domain basis
Applicability	Mid-range E10K server domains.
Hours of Availability	24x7x365, excluding planned outages
Measurement Period	Monthly
Algorithm	This algorithm will be used for each domain within the E10K Sun Server. E10K Domain System Availability Measurement = ((Total Hours of Domain Scheduled Availability – Domain Downtime) / (Total Hours of Domain Availability) x 100%

Base Measures	Total number of hours for month, number of hours unavailable for month. Overall System Availability. Components are Hardware Availability (Production Domains Only) OS and Application Availability (Production Domains Only)
Performance Requirement	99.8%
Data Creation	Metric data is created by recording system outages in the downtime log application

1.3.5.19 On-line Transaction Response Time

Identification Number	25.0 and 26.0
Name	On-line Transaction Response Time
Definition	Length of time for on-line systems to process request and return data to End-User's screen (i.e. end-to-end).
Applicability	This is a composite reporting of: Mainframe, AS400, and VAX
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays
Measurement Period	Monthly
Algorithm	<ol style="list-style-type: none"> 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 3:30 p.m., twice 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 to County.
Base Measures	Average response time for 100 transactions sent from the Data Center to a randomly selected endpoint on the WAN.
Performance Requirement	95% within 2 seconds 99% within 5 seconds
Data Creation	Metric data is created by recording systems sample results.

1.3.5.20 System File Restoration

Identification Number	27.0 and 28.0
Name	System File Restoration
Definition	Length of time to restore System files from the time of request until data is available for use.
Applicability	System File Restoration

Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$(\text{Number of System Files Restored in 4hrs (24 hrs)}) / (\text{Total Number of System Files Restoration Requests submitted}) \times 100$
Base Measures	Time of receipt of a completely documented request until data is available for use
Performance Requirement	95% within 4 hours 99% within 24 hours
Data Creation	Metric data is created by Help Desk agent who creates a Problem tracking system record after a request form with completed and signed authorizing documentation is received by agent.

1.3.5.21 Output Delivery

Identification Number	29.0
Name	Output Delivery
Definition	Timeliness for delivering centrally printed reports and microfiche to specifically defined End-User locations. Clarification: This metric is for Production Reports. Daily means 7 days a Week.
Applicability	All output
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	Number of Output Deliveries Completed Within the timeframe of the Output Delivery Schedule defined in Schedule 4.3 / Total Number of Output Deliveries Scheduled Excluded: Scheduled deliveries for which there is no output to deliver.
Base Measures	Report delivery time.
Performance Requirement	98% adherence to the Output Delivery Schedule as defined in Schedule 4.3 (reproduced below)
Data Creation	A combination of tracking normal delivery activity and missed delivery via calls to the Help Desk. The agent creates a Problem tracking system record on missed delivery activity.

1.3.5.22 Back-up Completion

Identification Number	30.0
Name	Back-up Completion
Definition	Percentage of time that back-ups must complete successfully. Back-ups must be verified and re-run if not successful.

Applicability	All Back-ups for Mainframe, Mid-range, VAX, and AS400.
Hours of Availability	Not Applicable
Measurement Period	Monthly
Algorithm	(Number of Backups Completed Successfully / Total Number of Backups Submitted) x 100
Base Measures	Percentage of the backups which were not completed during the Month.
Performance Requirement	99%
Data Creation	Metric data is created by Production Operations in the Help Desk's Problem tracking system database open back-up failure.

1.3.5.23 System Availability - Application Servers

Identification Number	31.0
Name	System Availability – Application Servers
Definition	<p>Percentage of times that each Application Server is available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance), are not included in the Availability calculation.</p> <p>The Availability of each Server will be separately reported as per the algorithm below. Fee Reductions will be assessed on an individual Server basis with 1/xxx of the applicable Fee Reduction accumulated with each Server Failure (xxx = total number of Application servers in operation).</p> <p>The start time for a Break-Fix incident is the earliest of the timestamp from the Server log, the time the failure was detected by the monitoring tools or the time of the first user Break-Fix incident call. It is expected that the start time may be adjusted after the failure when all the facts are known.</p> <p>The end time for the failure is the time at which full Server functionality is made available to the End-Users.</p> <p>The system Break-Fix time is equal to the difference between the start and end times. System Break-Fix time will be reviewed in the monthly MASL review meeting and may be adjusted.</p>
Applicability	All Application Production Servers that are County supported will be included in this measure.
Hours of Availability	24x7x365, excluding planned outages.
Measurement Period	Monthly
Algorithm	<p>System Break-Fix = SO minutes for each Server in each category</p> <p>Total Days per Month = WD</p> <p>Planned Break-Fix for each Server in each category for the Month = PO minutes.</p> <p>Total Uptime per Month per Server = [24 x 60 x WD] minutes – PO = TU</p>

	System Availability % per Server = $((TU - \sum SO) / TU) \times 100$
Base Measures	Overall Server and network Availability. Components are 1. Hardware Availability 2. OS and Application Availability. For those (newer) servers where the Availability of services can be monitored then the Break-Fix time is the time that the services the Server provides were unavailable as reported by the monitoring tools. For older servers the downtime is assessed manually from the Server log or via a monitoring agent.
Performance Requirement	99.8%
Data Creation	A Break-Fix Ticket is created in the Help Desk's Problem tracking system when a Problem is detected. This can be via the GMC, NOC, Help Desk Technical Support Analyst (TSA) or via a customer call.

1.3.5.24 System Availability - Infrastructure Servers

Identification Number	32.0
Name	System Availability – Infrastructure Servers
Definition	<p>Percentage of times that Infrastructure Servers are available for use during Scheduled Uptime. The SAN Infrastructure Servers are excluded from this measure and tracked under 4.1.1d. Planned outages (e.g., for system maintenance), are not included in the Availability calculation.</p> <p>The Availability of each Server will be separately reported as per the algorithm below. Fee Reductions will be assessed on an individual Server basis with 1/xxx of the applicable Fee Reduction accumulated with each Server Failure (xxx = total number of file/print/mail servers in operation).</p> <p>The start time for a Break-Fix incident is the earliest of the timestamp from the Server log, the time the failure was detected by the monitoring tools or the time of the first user Break-Fix call. It is expected that the start time may be adjusted after the failure when all the facts are known.</p> <p>The end time for the failure is the time at which full Server functionality is made available to the End-Users.</p> <p>The system Break-Fix incident time is equal to the difference between the start and end times. System Break-Fix incident time will be reviewed in the monthly MASL review meeting and may be adjusted as mutually agreed upon by the parties.</p>
Applicability	All Infrastructure Servers that are Contractor supported will be included in this measure.
Hours of Availability	24x7x365, excluding Planned Break-Fixes.
Measurement Period	Monthly
Algorithm	System Break-Fix = SO minutes for each Server in each category Total Days per Month = WD

	<p>Planned Break-Fix for each Server in each category for the Month = PO minutes.</p> <p>Total Uptime per Month per Server = [24 x 60 x WD] minutes – PO = TU</p> <p>System Availability % per Server = ((TU - Σ SO) / TU)x100</p>
Base Measures	<p>Overall Server and network Availability. Components are</p> <ol style="list-style-type: none"> 1. Hardware Availability 2. OS and Application Availability. For those (newer) Servers where the Availability of services can be monitored then the Break-Fix time is the time that the services the Server provides were unavailable as reported by the monitoring tools. For older Servers the downtime is assessed manually from the Server log or via a monitoring agent.
Performance Requirement	99.8%
Data Creation	A Problem record is created in the Help Desk's Problem tracking system when a Problem is detected. This can be via the GMC, NOC, Help Desk Technical Support Analyst (TSA) or via a customer call.

1.5.3.25 System Availability - SAN Servers

Identification Number	33.0
Name	System Availability – SAN Servers
Definition	<p>Percentage of times that SAN Infrastructure Servers are available for use during Scheduled Uptime. Planned outages (e.g., for system maintenance), are not included in the Availability calculation.</p> <p>The Availability of each Server will be separately reported as per the algorithm below. Fee Reductions will be assessed on an individual Server basis with 1/xxx of the applicable Fee Reductions accumulated with each Server Failure (xxx = total number of file/print/mail servers in operation).</p> <p>The start time for a Break-Fix is the earliest of the timestamp from the Server log, the time the failure was detected by the monitoring tools or the time of the first user Break-Fix call. It is expected that the start time may be adjusted after the failure when all the facts are known.</p> <p>The end time for the failure is the time at which full Server functionality is made available to the End-Users.</p> <p>The system Break-Fix time is equal to the difference between the start and end times. System Break-Fix time will be reviewed in the monthly MASL review meeting and may be adjusted.</p>
Applicability	All Production SAN Infrastructure Servers except those SAN Infrastructure Servers that provide support for contractor service delivery (e.g. software distribution servers) are excluded from this measurement.
Hours of Availability	24x7x365, excluding Planned Break-Fixes.
Measurement Period	Monthly

Algorithm	System Break-Fix = SO minutes for each Server in each category Total Days per Month = WD Planned Break-Fix for each Server in each category for the Month = PO minutes. Total Uptime per Month per Server = [24 x 60 x WD] minutes – PO = TU System Availability % per Server = ((TU - Σ SO) / TU)x100
Base Measures	Overall Server and network Availability. Components are 1. Hardware Availability 2. OS and Application Availability. For those (newer) Servers where the Availability of services can be monitored then the Break-Fix time is the time that the services the Server provides were unavailable as reported by the monitoring tools. For older Servers the downtime is assessed manually from the Server log or via a monitoring agent.
Performance Requirement	99.8%
Data Creation	A Problem record is created in the Help Desk's Problem tracking system when a Problem is detected. This can be via the GMC, NOC, Help Desk Technical Support Analyst (TSA) or via a customer call.

1.5.3.26 Break-Fix (Test Servers)

Identification Number	34.0
Name	Break-Fix - Test Servers
Definition	Time to restore service from time of Break-Fix report
Applicability	Test Servers (PTS)
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays
Measurement Period	Monthly
Algorithm	$100 \times \frac{(\Sigma \text{ total PTS} < \text{xx hr events for Month})}{(\Sigma \text{ total PTS events for Month})}$ Note: xx = is the applicable Performance Requirement hours
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	90% w/i 48 hours
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and Resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.27 Low Risk Work Request Budget Performance

Identification Number	35.0
Name	Low Risk Work Request Budget Performance
Definition	Percentage of Low Risk Work Requests completed within baseline budgeted hours
Applicability	All Low Risk Work Requests regarding Portfolio Applications, EXCEPT: <ul style="list-style-type: none"> • Work Requests provided at no cost or fixed price to the County. • Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	N/A
Measurement Period	Monthly
Algorithm	$(\# \text{ Low Risk Work Requests completed within baseline budget}) / (\# \text{ Low Risk Work Requests completed}) * 100$
Base Measures	Billable dollars expended
Performance Requirement	90%
Data Creation	Metric data is created by Application analysts in the Contractor Applications Work Request management system.

1.3.5.28 Low Risk Work Request Schedule Performance

Identification Number	36.0
Name	Low Risk Work Request Schedule Performance
Definition	Percentage of Low Risk Work Requests completed within schedule baseline
Applicability	All Low Risk Work Requests for Portfolio Applications, EXCEPT: <ul style="list-style-type: none"> • Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays
Measurement Period	Monthly
Algorithm	$(\# \text{ Low Risk Work Requests completed within baseline schedule}) / (\# \text{ Low Risk$

	Work Requests completed) *100
Base Measures	Business Days
Performance Requirement	90%
Data Creation	Metric data is created by Application analysts in the Contractor's Applications Work Request management system.

1.3.5.29 Medium Risk Work Request Budget Performance

Identification Number	37.0
Name	Medium Risk Work Request Budget Performance
Definition	Percentage of Medium Risk Work Requests completed within baseline budgeted hours plus 10%.
Applicability	All Medium Risk Work Requests, EXCEPT: <ul style="list-style-type: none"> • Work Requests provided at no cost or fixed price to the County. • Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	N/A
Measurement Period	Monthly
Algorithm	$(\# \text{ Medium Risk Work Requests completed within (baseline budget +10\%)}) / (\# \text{ Medium Risk Work Requests completed}) *100$
Base Measures	Billable dollars expended
Performance Requirement	100%
Data Creation	Metric data is created by Application analysts in the Contractor's Applications Work Request management system.

1.3.5.30 Medium Risk Work Request Schedule Performance

Identification Number	38.0
Name	Medium Risk Work Request Schedule Performance

Definition	Percentage of Medium Risk Work Requests completed within schedule baseline +10%.
Applicability	All Medium Risk Work Requests EXCEPT: <ul style="list-style-type: none"> Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	$(\# \text{ Medium Risk Work Requests completed within (baseline schedule +10\%)}) / (\# \text{ Medium Risk Work Requests completed}) * 100$
Base Measures	Business Days
Performance Requirement	100%
Data Creation	Metric data is created by Application analysts in Contractor’s Applications Work Request management system.

1.3.5.31 High Risk Work Request Budget Performance

Identification Number	39.0
Name	High Risk Work Request Budget Performance
Definition	Percentage of High Risk Work Requests completed with a Cost Performance Index (CPI) of 0.95, as described below, or greater.
Applicability	All High Risk Work Requests, EXCEPT: <ul style="list-style-type: none"> Work Requests provided at no cost or fixed price to the County. Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	N/A
Measurement Period	Monthly
Algorithm	$(\# \text{ High Risk Work Requests completed with a CPI to baseline budget } \geq 0.95) / ((\# \text{ high risk and large work requests completed}) * 100)$

Base Measures	Billable dollars expended
Performance Requirement	100%
Data Creation	Metric data is created by Application analysts in Contractor's Applications Work Request management system.

1.3.5.32 High Risk Work Request Schedule Performance

Identification Number	40.0
Name	High Risk Work Request Schedule Performance
Definition	Percentage of large work requests completed with a schedule performance index (SPI) 0.95, as described below, or greater, measured on the baseline completion date for the Work Request.
Applicability	All High Risk Work Requests, EXCEPT: <ul style="list-style-type: none"> • Level of effort (LOE), user support, preventive maintenance and Application administration (table maintenance and data modification.)
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays
Measurement Period	Monthly
Algorithm	$\frac{(\# \text{ High Risk Work Requests completed with a SPI to baseline schedule } \geq 0.95)}{((\# \text{ High Risk Work Requests completed}) * 100)}$
Base Measures	Business Days
Performance Requirement	100%
Data Creation	Metric data is created by Application analysts in Contractor's Applications Work Request management system.

1.3.5.33 Break-Fix (Priority 1)

Identification Number	41.0, 42.0 and 43.0
Name	Break-Fix (Priority 1) – Multiple User Break-Fix
Definition	Time to restore service from time of Break-Fix incident report
Applicability	Break-Fix incident affecting Life/Safety/Health Applications and all related hardware and network equipment.
Hours of Availability	24x7x365

Measurement Period	Monthly
Algorithm	$(\sum \text{total P1 events for Month}) * .91 = D1$ $(\sum \text{total P1 events for Month}) * .96 = D2$ $(\sum \text{total P1 events for Month}) * .04 = D3$
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	If D1 incidents are resolved ≤ 4 hours , then 41.0 is a pass; otherwise, a fail. If D2 incidents are resolved ≤ 8 hours , then 42.0 is a pass; otherwise, a fail. If average restoration time for D3 incidents with the longest restore time is ≤ 16 hours, then 43.0 is a pass; otherwise a fail. Contractor will immediately respond on-site to the offices of the Board of Supervisors. Site visits will be coordinated via the County Technology Office representative..
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.34 Break-Fix (Priority 2)

Identification Number	44.0, 45.0 and 46.0
Name	Break-Fix (Priority 2) – Multiple User Break-Fix
Definition	Time to restore service from time of Break-Fix report
Applicability	Break-Fix affecting Mission Critical Applications and all related hardware and network equipment.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$(\sum \text{total P2 events for Month}) * .91 = D1$ $(\sum \text{total P2 events for Month}) * .96 = D2$ $(\sum \text{total P2 events for Month}) * .04 = D3$
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	If D1 incidents are resolved ≤ 6 hours then 44.0 is a pass; otherwise, a fail. If D2 incidents are resolved ≤ 10 hours then 45.0 is a pass; otherwise, a fail. If average response time for D3 incidents with the longest restore time is ≤ 20 hours then 46.0 is a pass; otherwise a fail. Contractor will immediately respond on-site to the offices of the Board of Supervisors. Site visits will be coordinated via the CTO representative.
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and Resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.35 Break-Fix (Priority 3)

Identification Number	47.0, 48.0 and 49.0
Name	Break-Fix (Priority 3) – Single User Break-Fix
Definition	Time to restore service from time of Break-Fix report
Applicability	Break-Fix affecting Priority 1 or 2 Applications and all related hardware and network equipment for a single user. VIP TREATMENT Whenever a VIP Ticket is received, the Help Desk will page-out the business unit service delivery manager, workflow and will notify the technicians of the Ticket. Outside of the normal business hours (M-F 6am-6pm) on-call technicians will be notified of VIP Tickets.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	$(\sum \text{total P3 events for Month}) * .92 = D1$ $(\sum \text{total P3 events for Month}) * .96 = D2$ $(\sum \text{total P3 events for Month}) * .04 =$
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	If D1 incidents are resolved \leq 8 hours then 47.0 is a pass; otherwise, a fail. If D2 incidents are resolved \leq 12 hours then 48.0 is a pass; otherwise, a fail. If average response time for D3 incidents with the longest restore time is \leq 24 hours then 49.0 is a pass; otherwise a fail. Contractor will immediately respond on-site to the offices of the Board of Supervisors. Site visits will be coordinated via the CTO representative.
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and Resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.36 Break-Fix (Priority 4)

Identification Number	50.0, 51.0 and 52.0
Name	Break-Fix (Priority 4) – Multiple User Break-Fix
Definition	Time to restore Service from time of Break-Fix report
Applicability	Break-Fix affecting Business Function Applications and all related hardware and network equipment. VIP TREATMENT Whenever a VIP Ticket is received, the Help Desk pages-out the business unit service delivery manager, workflow will notify the technicians of the Ticket. Outside of the normal business hours (M-F 6am-6pm) on-call technicians will be notified of VIP Tickets.
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays [Note: The Telecom Break-Fix measures will work to a 8am to 5pm Service

	Window]
Measurement Period	Monthly
Algorithm	$(\sum \text{ total P4 events for Month} * .92) = D1$ ($\sum \text{ total P4 events for Month} * .96) = D2$ $(\sum \text{ total P4 events for Month} * .04 = D3$
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	If D1 incidents are resolved ≤ 10 hours then 50.0 is a pass; otherwise, a fail. If D2 incidents are resolved ≤ 16 hours then 51.0 is a pass; otherwise, a fail. If average response time for D3 incidents with the longest restore time is ≤ 32 hours then 52.0 is a pass; otherwise a fail. Contractor will immediately respond on-site to the offices of the Board of Supervisors. Site visits will be coordinated via the CTO representative.
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and Resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.37 Break-Fix (Priority 5)

Identification Number	53.0, 54.0 and 55.0
Name	Break-Fix (Priority 5) – Single User Break-Fix
Definition	Time to restore service from time of Break-Fix report
Applicability	Break-Fix affecting Business Function Applications and all related hardware and network equipment for a single user. VIP TREATMENT Whenever a VIP Ticket is received, Help Desk will page-out the business unit service delivery manager, workflow will notify the technicians of the Ticket. Outside of the normal business hours (M-F 6am-6pm) on-call technicians will be notified of VIP Tickets.
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County's holidays [Note: The Telecom Break-Fix measures will work to a 8am to 5pm Service Window]
Measurement Period	Monthly
Algorithm	$(\sum \text{ total P5 events for Month} * .92) = D1$ ($\sum \text{ total P5 events for Month} * .96) = D2$ $(\sum \text{ total P5 events for Month} * .04 = D3$ If D1 incidents are resolved $\leq T1$, then 53.0 is a pass; otherwise, a fail. If D2 incidents are resolved $\leq T2$, then 54.0 is a pass; otherwise, a fail. If average response time for D3 incidents with the longest resolve time is $\leq T3$, then 55.0 is a pass; otherwise a fail.
Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	If D1 incidents are resolved ≤ 12 hours then 53.0 is a pass; otherwise, a fail.

	<p>If D2 incidents are resolved <= 24 hours then 54.0 is a pass; otherwise, a fail.</p> <p>If average response time for D3 incidents with the longest restore time is <= 48 hours then 55.0 is a pass; otherwise a fail.</p> <p>Contractor will immediately respond on-site to the offices of the Board of Supervisors. Site visits will be coordinated via the CTO representative.</p>
Data Creation	Help Desk Technical Support Analyst (TSA) enters Ticket; Workflow updates, and Resolves a Problem Ticket in Help Desk's Problem tracking system.

1.3.5.38 Service Repair Scheduling

Identification Number	56.0
Name	Service Repair Scheduling
Definition	The elapsed time from the time the call is determined to be a desktop Break-Fix Ticket until the user is contacted to schedule an on-site service appointment.
Applicability	All Desktop Break-Fix Resolution Tickets
Hours of Availability	6a.m. – 6 p.m. Monday-Friday
Measurement Period	Monthly
Algorithm	$100 \times \frac{\text{Total Desktop Tickets responded to within 90 minutes}}{\text{Total Desktop Break-Fix Resolution Tickets}}$
Base Measures	Desktop Break-Fix Resolution Tickets only
Performance Requirement	98% within 90 minutes
Data Creation	Measured as the amount of time that elapses between the time the Ticket is reported to the Help Desk and the time the customer is provided an acknowledgement of the Problem and an estimated time for technician response.

1.3.5.39 Creation of User Ids and Access Profiles

Identification Number	57.0, 58.0 and 59.0
Name	Creation of User Ids and Access Profiles
Definition	Time elapsed to fulfill administration services requests if a request requires multiple Tickets (children) these still count as one ID request and the elapsed time is that for all child Tickets to be completed.
Applicability	All requests
Hours of Availability	6a.m. – 6 p.m. Monday-Friday
Measurement Period	Monthly

Algorithm	Note: User-ID/Access requests = UID/A $\frac{(\#UID/A \text{ requests} - \#UID/A \text{ requests completed on-time}) * 100}{\#UID/A \text{ requests}}$
Base Measures	Ticket Duration: Day of Help Desk Receipt through Day of Workflow Completion
Performance Requirement	90% within 2 days 98% within 5 days 100% average time not to exceed 3 days “Day” is defined as a 24-hour period. Example: If a request is received at 4:30 pm on Friday and completed at 3:15 pm the following Monday, that request will be completed within 1 day. If the same request was completed 5:30 pm the following Monday that request would be completed in 2 days. The start clock is triggered by ticket initiation.
Data Creation	The Helpdesk opening a Ticket and the GMC analyst closing the Ticket to indicate completion of the work creates metrics data. Notes: (a) For User IDs and Access Profiles requested to be created as part of a Project or Applications Work request, an HP team member will contact the requestor to negotiate completion schedules in support of the delivery date of the project or work request. (b) For creation requests for User IDs and Access Profiles received from the same County department on the same day, in excess of ten (10) or more, an HP team member will contact the requestor to negotiate a delivery date for some or all of the User IDs or Access Profiles requested submitted that day.

1.3.5.40 Data File Restoration

Identification Number	60.0, 61.0, 62.0 and 63.0
Name	Data/File Restoration
Definition	Length of time to begin file restore from the time of request.
Applicability	All requests for file restoration including those from users, Applications support and operations. Each file or data restoration request must be initiated through an AHD Ticket. Each request for restoration must contain the required file name and file date. When an entire directory needs restoration the specific directory name and date must be provided. When a merge is required, the restoration start time will be the time that the merge is begun.
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	Number of restores begun within 4 hrs / Total number of restores * 100 Number of restores begun within 8 hrs / Total number of restores * 100

Base Measures	
Performance Requirement	<p>On-site Tapes</p> <p>95% within 4 hrs 99% within 8 hrs</p> <p>Off-site Tapes</p> <p>95% within 8 hrs 99% within 12 hrs</p>
Data Creation	A Problem record is created in the Help Desk's Problem tracking system when a restore request is received.

1.3.5.41 Proposal Request

Identification Number	64.0 and 65.0
Name	Proposal Request
Definition	<p>Length of time to provide proposal information for Work Requests including schedule and cost estimates. The proposal submission information is broken into two measures: 1) Proposal for Requirements Analysis 2) Proposal for Development.</p> <p>1) Proposal for Requirements Analysis – The requestor will be provided a requirements analysis schedule and budget proposal within 5 business days or otherwise negotiated with requester.</p> <p>2) Proposal for Development – The County Technology Office will be provided a development schedule and budget proposal within 5 business days of receipt by Contractor of the County's request for work estimate or otherwise negotiated with requester.</p>
Applicability	All Work Requests for Proposals
Hours of Availability	Monday – Friday 6 a.m. to 6 p.m., excluding the County's holidays
Measurement Period	Monthly
Algorithm	<p><u>Proposal Requirements Analysis</u></p> <p>100 x (A/B)</p> <p>(A) = Total Proposal for Requirements Analysis Completed within 2 business days</p> <p>(B) = Total Proposal for Requirements Analysis requested</p> <p><u>Proposal for Development</u></p> <p>100 x (C/D)</p> <p>(C) = Total Proposal for Development Completed within 5 business days</p> <p>(D) = Total Proposal for Development requested</p>

Base Measures	Ticket Duration: Help Desk Receipt through Workflow Completion
Performance Requirement	95% Proposal Requirements Analysis completed within 2 business days 95% Proposal for Development completed within 5 business days
Data Creation	The Service Framework Project Manager will indicate the completeness of the requirements, provide a date for proposal submission, and County Contracts will provide the date the proposal was sent to the County.

1.3.5.42 Moves

Identification Number	66.0 and 67.0
Name	Moves
Definition	Time elapsed between the receipt of the request and the completion of that request. If a request requires multiple Tickets (children) all of these Tickets will be counted as a single request and the elapsed time is that for all child Tickets to be completed. As a result, only the parent Ticket is measured.
Applicability	All Requests Except: Projects
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	$((\text{Move requests} - \text{\# Move requests not completed on time}) / \text{\# Move requests}) * 100$
Base Measures	Ticket Duration: Day of Help Desk Receipt through Day of Workflow Completion
Performance Requirement	95% w/i 5 days, or by the requested completion date if the Move request specifies a completion date that exceeds 5 days following the receipt of the Move request. 100% average not to exceed 5 days of the receipt of the Move request, or the requested completion date if the Move request specifies a completion date that exceeds 5 days following the receipt of the Move request.
Data Creation	Help Desk Technical Support Analyst (TSA) enters, updates, and closes a Problem Ticket in Help Desk’s Problem tracking system.

1.3.5.43 Add

Identification Number	68.0 and 69.0
Name	Add
Definition	Time elapsed between the receipt of the Work Request and the completion of that request. If a request requires multiple Tickets (children) all of these Tickets will be counted as a single request and the elapsed time is that for all child Tickets to be completed. As a result, only the parent Ticket is measured.

Applicability	All Requests Except: Projects
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	$((\text{Add requests} - \# \text{ Add requests not completed on time}) / \# \text{ Add requests}) * 100$
Base Measures	Ticket Duration: Day of Help Desk Receipt through Day of Workflow Completion
Performance Requirement	95% w/i 3 days, or by the requested completion date if the Work Request specifies a completion date that exceeds 3 days following the receipt of the request. 100% average not to exceed 3 days of the receipt of the Add request, or the requested completion date if the Add request specifies a completion date that exceeds 3 days following the receipt of the Add request.
Data Creation	Help Desk Technical Support Analyst (TSA) enters, updates, and closes a Problem Ticket in Help Desk’s Problem tracking system.

1.3.5.44 Remove

Identification Number	70.0 and 71.0
Name	Remove
Definition	Time elapsed between the receipt of the Work Request and the completion of that request. If a request requires multiple Tickets (children) all of these Tickets will be counted as a single request and the elapsed time is that for all child Tickets to be completed. As a result, only the parent Ticket is measured.
Applicability	All Requests Except: Projects
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays
Measurement Period	Monthly
Algorithm	$((\text{Remove requests} - \# \text{ Remove requests not completed on time}) / \# \text{ Remove requests}) * 100$
Base Measures	Ticket Duration: Day of Help Desk Receipt through Day of Workflow Completion
Performance Requirement	95% w/i 3 days, or by the requested completion date if the Work Request specifies a completion date that exceeds 3 days following the receipt of the request. 100% average not to exceed 3 days of the receipt of the Remove request, or the requested completion date if the Remove request specifies a completion date that exceeds 3 days following the receipt of the Remove request.
Data Creation	Help Desk Technical Support Analyst (TSA) enters, updates, and closes a Problem Ticket in Help Desk’s Problem tracking system.

1.3.5.45 New Device Installation

Identification Number	72.0 and 73.0
Name	New Device Installation
Definition	Time elapsed between the receipt of a new device order and the completion of the order. Includes initial hook up, diagnostic testing, delivery, staging and configuration. In the event that a request requires multiple Tickets (children), all Tickets will be counted as a single Install and the elapsed time is that for all child Tickets to be completed. As a result, only the parent Ticket is measured.
Applicability	All Requests
Hours of Availability	6 a.m. to 6 p.m. Monday – Friday, excluding the County’s holidays [Note: The Telecom New Install measures will work to a 8am to 5pm Service Window]
Measurement Period	Monthly
Algorithm	$\frac{(\#Install\ requests - \#Install\ requests\ not\ completed\ on\ time)}{\#Install\ requests} * 100$
Base Measures	Ticket Duration: Day of Help Desk Receipt through Day of Workflow Completion
Performance Requirement	95% w/i 10 days, or by the requested completion date if the installation request specifies a completion date that exceeds 10 days following the receipt of the installation request. 100% average not to exceed 10 days
Data Creation	Help Desk Technical Support Analyst (TSA) enters, updates, and closes a Problem Ticket in Help Desk’s Problem tracking system.

1.3.5.46 Surveys

Identification Number	74.0 and 75.0
Name	Surveys
Definition	The End-User evaluation of the services provided by Contractor. A total of approximately 200 surveys per Week will be distributed including roughly 100 Break-Fix and 100 Work Request (WR) Tickets.
Applicability	All Service Frameworks and services except non-MASL’ed County services.
Hours of Availability	24x7x365
Measurement Period	Monthly

<p>Algorithm</p>	<p><u>Positive questions percentage</u> – the percentage of questions with a passing score</p> <p>Pos % = Number of passing survey questions / Total survey questions</p> <p><u>Overall question score</u> – the average score for all answered survey questions</p> <p>Overall Question Score = $\frac{\text{Sum of all questions answered with 1-5 response}}{\text{Total number of questions answered with 1-5 response}}$</p> <p>The surveys will be rated on a 5 point scale (1- highly unsatisfactory to 5-highly satisfied). Each survey question will be reported as passing, failing, or not counted.</p> <p>Passing survey questions – any question that is responded with a rating of 3, 4, or 5.</p> <p>Failing survey questions – any question that is responded with a rating of 1 or 2.</p> <p>Not counted questions – any question that is responded with an N/A.</p>
<p>Base Measures</p>	<p><u>Break-Fix surveys</u> – measure all Break-Fix Tickets regardless of Service Framework or status but active during the last 30 days:</p> <p>Help Desk Surveys – collects responses for Break-Fix first call Resolved Tickets</p> <p>Service Technician Surveys – collect responses for Break-Fix Tickets that require a technician to address/fix the Problem identified.</p> <p><u>Work Request Surveys</u> – measure all Work Request Tickets that have closed within the prior 30 days</p>

Performance Requirement	<p>Initial Requirements:</p> <p>Break-Fix Monthly Requirements:</p> <ul style="list-style-type: none"> - 85% Positive Question Percentage OR - 3.75 Overall Question Score <p>Work Request (WR) Monthly Requirements:</p> <ul style="list-style-type: none"> - 85% Positive Question Percentage OR - 3.75 Overall Question Score <p>Improvement Requirements:</p> <p>The Survey Requirements consist of the following levels:</p> <p>Break-Fix Monthly Requirements:</p> <ul style="list-style-type: none"> - 90% Positive Question Percentage or - 4.1 Overall Question Score <p>Work Request (WR) Monthly Requirements:</p> <ul style="list-style-type: none"> - 90% Positive Question Percentage or - 4.1 Overall Question Score <p>Note:</p> <p>A low volume of survey responses will not impose higher Performance Requirements than stated in this MASL Specification Sheet. .</p> <p>If negative responses are submitted for services outside of the Contractor’s scope of contractual responsibility, then the affected negative surveys will be negotiated and agreed upon with CTO before removal from the submitted survey counts.</p> <p>Subject to re-evaluation to increase improvement Requirement by 1% on a monthly basis until 95% is reached.</p>
Data Creation	All survey responses are tracked within the Survey Tracking system

1.3.5.47 System Availability

Identification Number	77.0
Name	System Availability
Definition	<p>Percentage of time that key voice, data systems, server, WAN and LAN switches are operational and available, excluding planned County-approved outages, power outages and device failover where no service interruption occurred.</p> <p>The Voice System, Data Network system, and LAN Availability will be measured on a per device basis. Each Type 1, 2, and 3 Site will be included in network Availability. The network equipment located at site 1099 & 99.1, has been excluded. The centralized voice mail platform, the Access Lines from Site 1, and the Access Lines from Site 2 will be included in network Availability.</p> <p>The Availability of each device will be separately reported as per the algorithm</p>

	<p>below.</p> <p>The measure is the aggregate of voice, data, and LAN, WAN and server Availability. Availability is calculated by summing the Total Available Hours¹ for all of the key network components (PBX, WAN devices, data router, core switches, LAN switches, servers) subtracting the Total Downtime² of all key components for each device.³ Divided by # of devices multiplied by scheduled hours</p> <p>Note 1: Total Available Hours are dependent upon the Site business hours. They will be either 24x7x365 or 12x5 (6am to 6pm, M-F, excluding county holidays).</p> <p>Note 2: Total Downtime is calculated by minutes device is down, during business hours, minus failover (where service is not interrupted)</p> <p>Note 3: Where redundant network capability exists at a site, only a single pathway's Availability hours will be counted in the total hours available. Correspondingly, system downtime hours will only be counted if redundant pathways fail, the system will be deemed operational and no Break-Fix incidents hours will be included in the Total Downtime. LAN switch Break-Fix incidents will be counted individually in Total Downtime hours.</p>
Applicability	Key network components include PBX, WAN, data router, LAN switches, Servers
Hours of Availability	24x7x365 or 12x5 (6am to 6pm)
Algorithm	Available Hours – {Outages-(Failover + Power Outages + Scheduled Outages)}/ # of devices*Scheduled Hours
Base Measures	Concord eHealth
Performance Requirement	99.9%
Data Creation	Concord eHealth

1.3.5.48 System Availability-Application Servers

Identification Number	78.0 (a) and (b)
Name	System Availability – Applications Servers
Definition	<p>Percentage of time that Application servers are operational and available, excluding planned outages, and device failover where no service interruption occurred.</p> <p>Applications Servers will be measured on a per device basis. Each Server site will be included in Availability: Data Center and County sites.</p> <p>The Availability of each Application server will be separately reported as per the algorithm below.</p> <p>The measure is the aggregate of all Application servers. Availability is calculated by summing the Total Available Hours¹ for all of the Application servers, subtracting the Total Downtime² of all key components for each Application Server .³ Divided by</p>

	<p># of Application servers multiplied by scheduled hours</p> <p>Note 1: Total Available Hours are dependent upon the application or services supported by the server. They will be either 24x7x365 or 12x5 (6am to 6pm, M-F, excluding county holidays).</p> <p>Note 2: Total Downtime is calculated by minutes an Application server is down, during business hours, minus failover (where service is not interrupted)</p> <p>Note 3: Where redundant servers exist for a single Application, only a single Application server's availability hours will be counted in the total hours available. Correspondingly, system downtime hours will only be counted on a single Application server if a redundant Application servers fails.</p>
Applicability	Applications Servers.
Hours of Availability	(a) 24x7x365 (b) 12x5 (6am to 6pm)
Algorithm	Available Hours – {Outages-(Failover + Scheduled Outages)}/ # of Application servers*Scheduled Hours
Base Measures	(tool name)
Performance Requirement	99.8%
Data Creation	(tool name)

1.3.5.49 System Availability-Infrastructure Servers

Identification Number	79.0
Name	System Availability – Infrastructure Servers
Definition	<p>Percentage of time that Infrastructure servers are operational and available, excluding planned outages, and device failover where no service interruption occurred.</p> <p>Infrastructure Servers will be measured on a per server basis. Each Server site will be included in Availability: data center and County sites.</p> <p>The Availability of each Infrastructure server will be separately reported as per the algorithm below.</p> <p>The measure is the aggregate of all Infrastructure servers. Availability is calculated by summing the Total Available Hours¹ for all Infrastructure servers subtracting the Total Downtime² of all key components for each Infrastructure server.³ Divided by # of Infrastructure servers multiplied by scheduled hours</p> <p>Note 1: Total Available Hours are 24x7x365.</p> <p>Note 2: Total Downtime is calculated by minutes Infrastructure server is down, minus failover (where service is not interrupted)</p> <p>Note 3: Where redundant Infrastructure server exists for a service, only a single Infrastructure server's availability hours will be counted in the total hours available. Correspondingly, system downtime hours will only be counted on a single Infrastructure server if a redundant Infrastructure servers</p>

	fails.
Applicability	Infrastructure Servers.
Hours of Availability	24x7x365
Algorithm	Available Hours – {Outages-(Failover + Scheduled Outages)}/ # of devices*Scheduled Hours
Base Measures	(tool name)
Performance Requirement	99.8%
Data Creation	(tool name)

1.3.5.50 Project Management Plan Rework

Identification Number	80.0
Name	Project Management Plan Rework
Definition	<p>Average Number of County Business Hours Lost due to Rejection and Revision of Project Management Plans (PMP).</p> <p>Number of County Business Hours Lost is defined as the number of County business Hours from County's notification date to HP of a PMP rejection through, and including, County's receipt of HP's revised PMP.</p>

Applicability	<p>Each 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.</p> <p>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.</p> <ol style="list-style-type: none"> 1. County Caused Reasons for Rejection (MASL clock does not start) must be categorized as: <ol style="list-style-type: none"> 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 F. Other as specified 2. HP Caused Reasons for Rejection (MASL clock starts) must be categorized as: <ol style="list-style-type: none"> A. Project scope is incorrect based on input document provided B. Math error C. Schedule issue D. Fee issue E. Changes made after “draft” review F. Other as specified
Hours of Availability	7 am PT – 5 pm PT County Workdays
Measurement Period	Monthly
Algorithm	<p>Average Number of Lost County Business Hours = Sum total of County business hours lost 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 County business hours lost on the specific PMP for the purposes of this algorithm will be reduced by 50%, or as mutually agreed-upon by the parties.</p>
Base Measures	Average Number of County Business Hours Lost
Performance Requirement	<p>Average Number of Lost County Business Hours during Measurement Period < = Target Baseline Total of Lost County Business Hours</p> <p>The Target Baseline Total of Lost County Business Hours for each month is:</p> <ul style="list-style-type: none"> • Month One through Three: 170 hours – 17 hours = 153 hours • Month Four through Seven: 170 hours – 34 hours = 136 hours • Month Eight through Eleven: 170 hours – 51 hours = 119 hours • Month Twelve through Fifteen: 170 hours – 68 hours = 102 hours

Data Creation	Metric data is created by the Contractor using Work Request Tracking Sheets
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1.3.5.51 Work Request Budget Performance

Identification Number	81.0
Name	Work Request Budget Performance
Definition	Work Requests completed within Last Approved Baseline Budget
Applicability	<p>Each Completed Work Request with an approved Project Management Plan (PMP). Exclusions:</p> <ul style="list-style-type: none"> • Level of effort (LOE) Work Requests • Very-Low-Risk (VLR) Work Requests • Non-Discretionary (NDWR) Work Requests • Software Purchase Work Requests • Software Maintenance Renewal Work Requests • Standalone Individual System Requests (ISR) • Firm Fixed Price Work Requests <p>This MASL will be in effect for each in-flight work request which had an approved PMP prior to the implementation of this MASL. Exceptions to this will be on a case-by-case basis and will be agreed upon prior to the implementation of this MASL.</p> <p>The types of costs that are to be included in the budget and actuals calculations for this MASL are labor billed through resource units as defined in the Contract.</p> <p>The penalty upper bound is the weighting percentage of the Penalty Pool.</p>
Hours of Availability	N/A
Measurement Period	Monthly
Algorithm	<p>'m' = Multiplier for penalty calculation. 'm' = 0.05</p> <p>MASL Penalty = m * (Last Approved Baseline Budget / CPI)</p>
Base Measures	Last Approved Baseline Budget and CPI
Performance Requirement	CPI => 0.90
Data Creation	Metric data is created by the Contractor using Work Request Tracking Sheets

1.3.5.52 Work Request Schedule Performance

Identification Number	82.0
Name	Work Request Schedule Performance
Definition	Work Requests completed within Last Approved Baseline Schedule
Applicability	<p>Each Completed Work Request with an approved Project Management Plan (PMP). Exclusions:</p> <ul style="list-style-type: none"> • Level of effort (LOE) Work Requests • Very-Low-Risk (VLR) Work Requests • Non-Discretionary (NDWR) Work Requests • Software Purchase Work Requests • Software Maintenance Renewal Work Requests • Standalone Individual System Requests (ISR) • Firm Fixed Price Work Requests <p>This MASL will be in effect for each in-flight work request which had an approved PMP prior to the implementation of this MASL. Exceptions to this will be on a case-by-case basis and will be agreed upon prior to the implementation of this MASL.</p>
Hours of Availability	N/A
Measurement Period	Monthly
Algorithm	<p>'m' = Multiplier for penalty calculation. 'm' = 0.05 'n' = Factor for penalty calculation. 'n' = 165,000 MASL Penalty = m * (n / SPI²)</p> <p>Note: ^2 means squared</p>
Base Measures	SPI
Performance Requirement	SPI => 0.90
Data Creation	Metric data is created by the Contractor using Work Request Tracking Sheets

1.3.5.53 Budgetary Estimate Request

Identification Number	83.0
Name	Budgetary Estimate Request
Definition	<p>Length of time to provide a budgetary estimate or make contact with Requester to negotiate a Budgetary Estimate delivery date for Work Requests.</p> <p>A Budgetary Estimate includes scope, assumptions, schedule and cost estimates.</p>
Applicability	<p>All Low, Medium and High Risk Work Requests.</p> <p>Excludes PREPP Work Requests.</p>
Hours of Availability	Monday – Friday 6 a.m. to 6 p.m., excluding the County’s holidays
Measurement Period	Monthly
Algorithm	<p>$100 \times (A+B)/C$</p> <p>(A) = Total number of Budgetary Estimates completed within 5 business days</p> <p>(B) = Total number of Budgetary Estimates for which contact with Requester was made within 5 business days.</p> <p>(C) = Total Budgetary Estimates requested</p>
Base Measures	<ol style="list-style-type: none"> 1. Approved Work Request through email receipt of Budgetary Estimate from HP Contracts to CTO Contracts; or 2. Approved Work Request through email receipt of proposed Budgetary Estimate delivery date from HP Project Manager to Requester; or 3. Approved Work Request through receipt of Budgetary Estimate from the Work Request system
Performance Requirement	95%
Data Creation	The Service Framework Project Manager will indicate the completeness of the requirements, provide a date for Budgetary Estimate submission, or email contact with Requester with proposed delivery date of Budgetary Estimate, or Work Request system date/time stamp.

1.3.5.55 Customer Satisfaction Survey

Identification Number	85.0
Name	Customer Satisfaction Surveys
Definition	The End-User evaluation of services provided by the contractor. The total number of surveys distributed per month will equal the total number of Break-Fix and IMAR tickets issued within a calendar month.
Applicability	All Service Frameworks
Hours of Availability	24x7x365
Measurement Period	Monthly
Algorithm	<p><u>Positive Evaluation percentage (POS)</u> – the percentage of evaluations with a score of 2 or 3</p> <p><u>Positive %</u> = Sum of survey evaluations scoring 2 and 3 /Total number of surveys</p> <p><u>Overall Question Score (OQS)</u> - the average score for all answered evaluations</p> <p>Overall evaluation score = Sum of scores for all evaluations answered with 1-3 response/Total number of evaluations answered with 1-3 responses</p> <p>The surveys will be rated on a three (3) point scale (1 – Dissatisfied, 2 – Satisfied, 3 – Highly satisfied)</p> <p>Scoring: OQS ≥ 2.46 or POS ≥ 95% = Pass OQS < 2.46 and POS < 95% = Fail</p> <p>For any month where the End-User response rate is 20% or less, this MASL will be reported but will have no standing for determining a Fee Reduction for that month.</p>
Base Measures	<p><u>Break/Fix IMAR ticket surveys</u> -</p> <p>Measures all tickets closed and user notified regardless of service framework during calendar month.</p> <p>Excludes internal contractor tickets.</p>

1.3.6 Transitional MASLs

The County recognizes that transitioning from one service provider to another requires a unique level of cooperation and facilitation between the Legacy Provider and the selected provider (i.e., Contractor). In general, the Contractor will assume responsibility for Service Framework-specific MASLs upon Cutover of the applicable Service Framework. The Contractor will not be responsible for MASLs (or portions of MASLs) relating to Service Frameworks that are not within its control. For MASLs that span Service Frameworks (e.g., Break-Fix MASLs), the Contractor will have responsibility when the fix is within a Service Framework for which the Contractor has already assumed control and responsibility. Active MASLs by Transition phase are listed in Section 8.2. In addition, the County has identified areas where transitional MASLs are appropriate to mitigate confusion and maintain service level commitments to County End-Users.

Help Desk Transition MASL

1.3.7 The Help Desk MASLs are defined for the period of transition from the Legacy Provider to the Contractor. These MASLs will go into effect at the start of the Help Desk Service Framework transition period and will stay in effect until the transition of all the Service Frameworks are complete. The Help Desk Transition MASLs will include:

- Help Desk Handoff – Identification Number 76.0. Total time elapsed from the receipt of a Help Desk call by the Contractor to the time the Contractor receives confirmation of receipt by the Legacy Provider – elapsed time will be 15 minutes or less for 99% of the calls on a 24x7x365 basis. If the call is incorrectly passed to the Legacy Provider (e.g., if Cutover has already occurred for the Applications Services Framework, and the Contractor incorrectly passes an Applications Services-related break-fix call to the Legacy Provider), then the elapsed time will encompass the receipt of the call information back from the Legacy Provider. This MASL excludes calls resolved on the first call.

Application Services Transition MASL

There are no anticipated transitional MASLs for the transition of the Application Services Framework.

Desktop Services Transition MASL

There are no anticipated transitional MASLs for the transition of the Desktop Services Framework.

Network Services Transition MASL

The Network Services Transition MASLs are defined for the period of transition from the Legacy Provider to the Contractor. These MASLs will go into effect at Cutover of the Network Services Framework and will stay in effect until the Cutover of the Network Services Framework and the Cutover of the Data Center Framework transition have been completed. In some cases, the Contractor will need to work with the County and the Legacy Provider to ensure the MASL sub-measurements are appropriately aligned with responsibilities during transition, e.g., on MASLs relating to response times, ensuring that network transmission times are differentiated from host computer processing times. The Network Services Transition MASLs will include, at a minimum:

- **Overall System Availability** – The percentage of time, end-to-end, that Network Services are available to End-Users, including all voice and data networks – 99.8% availability on a 24x7x365 basis, excluding planned outages.

Data Center Services Transition MASL

There are no anticipated transitional MASLs for the transition of the Data Center Services Framework.

Cross Functional Transition MASL Detail

1.3.8 There are no anticipated transitional MASLs for the transition of the Cross Functional Services Framework.

1.4 Special Requirements

In addition to the MASLs, Contractor shall comply with the following special requirements:

Special Requirements

Department	Requirement
All Departments	Approximately 250-300 individual End-Users will be designated as VIPs by the County. Any break-fix ticket from a VIP will be immediately escalated for resolution by the Contractor and resolved as soon as possible on 24x7x365 basis.
Registrar of Voters (ROV)	The Registrar of Voters has historically conducted on average two (2) statewide elections, and four (4) additional Special elections each fiscal year. For all such elections the special requirements as called out in the Special MASL, Requirement Services for ROV procedure in Appendix 4.3.8-1 will apply.
HHSA	Immediate (on-site, if needed) response, 24x7x365, for agency's public hotlines, and back-up phone service for the Polinsky Children's Center,

	Psychiatric Hospital and Edgemoor Hospital
OES	Immediate on-site response for all IT and Telecom during declared emergency events (approximately 15 days per year)
Tax Collector	<p>San Diego County Treasurer Tax Collector (TTC) has historically conducted two tax payment facilitation events (referred to as Tax Collection Event) and one Tax Sale event each County fiscal year. The Special MASL Requirement for Tax Collector as defined in Appendix 4.3.8-1 is intended to provide a priority level of service for the systems utilized to support both of these events as well as project management and general IT support for the events themselves.</p> <p>For all such events the Special MASL requirement as called out in the Special MASL, Requirement Services for Treasurer Tax Collector procedure at Appendix 4.3.8-1 will apply</p>
Public Administrator	Immediate on-site response for Public Administrator Auction System 8 days per year
Treasurer	Maximum 2-hour resolution for the Investment Manager and/or Assistant Investment Manager PCs.
Public Works	Level 1 response for Maintenance Management System and On-Line Time Sheet System on Thursdays and Fridays

END OF EXHIBIT