

U.S. General Services Administration

Federal Acquisition Service

GSA Transition Coordination Center

Predictive Analysis

Using Networx Installation Intervals to Aid EIS Transition Planning

Version 1.0

February 14, 2020

Introduction

To assist agencies with project planning, GSA convened a Predictive Analysis Collaboration Team (PACT) made up of representatives from eight (8) Federal agencies and the nine (9) EIS contractors to design an approach that could be used following EIS task order award to develop realistic high-level timelines and highlight risk areas. This approach is hereby referred to as predictive analysis.

Time Remaining for the EIS Transition

There is limited time remaining to transition to the EIS contracts given the volume of active services on the expiring contracts. Figure 1 provides the critical GSA milestones associated with the EIS Transition. It highlights the limited amount of time remaining to foster an increased sense of urgency among stakeholders.



*measured and reported monthly



Predictive Analysis Approach

Predictive analysis assigns conversion factors (or weighting) to similar installation intervals from the FTS 2001 to Networx transition, which can then be applied to transition inventory and used to predict installation intervals in preparation for EIS task order/service order execution.

GSA's Transition Coordination Center (TCC) calculated Networx installation intervals by subtracting the Order Receipt Acknowledgement (ORA) date from the Service Order Completion Notice (SOCN) date for any new orders on active Networx records with data

through November 19, 2019. Data was blended across all agencies. Common situations that may have impacted Networx installation intervals include:

- Customer Want Date (CWD) was/is in the distant future
- Multiple rejections of an ORA
- Errors in order writing [impacts notifications]
- Local access contractor delays [impact Firm Order Commitment (FOC) date]
- Back Office Transitions that tend to be reported as the same date
- Project level installations that tend to be reported as the same date

Data Analysis Assumptions

The following assumptions were used to develop Networx installation intervals:

- Data is for planning purposes only and not recommended for use with contractual Service Level Agreements (SLAs), which are based on the Service Order Confirmation (SOC) date
- Data was measured for new orders only and does not include change orders
- Data does not include instances where ORA date was listed after the SOCN date

Each agency should view its own installation interval data to provide context on how its transition was previously executed, and determine how items such as non-conus sites, construction required, and other time consuming items should be factored into this analysis.

For additional guidance, the TCC encourages agencies to review video presentations of the "Mitigating Transition Delays Workshop" and the "Transition Order Sequencing Workshop" at:

https://www.gsa.gov/technology/technology-purchasing-programs/telecommunicationsand-network-services/enterprise-infrastructure-solutions/eis-transition/transitionresources#2.

Networx Installation Intervals

Table 1 provides Networx installation intervals alongside the number of Networx orders used to derive the data.

Service Description Vorage Longest Average Networx Orders (#) Networx Orders (#) LAYER 2 VPN 156 944 619 932 MANAGED NETWORK 140 998 719 14.534 MANAGED TRUSTED INTERNET PROTOCOL SERVICES 120 618 462 134 NETWORK-BASED IP VPN 111 994 465 31.445 PRIVATE LINE 101 966 621 9.925 INTERNET PROTOCOL 92 980 413 1.976 CIRCUIT SWITCHED DATA SERVICE 34 379 115 15.254 VOICE SERVICE 29 944 252 3.200.032 TOLL-FREE 11 926 118 46.909 CALL CENTERCUSTOMER CONTACT CENTER 153 698 594 90 CALL CENTERCUSTOMER CONTACT CENTER 150 639 188 CELULARPICS 30 781 131 2.104 CLUCAL PROSTAL ACKET DATA 169 980 808 188 CELULARPICS 30 713 <t< th=""><th></th><th>Augragia</th><th>Longoot</th><th>Last 5%</th><th>No. of</th></t<>		Augragia	Longoot	Last 5%	No. of
(days) (days)<	Service Description	Average	Longest	Average	Networx
LAYER 2 VPN 156 944 619 932 MANAGED NETWORK 140 998 719 14,534 MANAGED TRUSTED INTERNET PROTOCOL SERVICES 120 618 462 134 NETWORK-BASED IP VPN 111 994 465 31,445 PRIVATE LINE 101 966 621 9,925 INTERNET PROTOCOL 92 980 413 1,976 ORCUT SWITCHED DATA SERVICE 379 115 15,254 VOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 11 926 433 62 4,830 BROADBAND ACCESS 183 396 8 62 4,830 CALL CENTERCUSTOMER CONTACT CENTER 153 116 2,873 113 2,104 COULCONPUTING SERVICE 11 60 60 594 90 CALL CENTERCUSTOMER CONTACT CENTER 153 168 46,909 111 COUD COMPUTING SERVICE 116 60 60		(days)	(days)	(days)	Orders (#)
NANAGED NETWORK 140 998 719 14.534 MANAGED TRUSTED INTERNET PROTOCOL SERVICES 120 618 462 1344 NETWORK-BASED IP VPN 111 994 465 31.445 PRIVARE LINE 101 966 621 9.925 INTERNET PROTOCOL 92 980 413 1.976 VOICE OVER IP 47 641 240 6.513 CIRCUIT SWITCHED DATA SERVICE 29 994 252 3,260.632 TOLL-FREE 11 926 118 46.003 AUDIO CONFERENCING 17 388 62 4.830 BROADBAND ACCESS 183 395 8 62 CALLING CARD 15 513 162 2.873 CELULUAR DIGITAL PACKET DATA 180 980 888 188 CELULUAR DIGITAL PACKET DATA 180 781 131 2.104 COMENTING SERVICE 11 60 659 75 11 COLOMOUTING SERVIC	LAYER 2 VPN	156	944	619	932
NANAGED TRUSTED INTERNET PROTOCOL SERVICES 120 618 462 134 NETWORK-BASED IP VPN 111 994 465 31.445 PRIVATE LINE 101 966 621 9.925 INTERNET PROTOCOL 92 980 413 1.976 PRIMARY RATE INTERFACE 57 997 224 2.964 VOICE OVER IP 47 641 240 6.513 CIRCUIT SWITCHED DATA SERVICE 34 379 115 15.254 VOICE SERVICE 29 994 252 3.260.632 TOLL-FREE 11 926 4.830 305 8 ALDIO CONFERENCING 17 388 62 4.830 BROADBAND ACCESS 183 395 8 6 CALLING CARD 15 531 112 2.064 CLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 761 131 2.04 COMEINED LIPCCI MWA	MANAGED NETWORK	140	998	719	14,534
NETWORK-BASED IP VPN 111 994 465 31.445 PRIVATE LINE 101 966 621 9.925 INTERNET PROTOCOL 92 980 413 1.976 PRIMARY RATE INTERFACE 57 997 224 2.964 VOICE OVER IP 47 641 240 6.513 CIRCUIT SWITCHED DATA SERVICE 24 379 115 15.254 VOICE OVER IP 47 641 240 6.613 AUDIO CONFERENCING 17 388 62 4.830 BROADBAND ACCESS 183 395 8 64 CALLING CARD 15 531 162 2.873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 804 181 CONDERGENTING 106 977 713 441 COMBINED (LOCAL AND LONG DISTANCE) <td< td=""><td>MANAGED TRUSTED INTERNET PROTOCOL SERVICES</td><td>120</td><td>618</td><td>462</td><td>134</td></td<>	MANAGED TRUSTED INTERNET PROTOCOL SERVICES	120	618	462	134
PRIVATE LINE 101 966 621 9.925 INTERNET PROTOCOL 92 980 413 1,976 PRIMARY RATE INTERFACE 57 997 284 2,964 VOICE OVER IP 47 641 240 6,513 CIRCUIT SWITCHED DATA SERVICE 34 379 115 15,254 VOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 11 926 118 46,909 ADDIO CONFERENCING 17 388 62 4,830 BROADBAND ACCESS 183 395 8 621 2,873 CELLULAR DIGITAL PACKET DATA 199 980 808 188 CELLULARIPCS 30 781 131 2,104 CO-LOCATED HOSTING 106 977 713 441 72 206 264 641 72 COMEINED LICCAL AND LONG DISTANCE) 249 644 641 72 26 35 CONTERT DELIVERY NETWORK 27	NETWORK-BASED IP VPN	111	994	465	31,445
INTERNET PROTOCOL 92 980 413 1,976 PRIMARY RATE INTERFACE 57 997 284 2,964 VOICE OVER IP 47 641 240 6,513 CIRCUIT SWITCHED DATA SERVICE 29 994 252 3,260,632 YOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 11 926 118 46,009 AUDIO CONFERENCING 17 388 62 4,830 BROADBAND ACCESS 183 396 8 64 4,800 CALLING CARD 15 531 162 2,873 641 72 CELULIAR DIGITAL PACKET DATA 189 980 808 188 62 413 71 COLOD COMPUTING SERVICE 11 60 60 59 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429 76,429	PRIVATE LINE	101	966	621	9,925
PRIMARY RATE INTERFACE 57 997 284 2,964 VOICE OVER IP 47 641 240 6,513 CIRCUIT SWITCHED DATA SERVICE 34 379 115 15,254 VOICE SERVICE 29 994 252 3,260,632 CALL CENTERE 11 926 118 46,909 AUDIO CONFERENCING 17 388 62 4,830 BROADBAND ACCESS 183 396 8 8 CALL CENTER/CUSTOMER CONTACT CENTER 155 531 162 2,873 CELLULAR/PCS 30 781 131 2,104 CLOUD COMPUTING SERVICE 111 60 60 59 CO-LOCATED HOSTING 106 977 713 4441 COMBINED LIPCALAND LONG DISTANCE 226 226 35 CONVERGED IP 84 819 435 191 COMBINED LUCALAND LONG DISTANCE 226 226 35 CONVERT DELIVERY MARK 27 226	INTERNET PROTOCOL	92	980	413	1,976
VOICE OVER IP 47 641 240 6,513 CIRCUIT SWITCHED DATA SERVICE 34 379 115 15,254 VOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 111 926 118 46,909 BROADBAND ACCESS 183 395 8 62 CALL CENTER/CUSTOMER CONTACT CENTER 153 693 90 CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 COLOCATED HOSTING 106 977 713 441 COMBINED LICCAL AND LONG DISTANCE) 249 644 641 722 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTENT DELIVERY NETWORK 27 226 226 21 DEDICATED HOSTING 98 <t< td=""><td>PRIMARY RATE INTERFACE</td><td>57</td><td>997</td><td>284</td><td>2,964</td></t<>	PRIMARY RATE INTERFACE	57	997	284	2,964
CIRCUIT SWITCHED DATA SERVICE 34 379 115 15,264 VOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 11 926 118 46,909 AUDIO CONFERENCING 17 338 62 4,830 BRADBAND ACCESS 183 395 8 62 CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 COLOCATED HOSTING 11 60 60 59 COLOCATED HOSTING 106 977 713 441 COMBINED URCE TIWARD DIALING 62 54 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 43 191 DEDICATED VOICE SERVICE 18	VOICE OVER IP	47	641	240	6,513
VOICE SERVICE 29 994 252 3,260,632 TOLL-FREE 11 926 118 46,909 AUDIO CONFERENCING 17 388 62 4,830 BROADBAND ACCESS 183 395 8 CALL CENTER/CUSTOMER CONTACT CENTER 153 698 594 90 CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 COLUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTERT DELIVERY NETWORK 27 226 26 35 CONTERT DELIVERY NETWORK 27 226 26 35 CONTERT SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 11 DEDICATED TRANSMISSION CONNECT	CIRCUIT SWITCHED DATA SERVICE	34	379	115	15,254
TOLL-FREE 11 926 118 46,009 AUDIO CONFERENCING 17 388 62 4,630 BROADBAND ACCESS 183 395 8 CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 COLOCATED HOSTING 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED (LOCAL AND LONG DISTANCE) 249 644 641 72 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 DEDICATED TOSTING 184 577 11 DEDICATED TRANSMISSION CONNECTION 99 469 <t< td=""><td>VOICE SERVICE</td><td>29</td><td>994</td><td>252</td><td>3,260,632</td></t<>	VOICE SERVICE	29	994	252	3,260,632
AUDIO CONFERENCING 17 388 62 4,830 BROADBAND ACCESS 183 395 8 CALL CENTER/CUSTOMER CONTACT CENTER 153 698 594 90 CALL CENTER/CUSTOMER CONTACT CENTER 155 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR/PCS 30 781 131 2,104 CLOUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED URCAL AND LONG DISTANCE) 249 644 641 72 CONTENT DELIVERY NETWORK 27 226 235 50 111 859 708 170 CUNTENT DELIVERY NETWORK 27 226 255 21 12 255 21 16 184 577 11 DEDICATED TRANSMISSION CONNECTION 99 469 11 11 16 160 138 225 21 </td <td>TOLL-FREE</td> <td>11</td> <td>926</td> <td>118</td> <td>46,909</td>	TOLL-FREE	11	926	118	46,909
BROADBAND ACCESS 183 395 8 CALL CENTER/CUSTOMER CONTACT CENTER 153 698 594 90 CALLING CARD 15 531 162 2.873 CELULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 COUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONTENT DELIVERY NETWORK 27 226 225 21 DEDICATED POSTING 184 25 25 21 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED TRANSMISSION CONNECTION 99 469 141 DEDICATED TRANSMISSION CONNECTION 221 233 507 149 FIMERNET 132 733 <td>AUDIO CONFERENCING</td> <td>17</td> <td>388</td> <td>62</td> <td>4,830</td>	AUDIO CONFERENCING	17	388	62	4,830
CALL CENTER/CUSTOMER CONTACT CENTER 153 698 594 90 CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR/PCS 30 781 131 2,104 COUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED LICCAL AND LONG DISTANCE) 249 644 641 72 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED TRANSMISSION CONNECTION 92 43 364 FRAME RELAY SERVICE	BROADBAND ACCESS	183	395		8
CALLING CARD 15 531 162 2,873 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR/PCS 30 781 131 2,104 CLOUD COMPUTING SERVICE 11 60 60 59 CONTED HOSTING 106 977 713 441 COMBINED LOCAL AND LONG DISTANCE) 249 644 641 72 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 11 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED WOICE SERVICE 132 733 507 149 FRAME RELAY S	CALL CENTER/CUSTOMER CONTACT CENTER	153	698	594	90
CELLULAR DIGITAL PACKET DATA 189 980 808 188 CELLULAR/PCS 30 781 131 2,104 CLOUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED (LOCAL AND LONG DISTANCE) 249 644 641 72 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 1 11 DEDICATED MOSTING 98 469 111 11 11 DEDICATED TRANSMISSION CONNECTION 99 469 11 11 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 4 INTEUSION DETECTION AND PREVENTION 237 997 902	CALLING CARD	15	531	162	2,873
CELLULAR/PCS 30 781 131 2,104 CLOUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED LICCAL AND LONG DISTANCE) 249 644 641 72 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1.889 E-CLOUD 222 363 2 2 363 INCIDENT RESPONSE 159 639 639 233 INTUSION DETECTION AND PREVENTION 237	CELLULAR DIGITAL PACKET DATA	189	980	808	188
CLOUD COMPUTING SERVICE 11 60 60 59 CO-LOCATED HOSTING 106 977 713 441 COMBINED LLOCAL AND LONG DISTANCE) 249 644 641 72 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED TOOLS SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 E 149 143 149 FIXED SATELLITE 101 909 489 364 149 363 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 197 142 3,510 </td <td>CELLULAR/PCS</td> <td>30</td> <td>781</td> <td>131</td> <td>2.104</td>	CELLULAR/PCS	30	781	131	2.104
CO-LOCATED HOSTING 106 977 713 441 COMBINED (LOCAL AND LONG DISTANCE) 249 644 641 72 COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 11 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,89 FCLOUD 222 363 2 2 41 INCIDENT RESPONSE 176 329 44 1 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102	CLOUD COMPUTING SERVICE	11	60	60	59
COMBINED (LOCAL AND LONG DISTANCE) 249 644 641 72 COMBINED LICCT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 211 DEDICATED HOSTING 184 577 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 149 364 FIXED SATELLITE 101 909 448 364 149 363 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 <t< td=""><td>CO-LOCATED HOSTING</td><td>106</td><td>977</td><td>713</td><td>441</td></t<>	CO-LOCATED HOSTING	106	977	713	441
COMBINED DIRECT INWARD DIALING 62 954 287 75,429 CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 111 DEDICATED TRANSMISSION CONNECTION 99 469 11 DEDICATED VOICE SERVICE 30 6629 159 1,889 E-CLOUD 222 363 2 2 149 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 4 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997<	COMBINED (LOCAL AND LONG DISTANCE)	249	644	641	72
CONTENT DELIVERY NETWORK 27 226 226 35 CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 363 2 ETHERNET 132 733 507 149 149 964 364 FIXED SATELLITE 101 909 489 364 3639 237 INCIDENT RESPONSE 159 639 639 237 17 142 3,510 IP VIDEO TRANSPORT 102 987 412 3,510 1997 870 423 MANAGED FIREWALL 210 997 870 423 <t< td=""><td>COMBINED DIRECT INWARD DIALING</td><td>62</td><td>954</td><td>287</td><td>75.429</td></t<>	COMBINED DIRECT INWARD DIALING	62	954	287	75.429
CONVERGED IP 84 819 435 191 CUSTOMER SPECIFIC DESIGN AND ENGINEERING 112 859 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 ETHERNET 132 733 507 149 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 7115 M	CONTENT DELIVERY NETWORK	27	226	226	35
CUSTOMER SPECIFIC DESIGN AND ENGINEERING 11 815 708 170 DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 11 DEDICATED TRANSMISSION CONNECTION 99 469 11 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 149 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IV DIEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 <td< td=""><td>CONVERGED IP</td><td>84</td><td>819</td><td>435</td><td>191</td></td<>	CONVERGED IP	84	819	435	191
DARK FIBER SERVICE 18 25 25 21 DEDICATED HOSTING 184 577 11 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 2 363 2 ETHERNET 132 733 507 149 364 FRAME RELAY SERVICE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597	CUSTOMER SPECIFIC DESIGN AND ENGINEERING	112	859	708	170
DEDICATED HOSTING 10	DARK FIBER SERVICE	18	25	25	21
DEDICATED TRANSMISSION CONNECTION 101 111 DEDICATED TRANSMISSION CONNECTION 99 469 111 DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 2222 363 2 2 ETHERNET 132 733 507 1449 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 PREMISE	DEDICATED HOSTING	184	577		11
DEDICATED VOICE SERVICE 30 629 159 1,889 E-CLOUD 222 363 2 ETHERNET 132 733 507 149 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 PREMISES-BASED IP VPN 68 162 5 5 SYNCHRONOUS OPTICAL NETWORK (SONET) 140 383 383 33	DEDICATED TRANSMISSION CONNECTION	99	469		11
DEDIGNIC 00 000		30	629	159	1 889
ETHERNET 132 733 507 149 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 PREMISES-BASED IP VPN 68 162 5 5 STORAGE SERVICES 181 472 3 3 VIDEO TELECONFERENCING SERVICE 19 80 51 558 VOICE OVER IP TRANSPORT 52 641 256 5		222	363	100	2
EINER NUCL 102 102 103 103 103 FIXED SATELLITE 101 909 489 364 FRAME RELAY SERVICE 176 329 4 INCIDENT RESPONSE 159 639 639 23 INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 STORAGE SERVICES 181 472 3 3 SYNCHRONOUS OPTICAL NETWORK (SONET) 140 383 383 33 VIDEO TELECONFERENCING SERVICE 19 80 51 558 VOICE OVER IP TRANSPORT 52 64	ETHERNET	132	733	507	149
INCLOST INCLOST INCLOST INCIDENT INCIDENT <thincident< th=""> <thincident< th=""> <thi< td=""><td>EXED SATELLITE</td><td>101</td><td>909</td><td>489</td><td>364</td></thi<></thincident<></thincident<>	EXED SATELLITE	101	909	489	364
INCIDENT RESPONSE 110 010 <td></td> <td>176</td> <td>329</td> <td>100</td> <td>4</td>		176	329	100	4
INTRUSION DETECTION AND PREVENTION 237 997 902 327 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 STORAGE SERVICES 181 472 3 SYNCHRONOUS OPTICAL NETWORK (SONET) 140 383 383 33 VIDEO TELECONFERENCING SERVICE 19 80 51 558 VOICE OVER IP TRANSPORT 52 641 256 5,620 VULNERABILITY SCANNING 90 90 1 1 WEB CONFERENCING 180 994 927 1,444 WIRELINE ACCESS 97 593 432 141 WEB CONFERENCING 180 994		159	639	639	23
INTRODUCTION 201 501 502 621 IP TELEPHONY 102 987 412 3,510 IP VIDEO TRANSPORT 147 965 522 818 MANAGED FIREWALL 210 997 870 423 MISCELLANEOUS OTHER 209 825 597 715 MULTIMODE/WIRELESS 154 701 497 170 OPTICAL WAVELENGTH 99 417 417 35 PREMISES-BASED IP VPN 68 162 5 STORAGE SERVICES 181 472 3 SYNCHRONOUS OPTICAL NETWORK (SONET) 140 383 383 33 VIDEO TELECONFERENCING SERVICE 19 80 51 558 VOICE OVER IP TRANSPORT 52 641 256 5,620 VULNERABILITY SCANNING 90 90 1 1 WEB CONFERENCING 180 994 927 1,444 WIRELINE ACCESS 97 593 432 141		237	997	902	327
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Table 1. Networx Installation Intervals and Volume

Average: the average new order installation period for each service type; measured in calendar days from the placement of an order to the implementation of the service. *This information can be helpful to determine the amount of time it will take to install the majority of an agency's orders for each service type.*

Longest: the longest new order installation period for each service type; measured in calendar days *to show real-world data on how long it has actually taken agencies to install each service type*. Note: these numbers are not anomalies, where one order far exceeded the next longest interval. For most service types, there were multiple orders close to the longest interval.

Last 5% Average: the average number of calendar days it took to complete installations for the longest 5% of new orders. *This information is useful in determining how long it may take to finish out challenging or problem sites.* Note: if a service did not have enough orders to provide a valid statistical sampling, it was left blank.

Assigning Weighting

Table 2 provides weighting that can be applied to the blended interval data from Networx. The PACT concurred with the weighting ranges, noting that agencies and EIS contractors should use this as a directional aid, applying adjustments based on their specific situation.

Transition Type	Weighting	Reason
Like-for-Like with incumbent	.60 – .80	In most instances, like services can be moved onto a new contract using a back-office process, thereby avoiding the time it takes for physical installations.
Like-for-Like with new provider	1 – 1.5	Installation intervals are expected to be equal to or higher than historical intervals depending on the new provider's knowledge of customer sites.
Transformation with incumbent	.75 – 1.25	Installation intervals vary depending on the technology selected and the maturity of its implementation process.
Transformation with new provider	1.25 – 2	Installation intervals vary depending on the technology selected and the maturity of its implementation process, and the new provider's understanding of agency practices, locations, and resources.

Table 2. Weighting by Transition Type

Example of How Predictive Analysis can be used for Scheduling

The PACT members determined that high-level predictive schedule can be useful for project and risk planning. In this example, actual agency-specific data for a large department's Networx NBIPVPN services was used to develop a sample predictive schedule.

Sample Agency:	Large Agency	
Inventory Applied:	1,736 NBIPVPN SIRs currently active on Networx	
Transition End Target:	September 30, 2022 (to meet the EIS transition milestone)	
Awardee:	New provider	
Transition Type:	Like-for-Like	
Weighting Applied:	1:1	
Transition Strategy:	Place all orders up front and hold the EIS contractor accountable to deliver an average of 60 per month	
Assumptions:	 Planning activities will take 90 days to complete 	

• The implementation period spans the time it took to install the site with the "longest" historical interval.

For an agency or EIS contractor using project planning software, the three types of installation interval metrics from Table 1 were compared to the agency's actual installation intervals to determine schedule elements. The schedule shown in Figure 2 uses the actual Networx intervals highlighted in green below.

Type of Installation Interval Metric	Blended Networx Interval (Table 1)	Actual Networx Interval
Average	111 days	50 days
Longest	994 days	29 months
Last 5%	465 days	18 months



Figure 2. Sample Predictive Schedule

Risks and Considerations:

- 1. If the order(s) that takes the longest time is not submitted on April 1st, it is in danger of being delivered too late to make the end date.
- 2. Can the agency and the EIS contractor consistently support an average of 60 installations every month for 29 months?
- 3. Implementation of service typically follows more of a "bell curve" (with more installations occurring during the middle/peak months and less installations at the beginning and at the end) than a straight line average.
- 4. Any slippage near the end of the project jeopardizes the ability to disconnect all services from the expiring contract by 9/30/2022.