



STATE OF MICHIGAN ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
320 S. Walnut Street 2nd Floor Lansing, MI 48933
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number 2

to

Contract Number MA220000000399

CONTRACTOR	ACCENTURE
	1001 Woodward Avenue, 4th Floor
	Detroit MI 48226
	Kathleen Cawley
	859-248-1187
	kathleen.cawley@accenture.com
	CV0062320

STATE	Program Manager	Various	Various
	Contract Administrator	Kristine Mills	DTMB
		517-242-6402	
		millsk11@michigan.gov	

CONTRACT SUMMARY

Real Time Data Exchange (RIDE) System

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
February 15, 2022	February 14, 2027	5 - 12 Months	February 14, 2027
PAYMENT TERMS		DELIVERY TIMEFRAME	
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING
<input type="checkbox"/> P-Card <input type="checkbox"/> Direct Voucher (PRC) <input type="checkbox"/> Other			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE

OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input type="checkbox"/>		<input type="checkbox"/>		
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$1,964,038.00	\$0.00	\$1,964,038.00		

DESCRIPTION

Effective 02/14/2025, this contract is terminated in accordance with the attached Statement of Work (SOW). Accenture and the State have agreed to the transition plan included in the attached SOW.

All other terms, conditions, specifications, and pricing remain the same. Per Contractor, Agency, and DTMB Procurement approval.

**Program Managers
for
Multi-Agency and Statewide Contracts**

AGENCY	NAME	PHONE	EMAIL
MDOT	Joseph Gorman	517-636-0635	GormanJ4@michigan.gov
DTMB	Dave Work	517-719-2250	WorkD@michigan.gov

STATEMENT OF WORK - IT CHANGE NOTICE

Project Title: MDOT – Realtime Information Data Exchange Transition	Period of Coverage: 1/1/2025-2/14/2025
Requesting Department: MDOT – Intelligent Transportation Systems Program Office	Date: 1/13/2025
Agency Project Manager: Joe Gorman	Phone: 517-636-0635
DTMB Project Manager: Dave Work	Phone: 517-719-2250

Brief description of services to be provided:

The State of Michigan and Accenture have agreed to revise the Master Agreement end date from 2/14/2027 to 2/14/2025.

BACKGROUND:

The Realtime Information Data Exchange (RIDE) is an implementation of the Urban OS open-source software project. Accenture currently supports and maintains the implementation of Urban OS for MDOT. Operational needs dictate shifting the support of Urban OS to internal State resources.

PROJECT OBJECTIVE:

The Statement of Work (SOW) requests Accenture to facilitate the transition of Urban OS support from current Accenture subject matter experts to State of Michigan developers.

SCOPE OF WORK:

The scope of work includes knowledge transfer sessions, status meetings, provisioning appropriate accounts, and preparation of documentation to enable a successful transition.

TASKS:

Technical support is required to assist with the following tasks:

1. Conduct necessary knowledge transfer and status meetings with DTMB support staff
2. Prepare written documentation detailed in deliverables below
3. Review existing environments for security issues
4. Complete transition items detailed in existing Schedule G - Transition Out

DELIVERABLES:

Deliverables for this project include:

- 1) **References** – Accenture to provide additional documentation on the following topics:
 - a. Building new images and uploading to Quay

- b. Deploying new images to MDOT environments
 - c. Managing users/authentication in Auth0
 - d. Previous issues/resolutions
 - e. Common debugging actions
 - f. Security vulnerability resolutions
 - g. Listing of Third-Party Licenses
- 2) **Operational Scenarios** - Accenture will ensure required personnel will have Admin access to the required services needed to maintain the RIDE application. These services are:
 - a. Quay (Container Images)
 - b. Auth0 (Authentication Management)
 - c. Github (Source Code)
- 3) **Release Process** – Accenture to provide detailed documentation on how to deploy changes to the development environment.
- 4) **Problem Resolution** - The following is a list of problems the Accenture team encountered throughout the maintenance phase. Accenture to provide detailed documentation on how these issues were resolved.
 - a. Sealed Vaults
 - b. Crashed Pods
 - c. Zookeeper tmp directory full
 - d. Kafka/Zookeeper no CA found
 - e. Cloudflare redirect
 - f. OOM Killed exceptions
- 5) **Security Vulnerabilities** - As of 1/6/25 there are 9 non-false positive vulnerabilities showing in the Redhat scanning tool. These will be assessed and mitigated if possible with the new DTMB support staff as a part of the transition process.

ACCEPTANCE CRITERIA:

Deliverables will not be considered complete until the Agency and DTMB Project Manager have formally accepted them.

PROJECT CONTROL AND REPORTS:

The vendor must conduct regular meetings throughout the transition period.

Overall Transition Timeline: 1/13/25 – 2/14/25

Transition Kick-off Meeting: 1/13/25

Transition Status Meetings: 1/21/25, 1/27/25, 2/3/25, 2/10/25

Transition Project Closeout Meeting: 2/14/25

In addition to scheduled meetings, the Accenture team will facilitate on demand knowledge transfer sessions and provide live shadowing opportunities for DTMB staff.

PAYMENT SCHEDULE:

Payment will be made based on the existing maintenance schedule; there are no additional payments for this Statement of Work. DTMB will pay Contractor upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense.

Payment shall be considered timely if made by DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc.

PROJECT CONTACTS:

The designated Agency Project Manager is:

Name: Joe Gorman

Department: Transportation

Area: Bureau of Field Services, TSMO

Address: 8885 Ricks Rd

City/State/Zip: Lansing, Michigan 48917

Phone Number: 517-636-0635

Email Address: GormanJ4@michigan.gov

The designated DTMB Project Manager(s) is:

Name: Dave Work

Department: Technology, Management, and Budget

Area: Agency Services supporting MDOT

Building/Floor: Van Wagener Building 3rd Floor

Address: 425 West Ottawa Street

City/State/Zip: Lansing, Michigan-48821

Phone Number: 517-719-2250

Email Address: WorkD@michigan.gov

AGENCY RESPONSIBILITIES:

Review and approval of the deliverables and submitted invoice(s).

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

All work completed by the vendor staff will be at their office physical or remote location(s), or on site when mutually agreed.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing.

No overtime will be permitted.



STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
 Department of Technology, Management, and Budget
 320 S. WALNUT ST., LANSING, MICHIGAN 48933
 P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **1**
 to
 Contract Number **220000000399**

CONTRACTOR	ACCENTURE
	1001 Woodward Avenue, 4th Floor
	Detroit, MI 48226
	Kathleen Cawley
	859-248-1187
	kathleen.cawley@accenture.com
	CV0062320

STATE	Program Manager	Various	MDOT
	Contract Administrator	Christopher Martin	DTMB
		(517) 643-2833 martinc20@michigan.gov	

CONTRACT SUMMARY				
REAL TIME DATA EXCHANGE (RIDE) SYSTEM				
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE	
February 15, 2022	February 14, 2027	5 - 1 Year	February 14, 2027	
PAYMENT TERMS		DELIVERY TIMEFRAME		
ALTERNATE PAYMENT OPTIONS				EXTENDED PURCHASING
<input type="checkbox"/> P-Card <input type="checkbox"/> PRC <input type="checkbox"/> Other				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MINIMUM DELIVERY REQUIREMENTS				
DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
<input type="checkbox"/>		<input type="checkbox"/>		February 14, 2027
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
\$1,964,038.00	\$0.00	\$1,964,038.00		
DESCRIPTION				
<p>Effective 8/25/2022, the following amendments are incorporated into this Contract per attached Amendment. This change includes the following:</p> <ul style="list-style-type: none"> • Updating the preamble with the correct effective and expiration dates to match the cover sheet of the original Contract. • Updating the WBS and payment milestones in the Statement of Work and Schedule B - Pricing with accurate descriptions and dates. • Adjusting the payment of Annual Maintenance Fees to be paid monthly post Go-Live. <p>All other terms, conditions, specifications and pricing remain the same. Per contractor and agency agreement, and DTMB Central Procurement Services approval.</p>				

**Program Managers
for
Multi-Agency and Statewide Contracts**

AGENCY	NAME	PHONE	EMAIL
MDOT	Joseph Gorman	517-636-0635	GormanJ4@michigan.gov
DTMB	Dave Work	517-241-4604	WorkD@michigan.gov

220000000399 – Accenture Amendment

1. Preamble, the last sentence in the first paragraph is deleted in its entirety and replaced with the following:

“This Contract is effective on 2/15/2022 (“Effective Date”), and unless terminated, will expire on 2/14/2027 (the “Term”).”, to match the correct information contained on the Contract Cover Page.
2. Scheduled B, Pricing, Section 4, Implementation Fees, the table in this section shall be deleted in its entirety and replaced with the table below. The parties agree the table below also replaces, in its entirety, Table 7, MDOT RIDE High Level Work Breakdown Schedule, found in Schedule A, Statement of Work, found on pages 67 and 68.

WBS Number	WBS Element	Project Activities and Responsibilities	Start Date	Expected Completion	Fees (USD)
1	Project Kickoff/Discovery	Duration: 21 Calendar Days	5/9/2022	6/22/2022	\$206,167.00
1.1	Discovery Kickoff	- MDOT and Accenture hold Joint Kick-off Meeting - Accenture to develop Kick-off Deck			
1.2	Feature Roadmap				
1.3	Use Cases	Accenture creates and MDOT reviews and approves user stories		SEM-0502	
1.4	Project Plan	Accenture and MDOT to jointly develop project plan – Excluding requirements 21.0 and 31.0.			
1.5	Access to On-premise Infrastructure	DTMB to provide Accenture personnel access to necessary State of Michigan IT resources			
1.6	Test Strategy	Accenture to produce Test Strategy Document		SEM-0600	
1.7	Detailed Test Plan	Accenture to produce Detailed Test Plan		SEM-0603	
1.8	Structured Walkthrough	MDOT to review documentation produced in this phase		SEM-0187	
2	Design Review	Duration: 14 Calendar Days	6/13/2022	7/6/2022	\$206,167.00
2.1	Functional Design Document	Accenture to produce Functional Design Document		SEM-0501	
2.2	System Design Document	Accenture to produce System Design Document		SEM-0604	
2.3	Requirements Specification	Accenture and MDOT to produce Requirements Specification		SEM-0402	
2.4	System Design Checklist	Accenture to produce System Design Checklist		SEM-0605	

2.5	Software Configuration Management Plan	Accenture and MDOT to produce Software Configuration Management Plan	SEM-0302		
2.6	Installation Plan	Accenture to produce Installation Plan	SEM-0702		
2.7	Data Conversion Plan	Accenture to produce data Conversion Plan	SEM-0601		
2.8	Structured Walkthrough	MDOT to review documentation produced in this phase	SEM-0187		
2.9	Stage Exit	MDOT to make stage exit decision	SEM-0189		
3	Deploy Dev Environment		7/5/2022	8/17/2022	\$206,167.00
3.1	Image Security Scan Remediation	Accenture to produce UrbanOS containers which pass DTMB container scans			
3.2	Deploy UrbanOS to OpenShift (Development)	Accenture to deploy UrbanOS to DTMB's allocated RIDE Development Environment in Openshift			
3.3	Automated Testing - Environment Validation	Accenture to produce automated testing reports	SEM-0607		
3.4	Structured Walkthrough	MDOT to review documentation produced this phase	SEM-0187		
4	MILogin Integration		5/16/2022	8/17/2022	\$50,000.00
5	Deploy QA Environment	Duration: 14 Calendar Days	8/1/2022	9/23/2022	\$206,167.00
5.1	Deploy UrbanOS to OpenShift (QA)	Accenture to deploy UrbanOS to DTMB's allocated RIDE QA Environment in Openshift. DTMB to perform Secure Application Development Lifecycle (SADLC) Dynamic Application Scan and provide results. Accenture to remediate Application Scan findings.			
5.2	Test Cases (UAT)	MDOT to perform UAT against initial QA environment	SEM-0606		
5.3	Test Closure Report (UAT)	MDOT and Accenture produce Test Closure Report	SEM-0607		
5.4	Structured Walkthrough	MDOT to review documentation produced in this phase	SEM-0187		
6	OpenShift Migration		5/9/2022	9/23/2022	\$50,000.00
7	Deploy Production Environment	Duration: 14 Calendar Days	8/29/2022	10/12/2022	\$206,167.00
7.1	Deploy UrbanOS to OpenShift (Production)	Accenture to deploy UrbanOS to DTMB's allocated RIDE Production Environment in Openshift			

7.2	Structured Walkthrough	MDOT to review documentation produced in this phase		SEM-0187		
8	Training Delivery		6/8/2022	11/18/2022		
8.1	Training Plan	Accenture and MDOT to produce Training Plan document		SEM-0703		
8.2	Training Checklist	Accenture and MDOT to produce Training Checklist		SEM-0704		
8.3	Train the Trainer	Accenture to train MDOT's designated trainer				
9	Environment Validation		10/10/2022	1/6/2023	\$206,167.00	
9.1	Authority to Operate (ATO)	Receive ATO from Michigan Cyber Security (MCS)				
9.2	eMichigan ADA Testing	eMichigan to perform ADA testing on QA environment				
9.3	Test Cases (Final UAT)	MDOT to perform final UAT on QA environment		SEM-0606		
9.4	Test Closure Report (Final UAT)	Accenture and MDOT to produce Test Closure Report for the final UAT		SEM-0607		
9.5	Maintenance Plan	Accenture to produce Maintenance Plan		SEM-0301		
9.6	Transition Plan	Accenture to produce Transition Plan		SEM-0701		
9.7	Requirements Traceability Matrix	Accenture to produce Requirements traceability matrix		SEM-0401		
9.8	Structured Walkthrough	MDOT to review documentation produced this phase		SEM-0187		
9.9	Stage Exit	MDOT to make stage exit decision		SEM-0189		
10	Deploy/Hypercare	Duration: 90 Calendar Days	11/18/2022	2/16/2023	\$106,036.00	
10.1	Pilot Release	Limited user pilot release				
10.2	Hypercare	Defect remediation extended 90-day support				
10.3	Training Delivery	MDOT provides training to end users after the Train the Trainer Session				
10.4	Go Live	Release				
11	Post Production Support	Duration: 90 Calendar Days	12/19/2022	2/14/2027		
11.1	Incident Resolution	Accenture to work with MDOT to address end-user incidents	Year 1	8/1/2022	2/14/2023	\$141,000.00*
			Year 2	2/15/2023	2/14/2024	\$95,000.00**
			Year 3	2/15/2024	2/14/2025	\$95,000.00**
11.2	Open-Source new feature support	Accenture to provide support	Year 4	2/15/2025	2/14/2026	\$95,000.00**
11.3	Security updates	Security updates made	Year 5	2/15/2026	2/14/2027	\$95,000.00**
Total Fees					\$1,964,038.00	

* The annual Fee of \$141,000.00 will be invoiced in monthly installments of \$23,500.00 from September 2022 through February 2023.

** The annual Fee of \$95,000.00 will be invoiced in monthly installments of \$7,916.67 from February of the applicable year through December of the applicable year and \$7,916.63 in January of the applicable year.



STATE OF MICHIGAN PROCUREMENT
Department of Technology, Management, & Budget
525 West Allegan Street
PO Box 30026
Lansing, MI 48909

NOTICE OF CONTRACT

NOTICE OF CONTRACT NO. **220000000399**
between
THE STATE OF MICHIGAN
and

CONTRACTOR	Accenture LLP
	1001 Woodward Avenue, 4 th Floor
	Detroit, MI 48226
	Kathleen (Lisa) Cawley
	859-248-1187
	kathleen.cawley@accenture.com
	CV0062320

STATE	Program Manager	Multi	Multi
		Multi	
		Multi	
	Contract Administrator	Christopher Martin	DTMB
		517-643-2833	
		martinc20@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Real Time Data Exchange (RIDE)			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
2/15/2022	2/14/2027	5, one-year	2/14/2027
PAYMENT TERMS		DELIVERY TIMEFRAME	
Net 45			
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING
<input type="checkbox"/> P-card <input type="checkbox"/> Payment Request (PRC) <input type="checkbox"/> Other			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
MINIMUM DELIVERY REQUIREMENTS			
MISCELLANEOUS INFORMATION			
ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION			\$1,964,038.00

CONTRACT NO. 220000000399

Program Managers
for
Multi-Agency and Statewide Contracts

AGENCY	NAME	PHONE	EMAIL
DTMB	Dave Work	517-719-2250	workd@michigan.gov
MDOT	Joe Gorman	517-636-0635	gormanj4@michigan.gov

STATE OF MICHIGAN

SOFTWARE TERMS AND CONDITIONS

These Terms and Conditions, together with all Schedules (including the Statement(s) of Work), Exhibits and any other applicable attachments or addenda (Collectively this "Contract") are agreed to between the State of Michigan (the "State") and Accenture LLP ("Contractor"), an Illinois Limited Liability Partnership. This Contract is effective on 11/16/2021 ("Effective Date"), and unless terminated, will expire on 11/15/2026 (the "Term").

This Contract may be renewed for up to five (5) additional one-year period(s). Renewal is at the sole discretion of the State and will automatically extend the Term of this Contract. The State will document its exercise of renewal options via Contract Change Notice.]

1. Definitions. For the purposes of this Contract, the following terms have the following meanings:

"Acceptance" has the meaning set forth in **Section 9**.

"Acceptance Tests" means such tests as may be conducted in accordance with **Section 9.1** and a Statement of Work to determine whether the Software meets the requirements of this Contract and the Documentation.

"Affiliate" of a Person means any other Person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person. For purposes of this definition, the term "control" (including the terms "controlled by" and "under common control with") means the direct or indirect ownership of more than fifty percent (50%) of the voting securities of a Person.

"Allegedly Infringing Materials" has the meaning set forth in **Section 17.2(b)**.

"Approved Third Party Components" means all third party components, including Open-Source Components, that are included in or used in connection with the Software and are specifically identified by Contractor in the Contractor's Bid Response, the Pricing Schedule, or as part of the State's Security Accreditation Process defined in Schedule E – Data Security Schedule, or elsewhere in this Contract.

"Authorized Users" means all Persons authorized by the State to access and use the Software under this Contract, subject to the maximum number of users specified in the applicable Statement of Work.

"Business Day" means a day other than a Saturday, Sunday, or other day on which the State is authorized or required by law to be closed for business.

"Business Requirements Specification" means the initial specification setting forth the State's business requirements regarding the features and functionality of the Software, as set forth in a Statement of Work.

"Change" has the meaning set forth in **Section 2.2**.

"Change Notice" has the meaning set forth in **Section 2.2(b)**.

"Change Proposal" has the meaning set forth in **Section 2.2(a)**.

"Change Request" has the meaning set forth in **Section 2.2**.

"Confidential Information" has the meaning set forth in **Section 22.1**.

"Configuration" means State-specific changes made to the Software without Source Code or structural data model changes occurring.

"Contract" has the meaning set forth in the preamble.

"Contract Administrator" is the individual appointed by each party to (a) administer the terms of this Contract, and (b) approve any Change Notices under this Contract. Each party's Contract Administrator will be identified in a Statement of Work.

"Contractor" has the meaning set forth in the preamble.

"Contractor's Bid Response" means the Contractor's proposal submitted in response to the Request for Proposal.

"Contractor Hosted" means the Hosted Services are provided by Contractor or one or more of its Permitted Subcontractors.

"Contractor Materials" means (i) all Intellectual Property Rights that are owned, developed or acquired by or on behalf of Accenture and/or its affiliate(s) prior to the Effective Date of this agreement or completely independent of this Contract, and (ii) all modifications, enhancements, improvements and derivative works of the foregoing made by any person or entity that are not Deliverables or Work Product under this Contract, in which Contractor owns such Intellectual Property Rights as are necessary for Contractor to grant the rights and licenses set forth in **Section 7.3**, and for the State (including its licensees, successors and assigns) to exercise such rights and licenses, without violating any right of any third party or any law or incurring any payment obligation to any third party.

"Contractor Personnel" means all employees of Contractor or any subcontractors or Permitted Subcontractors involved in the performance of Services hereunder.

"Contractor Project Manager" means the individual appointed by Contractor and identified in a Statement of Work to serve as the primary contact with regard to services, to monitor and coordinate the day-to-day activities of this Contract, and to perform other duties as may be further defined in this Contract, including an applicable Statement of Work.

"Customization" means State-specific changes to the Software's underlying Source Code or structural data model changes.

"Deliverables" means the Software, and all other documents and other materials that Contractor is required to or otherwise does provide to the State under this Contract and otherwise in connection with any Services, including all items specifically identified as Deliverables in a Statement of Work and all Work Product.

"Deposit Material" refers to material required to be deposited pursuant to **Section 28**.

"Documentation" means all user manuals, operating manuals, technical manuals and any other instructions, specifications, documents, or materials, in any form or media, that describe the functionality, installation, testing, operation, use, maintenance, support, technical or other components, features or requirements of the Software.

"DTMB" means the Michigan Department of Technology, Management and Budget.

"Effective Date" has the meaning set forth in the preamble.

"Fees" means the fees set forth in the Pricing Schedule attached as **Schedule B**.

"Financial Audit Period" has the meaning set forth in **Section 23.1**.

"Harmful Code" means any software, hardware or other technologies, devices or means, the purpose or effect of which is to: (a) permit unauthorized access to, or to destroy, disrupt, disable, encrypt, modify, copy, or otherwise harm or impede in any manner, any (i) computer, software, firmware, data, hardware, system or network, or (ii) any application or function of any of the foregoing or the integrity, use or operation of any data Processed thereby; or (b) prevent the State or any Authorized User from accessing or using the Services as intended by this Contract, and includes any virus, bug, trojan horse, worm, backdoor or other malicious computer code and any time bomb or drop dead device.

"HIPAA" has the meaning set forth in **Section 21.1**.

"Hosted Services" means the hosting, management and operation of the Operating Environment, Software, other services (including support and subcontracted services), and related resources for remote electronic access and use by the State and its Authorized Users, including any services and facilities related to disaster recovery obligations.

"Implementation Plan" means the schedule included in a Statement of Work setting forth the sequence of events for the performance of Services under a Statement of Work, including the Milestones and Milestone Dates.

"Integration Testing" has the meaning set forth in **Section 9.2(a)**.

"Intellectual Property Rights" means all or any of the following: (a) patents, patent disclosures, and inventions (whether patentable or not); (b) trademarks, service marks, trade dress, trade names, logos, corporate names, and domain names, together with all of the associated goodwill; (c) copyrights and copyrightable works (including computer programs), mask works and rights in data and databases; (d) trade secrets, know-how and other confidential information; and (e) all other intellectual property rights, in each case whether registered or unregistered and including all applications for, and renewals or extensions of, such rights, and all similar or equivalent rights or forms of protection provided by applicable law in any jurisdiction throughout the world.

"Key Personnel" means any Contractor Personnel identified as key personnel in the Contract.

"Loss or Losses" means all losses, including but not limited to, damages, liabilities, deficiencies, claims, actions, judgments, settlements, interest, awards, penalties, fines, costs, or expenses of whatever kind, including reasonable attorneys' fees and the costs of enforcing any right to indemnification hereunder and the cost of pursuing any insurance providers.

"Maintenance Release" means any update, upgrade, release or other adaptation or modification of the Software, including any updated Documentation, that Contractor may generally provide to its licensees from time to time during the Term, which may contain, among other things, error corrections, enhancements, improvements or other changes to the user interface, functionality, compatibility, capabilities, performance, efficiency, or quality of the Software.

"Milestone" means an event or task described in the Implementation Plan under a Statement of Work that must be completed by the corresponding Milestone Date.

"Milestone Date" means the date by which a particular Milestone must be completed as set forth in the Implementation Plan under a Statement of Work.

"New Version" means any new version of the Software, including any updated Documentation, that the Contractor may from time to time introduce and market generally as a distinct licensed product, as may be indicated by Contractor's designation of a new version number.

"Nonconformity" or "Nonconformities" means any failure or failures of the Software to conform to the requirements of this Contract, including any applicable Documentation or Specifications.

"Open-Source Components" means any software component that is subject to any open-source copyright license agreement, including any GNU General Public License or GNU Library or Lesser Public License, or other obligation, restriction or license agreement that substantially conforms to the Open Source Definition as prescribed by the Open Source Initiative or otherwise may require disclosure or licensing to any third party of any source code with which such software component is used or compiled.

"Operating Environment" means, collectively, the platform, environment and conditions on, in or under which the Software is intended to be installed and operate, as set forth in a Statement of Work, including such structural, functional and other features, conditions and components as hardware, operating software, system architecture, configuration, computing hardware, ancillary equipment, networking, software, firmware, databases, data, and electronic systems (including database management systems).

"PAT" means a document or product accessibility template, including any Information Technology Industry Council Voluntary Product Accessibility Template or VPAT®, that specifies how information and software products, such as websites, applications, software, and associated content, conform to WCAG 2.0 Level AA.

"Permitted Subcontractor" means any third party hired by Contractor to perform Services for the State under this Contract or have access to State Data.

"Person" means an individual, corporation, partnership, joint venture, limited liability company, governmental authority, unincorporated organization, trust, association or other entity.

"Pricing Schedule" means the schedule attached as **Schedule B**.

"Process" means to perform any operation or set of operations on any data, information, material, work, expression or other content, including to (a) collect, receive, input, upload, download, record, reproduce, store, organize, combine, log, catalog, cross-reference, manage, maintain, copy, adapt, alter, translate or make other improvements or derivative works, (b) process, retrieve, output, consult, use, disseminate, transmit, submit, post, transfer, disclose or otherwise provide or make available, or (c) block, erase or destroy. **"Processing"** and **"Processed"** have correlative meanings.

"Representatives" means a party's employees, officers, directors, partners, shareholders, agents, attorneys, successors and permitted assigns.

"RFP" means the State's request for proposal designed to solicit responses for Services under this Contract.

"Services" means any of the services, including but not limited to, Hosted Services, Contractor is required to or otherwise does provide under this Contract.

"Service Level Agreement" means the schedule attached as **Schedule D**, setting forth the Support Services Contractor will provide to the State, and the parties' additional rights and obligations with respect thereto.

"Site" means the physical location designated by the State in, or in accordance with, this Contract or a Statement of Work for delivery and installation of the Software.

“Software” means Contractor’s software (to include without limitation all Contractor Materials in the form of software) provided as set forth in a Statement of Work, and any Maintenance Releases or New Versions provided to the State and any Customizations or Configurations made by or for the State pursuant to this Contract, and all copies of the foregoing permitted under this Contract.

“Source Code” means the human readable source code of the Software to which it relates, in the programming language in which the Software was written, together with all related flow charts and technical documentation, including a description of the procedure for generating object code, all of a level sufficient to enable a programmer reasonably fluent in such programming language to understand, build, operate, support, maintain and develop modifications, upgrades, updates, adaptations, enhancements, new versions and other derivative works and improvements of, and to develop computer programs compatible with, the Software.

“Specifications” means, for the Software or Deliverables, the specifications collectively set forth in the Business Requirements Specification, Technical Specification, Documentation, RFP or Contractor’s Bid Response, if any, for such Software, or elsewhere in a Statement of Work.

“State” means the State of Michigan.

“State Data” has the meaning set forth in **Section 21.1**.

“State Hosted” means the Hosted Services are not provided by Contractor or one or more of its Permitted Subcontractors.

“State Materials” means all materials and information, including documents, data, know-how, ideas, methodologies, specifications, software, content and technology, in any form or media, directly or indirectly provided or made available to Contractor by or on behalf of the State in connection with this Contract.

“State Program Managers” are the individuals appointed by the State, or their designees, to (a) monitor and coordinate the day-to-day activities of this Contract; (b) co-sign off on Acceptance of the Software and other Deliverables; and (c) perform other duties as may be specified in a Statement of Work Program Managers will be identified in a Statement of Work.

“State Systems” means the information technology infrastructure, including the computers, software, databases, electronic systems (including database management systems) and networks, of the State or any of its designees.

“Statement of Work” means any statement of work entered into by the parties and incorporated into this Contract. The initial Statement of Work is attached as **Schedule A**.

“Stop Work Order” has the meaning set forth in **Section 15**.

“Support Services” means the software maintenance and support services Contractor is required to or otherwise does provide to the State under the Service Level Agreement.

“Support Services Commencement Date” means, with respect to the Software, the date on which the Warranty Period for the Software expires, and fees for support become applicable, or such other date as may be set forth in a Statement of Work.

“Technical Specification” means, with respect to any Software, the document setting forth the technical specifications for such Software and included in a Statement of Work.

"Term" has the meaning set forth in the preamble.

"Testing Period" has the meaning set forth in **Section 9.1(b)**.

"Transition Period" has the meaning set forth in **Section 16.3**.

"Transition Responsibilities" has the meaning set forth in **Section 16.3**.

"Unauthorized Removal" has the meaning set forth in **Section 2.5(b)**.

"Unauthorized Removal Credit" has the meaning set forth in **Section 2.5(c)**.

"User Data" means all data, information and other content of any type and in any format, medium or form, whether audio, visual, digital, screen, GUI or other, that is input, uploaded to, placed into or collected, stored, Processed, generated or output by any device, system or network by or on behalf of the State, including any and all works, inventions, data, analyses and other information and materials resulting from any use of the Software by or on behalf of the State under this Contract, except that User Data does not include the Software or data, information or content, including any GUI, audio, visual or digital or other display or output, that is generated automatically upon executing the Software without additional user input without the inclusion of user derived Information or additional user input.

"Warranty Period" means the ninety (90) calendar-day period commencing on the date of the State's Acceptance of the Software and for which Support Services are provided free of charge.

"WCAG 2.0 Level AA" means level AA of the World Wide Web Consortium Web Content Accessibility Guidelines version 2.0.

"Work Product" means all State-specific deliverables that Contractor is required to, or otherwise does, provide to the State under this Contract including but not limited to Customizations, application programming interfaces, computer scripts, macros, user interfaces, reports, project management documents, forms, templates, and other State-specific documents and related materials together with all ideas, concepts, processes, and methodologies developed in connection with this Contract whether or not embodied in this Contract. For clarity, Contractor Materials are not Work Product.

2. Duties of Contractor. Contractor will provide Services and Deliverables pursuant to Statement(s) of Work entered into under this Contract. Contractor will provide all Services and Deliverables in a timely, professional manner and in accordance with the terms, conditions, and Specifications set forth in this Contract and the Statement(s) of Work.

2.1 Statement of Work Requirements. No Statement of Work will be effective unless signed by each party's Contract Administrator. The term of each Statement of Work will commence on the parties' full execution of a Statement of Work and terminate when the parties have fully performed their obligations. The terms and conditions of this Contract will apply at all times to any Statements of Work entered into by the parties and incorporated into this Contract. The State will have the right to terminate such Statement of Work as set forth in **Section 16**. Contractor acknowledges that time is of the essence with respect to Contractor's obligations under each Statement of Work and agrees that prompt and timely performance of all such obligations in accordance with this Contract and the Statements of Work (including the Implementation Plan and all Milestone Dates) is strictly required.

2.2 Change Control Process. The State may at any time request in writing (each, a **"Change Request"**) changes to a Statement of Work, including changes to the Services and Implementation Plan (each, a **"Change"**). Upon the State's submission of a Change Request, the parties will evaluate and implement all Changes in accordance with this **Section 2.2**.

(a) As soon as reasonably practicable, and in any case within twenty (20) Business Days following receipt of a Change Request, Contractor will provide the State with a written proposal for implementing the requested Change (“**Change Proposal**”), setting forth:

- (i) a written description of the proposed Changes to any Services or Deliverables;
- (ii) an amended Implementation Plan reflecting: (A) the schedule for commencing and completing any additional or modified Services or Deliverables; and (B) the effect of such Changes, if any, on completing any other Services under a Statement of Work;
- (iii) any additional State Resources Contractor deems necessary to carry out such Changes; and
- (iv) any increase or decrease in Fees resulting from the proposed Changes, which increase or decrease will reflect only the increase or decrease in time and expenses Contractor requires to carry out the Change.

(b) Within thirty (30) Business Days following the State's receipt of a Change Proposal, the State will by written notice to Contractor, approve, reject, or propose modifications to such Change Proposal. If the State proposes modifications, Contractor must modify and re-deliver the Change Proposal reflecting such modifications, or notify the State of any disagreement, in which event the parties will negotiate in good faith to resolve their disagreement. Upon the State's approval of the Change Proposal or the parties' agreement on all proposed modifications, as the case may be, the parties will execute a written agreement to the Change Proposal (“**Change Notice**”), which Change Notice will be signed by the State's Contract Administrator and will constitute an amendment to a Statement of Work to which it relates; and

(c) If the parties fail to enter into a Change Notice within fifteen (15) Business Days following the State's response to a Change Proposal, the State may, in its discretion:

- (i) require Contractor to perform the Services under a Statement of Work without the Change;
- (ii) require Contractor to continue to negotiate a Change Notice;
- (iii) initiate a Dispute Resolution Procedure; or
- (iv) notwithstanding any provision to the contrary in a Statement of Work, terminate this Contract under **Section 16.1**.

(d) No Change will be effective until the parties have executed a Change Notice. Except as the State may request in its Change Request or otherwise in writing, Contractor must continue to perform its obligations in accordance with a Statement of Work pending negotiation and execution of a Change Notice. Contractor will use commercially reasonable efforts to limit any delays or Fee increases from any Change to those necessary to perform the Change in accordance with the applicable Change Notice. Each party is responsible for its own costs and expenses of preparing, evaluating, negotiating, and otherwise processing any Change Request, Change Proposal, and Change Notice.

(e) The performance of any functions, activities, tasks, obligations, roles and responsibilities comprising the Services as described in this Contract are considered part of the Services and, thus, will not be considered a Change. This includes the delivery of all Deliverables in accordance with their respective Specifications, and the diagnosis and correction of Non-Conformities discovered in Deliverables prior to their Acceptance by the State or, subsequent to their Acceptance by the State, as necessary for Contractor to fulfill its associated warranty requirements and its Support Services under this Contract.

(f) Contractor may, on its own initiative and at its own expense, prepare and submit its own Change Request to the State. However, the State will be under no obligation to approve or otherwise respond to a Change Request initiated by Contractor.

2.3 Contractor Personnel.

(a) Contractor is solely responsible for all Contractor Personnel and for the payment of their compensation, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments and disability benefits.

(b) Prior to any Contractor Personnel performing any Services, Contractor will:

- (i) ensure that such Contractor Personnel have the legal right to work in the United States;
- (ii) upon request, require such Contractor Personnel to execute written agreements, in form and substance acceptable to the State, that bind such Contractor Personnel to confidentiality provisions that are at least as protective of the State's information (including all Confidential Information) as those contained in this Contract; and
- (iii) upon request, or as otherwise specified in a Statement of Work, perform background checks on all Contractor Personnel prior to their assignment. The scope is at the discretion of the State and any background checks must be conducted in accordance with applicable law, and documentation must be provided as requested. Contractor is responsible for all costs associated with the requested background checks. The State, in its sole discretion, may also perform background checks on Contractor Personnel. Pursuant to Michigan law, all agencies subject to IRS Pub. 1075 are required to ask the Michigan State Police to perform fingerprint background checks on all employees, including Contractor and subcontractor employees, who may have access to any database of information maintained by the federal government that contains confidential or personal information, including, but not limited to, federal tax information. Further, pursuant to Michigan law, any agency described above is prohibited from providing Contractors or subcontractors with the result of such background check. For more information, please see Michigan Public Act 427 of 2018.

(c) Contractor and all Contractor Personnel will comply with all rules, regulations, and policies of the State that are communicated to Contractor in writing, including security procedures concerning systems and data and remote access, building security procedures, including the restriction of access by the State to certain areas of its premises or systems, and general health and safety practices and procedures.

(d) The State reserves the right to require the removal of any Contractor Personnel found, in the judgment of the State, to be unacceptable. The State's request must be written with reasonable detail outlining the reasons for the removal request. Replacement personnel for the removed person must be fully qualified for the position. If the State exercises this right, and Contractor cannot immediately replace the removed personnel, the State agrees to negotiate an equitable adjustment in schedule or other terms that may be affected by the State's required removal.

2.4 Contractor Project Manager. Throughout the Term of this Contract, Contractor must maintain a Contractor employee acceptable to the State to serve as Contractor Project Manager, who will be considered Key Personnel of Contractor. Contractor Project Manager will be identified in a Statement of Work.

(a) Contractor Project Manager must:

- (i) have the requisite authority, and necessary skill, experience, and qualifications, to perform in such capacity;
 - (ii) be responsible for overall management and supervision of Contractor's performance under this Contract; and
 - (iii) be the State's primary point of contact for communications with respect to this Contract, including with respect to giving and receiving all day-to-day approvals and consents.
- (b) Contractor Project Manager must attend all regularly scheduled meetings as set forth in the Implementation Plan and will otherwise be available as set forth in a Statement of Work.
- (c) Contractor will maintain the same Contractor Project Manager throughout the Term of this Contract, unless:
- (i) the State requests in writing the removal of Contractor Project Manager;
 - (ii) the State consents in writing to any removal requested by Contractor in writing;
 - (iii) Contractor Project Manager ceases to be employed by Contractor, whether by resignation, involuntary termination or otherwise.
- (d) Contractor will promptly replace its Contractor Project Manager on the occurrence of any event set forth in **Section 2.4(c)**. Such replacement will be subject to the State's prior written approval.

2.5 Contractor's Key Personnel.

- (a) The State has the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, introduce the individual to the State Program Managers or their designees, and provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection.
- (b) Contractor will not remove any Key Personnel from their assigned roles on this Contract without the prior written consent of the State. The Contractor's removal of Key Personnel without the prior written consent of the State is an unauthorized removal ("**Unauthorized Removal**"). An Unauthorized Removal does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation, or for cause termination of the Key Personnel's employment. Any Unauthorized Removal may be considered by the State to be a material breach of this Contract, in respect of which the State may elect to terminate this Contract for cause under **Section 16.1**.
- (c) It is further acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of this Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to determine and remedy the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 16**, Contractor will issue to the State an amount equal to \$25,000 per individual (each, an "**Unauthorized Removal Credit**").
- (d) Contractor acknowledges and agrees that each of the Unauthorized Removal Credits assessed under **Subsection 2.5(c)** above: (i) is a reasonable estimate of and compensation for the anticipated or actual harm to the State that may arise from the Unauthorized Removal, which would be impossible or very difficult to accurately

estimate; and (ii) may, at the State's option, be credited or set off against any Fees or other charges payable to Contractor under this Contract.

2.6 Subcontractors. Contractor must obtain prior written approval of the State, which consent may be given or withheld in the State's sole discretion, before engaging any Permitted Subcontractor to provide Services to the State under this Contract. Third parties otherwise retained by Contractor to provide Contractor or other clients of contractor with services are not Permitted Subcontractors, and therefore do not require prior approval by the State. Engagement of any subcontractor or Permitted Subcontractor by Contractor does not relieve Contractor of its representations, warranties or obligations under this Contract. Without limiting the foregoing, Contractor will:

(a) be responsible and liable for the acts and omissions of each such subcontractor (including such Permitted Subcontractor and Permitted Subcontractor's employees who, to the extent providing Services or Deliverables, will be deemed Contractor Personnel) to the same extent as if such acts or omissions were by Contractor or its employees;

(b) name the State a third-party beneficiary under Contractor's Contract with each Permitted Subcontractor with respect to the Services;

(c) be responsible for all fees and expenses payable to, by or on behalf of each Permitted Subcontractor in connection with this Contract, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments and disability benefits; and

(d) notify the State of the location of the Permitted Subcontractor and indicate if it is located within the continental United States.

3. Notices. All notices and other communications required or permitted under this Contract must be in writing and will be considered given and received: (a) when verified by written receipt if sent by courier; (b) when actually received if sent by mail without verification of receipt; or (c) when verified by automated receipt or electronic logs if sent by facsimile or email.

If to State:	If to Contractor:
Christopher Martin PO Box 30026 Lansing, MI 48909 martinc20@michigan.gov 517-643-2833	Kristine Handy 1001 Woodward Avenue, 4 th Floor Detroit, Michigan 48226 Kristine.handy@accenture.com 517-256-9273

4. Insurance. Contractor must maintain the minimum insurances identified in the Insurance Schedule attached as **Schedule C**.

5. Software License or Contractor Materials.

5.1 Certification. To the extent that a License granted to the State is not unlimited, Contractor may request written certification from the State regarding use of the Contractor Materials for the sole purpose of verifying compliance with this **Section 5**. Such written certification may occur no more than once in any twenty four (24) month period during the Term of the Contract. The State will to respond to any such request within 45 calendar days of receipt. If the State's use is greater than contracted, Contractor may invoice the State for any unlicensed use (and related support) pursuant to the terms of this Contract at the rates set forth in **Schedule B**, and the unpaid license and support fees shall be payable in accordance with the terms of the Contract. Payment under this provision shall be Contractor's sole and exclusive remedy to cure these issues.

5.2 State License Grant to Contractor. The State hereby grants to Contractor a limited, non-exclusive, non-transferable license (i) to use the State's (or individual agency's, department's or division's) name, trademarks,

service marks or logos, solely in accordance with the State's specifications, and (ii) to display, reproduce, distribute and transmit in digital form the State's (or individual agency's, department's or division's) name, trademarks, service marks or logos in connection with promotion of the Services as communicated to Contractor by the State. Use of the State's (or individual agency's, department's or division's) name, trademarks, service marks or logos will be specified in the applicable Statement of Work. Contractor is provided a limited license to State Materials for the sole and exclusive purpose of providing the Services.

6. Third Party Components. At least 30 days prior to adding new Third Party Components, Contractor will provide the State with notification information identifying and describing the addition. Throughout the Term, on an annual basis, Contractor will provide updated information identifying and describing any Approved Third Party Components included in the Software, Deliverables, or Contractor Materials. Ownership of all Approved Third Party Components, and all Intellectual Property Rights therein, is and will remain with its respective owners, subject to the State's rights under the applicable licenses for the Approved Third Party Components.

7. Intellectual Property Rights

7.1 Ownership Rights in Software

- (a) For purposes of this **Section 7** only, the term "Software" does not include Customizations.
- (b) Subject to the rights and licenses granted by Contractor in this Contract and the provisions of **Section**

7.1(c):

- (i) Contractor and/or its licensors, as applicable reserves and retains its entire right, title, and interest in and to all Intellectual Property Rights arising out of or relating to the Software; and
- (ii) none of the State or Authorized Users acquire any ownership of Intellectual Property Rights in or to the Software or Documentation as a result of this Contract.

(c) As between the State, on the one hand, and Contractor, on the other hand, the State has, reserves and retains, sole and exclusive ownership of all right, title and interest in and to State Materials, User Data, including all Intellectual Property Rights arising therefrom or relating thereto.

7.2 Except as set forth in **Section 7.3**, the State is and will be the sole and exclusive owner of all right, title, and interest in and to all Work Product developed exclusively for the State under this Contract, including all Intellectual Property Rights. In furtherance of the foregoing, subject to **Section 7.3**:

- (a) Contractor will create all Work Product as work made for hire as defined in Section 101 of the Copyright Act of 1976; and
- (b) to the extent any Work Product, or Intellectual Property Rights do not qualify as, or otherwise fails to be, work made for hire, Contractor hereby:
 - (i) assigns, transfers, and otherwise conveys to the State, irrevocably and in perpetuity, throughout the universe, all right, title, and interest in and to such Work Product, including all Intellectual Property Rights; and
 - (ii) irrevocably waives any and all claims Contractor may now or hereafter have in any jurisdiction to so-called "moral rights" or rights of *droit moral* with respect to the Work Product.

7.3 Contractor Materials License.

(a) Contractor is and will remain the sole and exclusive owner of all right, title, and interest in and to the Contractor Materials, including all Intellectual Property Rights therein, subject to the license granted 7.3 (b).

(b) Contractor hereby grants to the State such rights and licenses with respect to the Contractor Materials that will allow the State to use and otherwise exploit perpetually throughout the universe for internal business purposes, without incurring any fees or costs to Contractor (other than the Fees set forth under this Contract) or any other Person in respect of the Contractor Materials. In furtherance of the foregoing, such rights and licenses will:

- (i) be irrevocable, perpetual, fully paid-up and royalty-free;
- (ii) include the rights to use, reproduce, perform (publicly or otherwise), display (publicly or otherwise), modify, improve, distribute, import, make, have made, solely as part of, or as necessary to use and exploit, the Work Product; and
- (iii) be freely assignable and sublicensable, in each case solely in connection with the assignment or licensing of the Work Product or any portion, modification, and only to the extent necessary to allow the assignee or sublicensee, as the case may be, to use and exploit the Work Product or portion, modification, improvement.

8. Software or Deliverable Implementation.

8.1 Implementation. Contractor will as applicable; deliver, install, configure, integrate, and otherwise provide and make fully operational the Software or Deliverable on or prior to the applicable Milestone Date in accordance with the criteria set forth in a Statement of Work and the Implementation Plan.

8.2 Site Preparation. Unless otherwise set forth in a Statement of Work, Contractor is responsible for ensuring the relevant Operating Environment is set up and in working order to allow Contractor to deliver and install the Software or Deliverable on or prior to the applicable Milestone Date. Contractor will provide the State with such notice as is specified in a Statement of Work, prior to delivery of the Software or Deliverable to give the State sufficient time to prepare for Contractor's delivery and installation of the Software or Deliverable. If the State is responsible for Site preparation, Contractor will provide such assistance as the State requests to complete such preparation on a timely basis.

9. Software Acceptance Testing.

9.1 Acceptance Testing.

(a) Unless otherwise specified in a Statement of Work, upon installation of the Software, or in the case of Contractor Hosted Software, when Contractor notifies the State in writing that the Hosted Services are ready for use in a production environment, Acceptance Tests will be conducted as set forth in this **Section 9** to ensure the Software conforms to the requirements of this Contract, including the applicable Specifications and Documentation.

(b) All Acceptance Tests will take place at the designated Site(s) in the Operating Environment described in a Statement of Work, commence on the Business Day following installation of the Software, or the receipt by the State of the notification in **Section 9.1(a)**, and be conducted diligently for up to thirty (30) Business Days, or such other period as may be set forth in a Statement of Work (the "**Testing Period**"). Acceptance Tests will be conducted by the party responsible as set forth in a Statement of Work or, if a Statement of Work does not specify, the State, provided that:

- (i) for Acceptance Tests conducted by the State, if requested by the State, Contractor will make suitable Contractor Personnel available to observe or participate in such Acceptance Tests; and

- (ii) for Acceptance Tests conducted by Contractor, the State has the right to observe or participate in all or any part of such Acceptance Tests.

9.2 Contractor is solely responsible for all costs and expenses related to Contractor's performance of, participation in, and observation of Acceptance Testing.

(a) Upon delivery and installation of any application programming interfaces, Configuration or Customizations, or any other applicable Work Product, to the Software under a Statement of Work, additional Acceptance Tests will be performed on the modified Software as a whole to ensure full operability, integration, and compatibility among all elements of the Software ("**Integration Testing**"). Integration Testing is subject to all procedural and other terms and conditions set forth in **Section 9.1**, **Section 9.4**, and **Section 9.5**.

(b) The State may suspend Acceptance Tests and the corresponding Testing Period by written notice to Contractor if the State discovers a material Non-Conformity in the tested Software or part or feature of the Software. In such event, Contractor will immediately, and in any case within ten (10) Business Days, correct such Non-Conformity, whereupon the Acceptance Tests and Testing Period will resume for the balance of the Testing Period.

9.3 Notices of Completion, Non-Conformities, and Acceptance. Within fifteen (15) Business Days following the completion of any Acceptance Tests, including any Integration Testing, the party responsible for conducting the tests will prepare and provide to the other party written notice of the completion of the tests. Such notice must include a report describing in reasonable detail the tests conducted and the results of such tests, including any uncorrected Non-Conformity in the tested Software.

(a) If such notice is provided by either party and identifies any Non-Conformities, the parties' rights, remedies, and obligations will be as set forth in **Section 9.4** and **Section 9.5**.

(b) If such notice is provided by the State, is signed by the State Program Managers or their designees, and identifies no Non-Conformities, such notice constitutes the State's Acceptance of such Software.

(c) If such notice is provided by Contractor and identifies no Non-Conformities, the State will have thirty (30) Business Days to use the Software in the Operating Environment and determine, in the exercise of its sole discretion, whether it is satisfied that the Software contains no Non-Conformities, on the completion of which the State will, as appropriate:

- (i) notify Contractor in writing of Non-Conformities the State has observed in the Software and of the State's non-acceptance thereof, whereupon the parties' rights, remedies and obligations will be as set forth in **Section 9.4** and **Section 9.5**; or
- (ii) provide Contractor with a written notice of its Acceptance of such Software, which must be signed by the State Program Managers or their designees.

9.4 Failure of Acceptance Tests. If Acceptance Tests identify any Non-Conformities, Contractor, at Contractor's sole cost and expense, will remedy all such Non-Conformities and re-deliver the Software, in accordance with the requirements set forth in a Statement of Work. Redelivery will occur as promptly as commercially possible and, in any case, within thirty (30) Business Days following, as applicable, Contractor's:

- (a) completion of such Acceptance Tests, in the case of Acceptance Tests conducted by Contractor; or
- (b) receipt of the State's notice under **Section 9.1(a)** or **Section 9.3(c)(i)**, identifying any Non-Conformities.

9.5 Repeated Failure of Acceptance Tests. If Acceptance Tests identify any Non-Conformity in the Software after a second or subsequent delivery of the Software, or Contractor fails to re-deliver the Software on a timely basis, the State may, in its sole discretion, by written notice to Contractor:

- (a) continue the process set forth in this **Section 9**;
- (b) accept the Software as a nonconforming deliverable, in which case the Fees for such Software will be reduced equitably to reflect the value of the Software as received relative to the value of the Software had it conformed; or
- (c) deem the failure to be a non-curable material breach of this Contract and a Statement of Work and terminate this Contract for cause in accordance with **Section 16.1**.

9.6 Acceptance. Acceptance ("**Acceptance**") of the Software (subject, where applicable, to the State's right to Integration Testing) and any Deliverables will occur on the date that is the earliest of the State's delivery of a notice accepting the Software or Deliverables under **Section 9.3(b)**, or **Section 9.3(c)(ii)**.

10. Non-Software Acceptance.

10.1 All other non-Software Services and Deliverables are subject to inspection and testing by the State within 30 calendar days of the State's receipt of them ("State Review Period"), unless otherwise provided in the Statement of Work. If the non-Software Services and Deliverables are not fully accepted by the State, the State will notify Contractor by the end of the State Review Period that either: (a) the non-Software Services and Deliverables are accepted but noted deficiencies, where such non-Software Services and Deliverables do not comply with their applicable Specifications, must be corrected; or (b) the non-Software Services and Deliverables are rejected for failing to comply with their applicable Specifications. If the State finds material deficiencies, it may: (i) reject the non-Software Services and Deliverables without performing any further inspections; (ii) demand performance at no additional cost; or (iii) terminate this Contract in accordance with **Section 16.1**, Termination for Cause.

10.2 Within 10 business days from the date of Contractor's receipt of notification of acceptance with deficiencies or rejection of any non-Software Services and Deliverables, Contractor must cure, at no additional cost, the deficiency and deliver unequivocally acceptable non-Software Services and Deliverables to the State. If acceptance with deficiencies or rejection of the non-Software Services and Deliverables impacts the content or delivery of other non-completed non-Software Services and Deliverables, the parties' respective Program Managers must determine an agreed to number of days for re-submission that minimizes the overall impact to the Contract. However, nothing herein affects, alters, or relieves Contractor of its obligations to correct deficiencies in accordance with the time response standards set forth in this Contract.

10.3 If Contractor is unable or refuses to correct the deficiency within the time response standards set forth in this Contract, the State may cancel the Deliverable in whole or in part and Contractor shall refund the portion of fees paid to Contractor associated with such deliverable.

11. Assignment. Contractor may not assign this Contract to any other party without the prior approval of the State. Upon notice to Contractor, the State, in its sole discretion, may assign in whole or in part, its rights or responsibilities under this Contract to any other party. If the State determines that a novation of the Contract to a third party is necessary, Contractor will agree to the novation and provide all necessary documentation and signatures.

12. Change of Control. Contractor will notify the State, within 30 days of any public announcement or otherwise once legally permitted to do so, of a change in Contractor's organizational structure or ownership. For purposes of this Contract, a change in control means any of the following:

- (a) a sale of more than 50% of Contractor's stock;
- (b) a sale of substantially all of Contractor's assets;

- (c) a change in a majority of Contractor's board members;
- (d) consummation of a merger or consolidation of Contractor with any other entity;
- (e) a change in ownership through a transaction or series of transactions;
- (f) or the board (or the stockholders) approves a plan of complete liquidation.

A change of control does not include any consolidation or merger effected exclusively to change the domicile of Contractor, or any transaction or series of transactions principally for bona fide equity financing purposes. In the event of a change of control, Contractor must require the successor to assume this Contract and all of its obligations under this Contract.

13. Invoices and Payment.

13.1 Invoices must conform to the requirements communicated from time-to-time by the State. All undisputed amounts are payable within 45 days of the State's receipt. Contractor may only charge for Services and Deliverables provided as specified in Statement(s) of Work. Invoices must include an itemized statement of all charges. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services purchased under this Contract are for the State's exclusive use. Notwithstanding the foregoing, all prices are exclusive of taxes, and the State is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract, unless exempt to the extent that the State, in a timely manner, delivers to Contractor a valid and applicable tax exemption certificate evidencing the above exemption, Contractor will not assess such tax on its invoicing. .

13.2 The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify Contractor of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to Contractor's continuing obligations, including claims for deficiencies or substandard Services and Deliverables. Contractor's acceptance of final payment by the State constitutes a waiver of all claims by Contractor against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

13.3 The State will only disburse payments under this Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at <http://www.michigan.gov/SIGMAVSS> to receive electronic fund transfer payments. If Contractor does not register, the State is not liable for failure to provide payment. Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

13.4 Right of Setoff. Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

13.5 Taxes. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services or Deliverables purchased under this Contract are for the State's exclusive use. Notwithstanding the foregoing, all Fees are exclusive of taxes, and the State is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract, unless exempt.

13.6 Pricing/Fee Changes. All Pricing set forth in this Contract will not be increased, except as otherwise expressly provided in this Section.

(a) The Fees will not be increased at any time except for the addition of additional licenses, the fees for which licenses will also remain firm in accordance with the Pricing set forth in the Pricing Schedule.

(b) Excluding federal government charges and terms. Contractor agrees that each of the Fees, economic or product terms or warranties granted pursuant to this Contract are comparable to or better than the equivalent fees, economic or product term or warranty being offered to any government customer of Contractor for similar services, scope of work, volume and complexity. If Contractor enters into any arrangements with another governmental customer of Contractor to provide the products or services, available under this Contract, under more favorable prices, as the prices may be indicated on Contractor's current U.S. and International price list or comparable document, then this Contract will be deemed amended as of the date of such other arrangements to incorporate those more favorable prices, and Contractor will immediately notify the State of such Fee and formally memorialize the new pricing in a Change Notice.

14. Liquidated Damages.

14.1 The parties understand and agree that any liquidated damages (which includes but is not limited to applicable credits) set forth in this Contract are reasonable estimates of the State's damages in accordance with applicable law.

14.2 The parties acknowledge and agree that Contractor could incur liquidated damages for more than one event.

14.3 The assessment of liquidated damages will not constitute a waiver or release of any other remedy the State may have under this Contract for Contractor's breach of this Contract, including without limitation, the State's right to terminate this Contract for cause under **Section 16.1** and the State will be entitled in its discretion to recover actual damages caused by Contractor's failure to perform its obligations under this Contract. However, the State will reduce such actual damages by the amounts of liquidated damages received for the same events causing the actual damages.

14.4 Amounts due the State as liquidated damages may be set off against any Fees payable to Contractor under this Contract, or the State may bill Contractor as a separate item and Contractor will promptly make payments on such bills.

15. Stop Work Order. The State may, at any time, order the Services of Contractor fully or partially stopped for up to ninety (90) calendar days at no additional cost to the State. The State will provide Contractor a written notice detailing such suspension (a "**Stop Work Order**"). Contractor must comply with the Stop Work Order upon receipt. Within 90 days, or any longer period agreed to by Contractor, the State will either:

(a) issue a notice authorizing Contractor to resume work, or

(b) terminate this Contract, subject to any termination fees agreed to in the applicable Statement of Work. . The State will not pay for any Services, Contractor's lost profits, or any additional compensation during a stop work period.

16. Termination, Expiration, Transition. The State may terminate this Contract, the Support Services, or any Statement of Work, in accordance with the following:

16.1 Termination for Cause. In addition to any right of termination set forth elsewhere in this Contract:

(a) The State may terminate this Contract for cause, in whole or in part, if Contractor, as determined by the State:

(i) endangers the value, integrity, or security of State Systems, State Data, or the State's facilities or personnel;

- (ii) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; or
- (iii) breaches any of its material duties or obligations under this Contract. Any reference to specific breaches being material breaches within this Contract will not be construed to mean that other breaches are not material.

(b) If the State terminates this Contract under this **Section 16.1**, the State will issue a termination notice specifying whether Contractor must:

- (i) cure the breach within thirty (30) days of such notice ("Cure Period"), and if not cured within such Cure Period, cease performance immediately. Contractor must submit all invoices for Services accepted by the State within 30 days of the date of termination. Failure to submit an invoice within that timeframe will constitute a waiver by Contractor for any amounts due to Contractor for Services accepted by the State under this Contract, or
- (ii) cure the breach within thirty (30) days of such notice ("Cure Period"), and if not cured within such Cure Period, continue to perform for a specified period. If it is later determined that Contractor was not in breach of this Contract, the termination will be deemed to have been a termination for public interest, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in **Section 16.2**.

(c) The State will only pay for amounts due to Contractor for Services accepted by the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Contractor for the State's reasonable costs in terminating this Contract. Contractor must promptly reimburse to the State any Fees prepaid by the State prorated to the date of such termination, including any prepaid Fees. Further, Contractor must pay all reasonable costs incurred by the State in terminating this Contract for cause, including administrative costs, attorneys' fees, court costs, transition costs, and any costs the State incurs to procure the Services from other sources.

16.2 Termination for Public Interest. The State may immediately terminate this Contract in whole or in part, without penalty, and for any reason, including but not limited to, appropriation or budget shortfalls. The termination notice will specify whether Contractor must:

- (a) cease performance immediately. Contractor must submit all invoices for Services accepted by the State within 30 days of the date of termination. Failure to submit an invoice within that timeframe will constitute a waiver by Contractor for any amounts due to Contractor for Services accepted by the State under this Contract, or
- (b) continue to perform in accordance with **Section 16.3**. If the State terminates this Contract for public interest, the State will pay all reasonable costs, as determined by the State, for State approved Transition Responsibilities to the extent the funds are available.

16.3 Transition Responsibilities.

(a) Upon termination or expiration of this Contract for any reason, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days; the "**Transition Period**"), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the Contract to continue without interruption or adverse effect, and to facilitate the orderly transfer of the Services to the State or its designees. Such transition assistance may include but is not limited to:

- (i) continuing to perform the Services at the established Contract rates;

- (ii) taking all reasonable and necessary measures to transition performance of the work, including all applicable Services to the State or the State's designee;
- (iii) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, and comply with **Section 22.5** regarding the return or destruction of State Data at the conclusion of the Transition Period; and
- (iv) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts (collectively, the "**Transition Responsibilities**"). The Term of this Contract is automatically extended through the end of the Transition Period.

(b) Contractor will follow the transition plan attached as **Schedule G** as it pertains to both transition in and transition out activities.

17. Indemnification

17.1 General Indemnification. Contractor must defend, indemnify and hold the State, its departments, divisions, agencies, offices, commissions, officers, and employees harmless, without limitation, from and against any and all third-party actions, claims, losses, liabilities, damages, costs, attorney fees, and expenses (including those required to establish the right to indemnification), arising out of or relating to:

(a) any breach by Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable) of any of the promises, agreements, representations, warranties, or insurance requirements contained in this Contract;

(b) any infringement, misappropriation, or other violation of any Intellectual Property Right or other right of any third party;

(c) any bodily injury, death, or damage to real or tangible personal property occurring wholly or in part due to Contractor's negligence or willful misconduct (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable); and

(d) any acts or omissions of Contractor (or any of Contractor's employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable).

17.2 Indemnification Procedure. The State will notify Contractor in writing if indemnification is sought; however, failure to do so will not relieve Contractor, except to the extent that Contractor is materially prejudiced. Contractor must, to the satisfaction of the State, demonstrate its financial ability to carry out these obligations. The State is entitled to:

(a) regular updates on proceeding status;

(b) participate in the defense of the proceeding;

(c) employ its own counsel; and to

(d) retain control of the defense, at its own cost and expense, if the State deems necessary. Contractor will not, without the State's prior written consent (not to be unreasonably withheld), settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. Any litigation activity on behalf of the State or any of its subdivisions, under this **Section 17**, must be coordinated with the Department of Attorney General. An attorney designated to represent the State may not do so until approved by the Michigan Attorney General and appointed as a Special Assistant Attorney General.

17.3 The State is constitutionally prohibited from indemnifying Contractor or any third parties.

18. Infringement Remedies.

18.1 The remedies set forth in this Section are in addition to, and not in lieu of, all other remedies that may be available to the State under this Contract or otherwise, including the State's right to be indemnified for such actions.

18.2 If any Software or Deliverable or any component thereof, other than State Materials, is found to be infringing or if any use of any Software or any component thereof is enjoined, threatened to be enjoined or otherwise the subject of an infringement claim, Contractor must, at Contractor's sole cost and expense:

(a) procure for the State the right to continue to use such Software or Deliverable or component thereof to the full extent contemplated by this Contract; or

(b) modify or replace the materials that infringe or are alleged to infringe ("**Allegedly Infringing Materials**") to make the Software or Deliverable and all of its components non-infringing while providing fully equivalent features and functionality.

18.3 If neither of the foregoing is possible notwithstanding Contractor's commercially reasonable efforts, then Contractor may direct the State to cease any use of any materials that have been enjoined or finally adjudicated as infringing, provided that Contractor will:

(a) refund to the State all amounts paid by the State in respect of such Allegedly Infringing Materials and any other aspects of the Software or Deliverable provided under a Statement of Work for the Allegedly Infringing Materials that the State cannot reasonably use as intended under this Contract; and

(b) in any case, at its sole cost and expense, secure the right for the State to continue using the Allegedly Infringing Materials for a transition period of up to six (6) months to allow the State to replace the affected features of the Software or Deliverable without disruption.

18.4 If Contractor directs the State to cease using any Software or Deliverable under **Section 18.3**, the State may terminate this Contract for cause under **Section 16.1**. Unless the claim arose against the Software or Deliverable independently of any of the actions specified below, Contractor will have no liability for any claim of infringement arising solely from:

(a) Contractor's compliance with any designs, specifications, or instructions of the State; or

(b) modification of the Software by the State without the prior knowledge and approval of Contractor.

19. Disclaimer of Damages and Limitation of Liability.

19.1 Disclaimer of Damages. NEITHER PARTY WILL BE LIABLE, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS AND LOST BUSINESS OPPORTUNITIES.

19.2 Limitation of Liability. EXCEPT WITH RESPECT TO CONTRACTOR'S INFRINGEMENT, OBLIGATIONS AS SET FORTH IN SECTION 18, INDEMNIFICATION OBLIGATIONS AS SET FORTH IN SECTION 17.1(b) AND 17.1(c), AND CONTRACTOR'S OBLIGATIONS WITH RESPECT TO STATE DATA AS SET FORTH IN SECTION 21, WHICH IS INSTEAD SUBJECT TO THE STATE DATA LIABILITY CAP IN SECTION 19.3 BELOW, IN NO EVENT WILL EITHER PARTY'S AGGREGATE LIABILITY TO THE OTHER UNDER THIS CONTRACT, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT, EXCEED \$2,000,000.00.

19.3 State Data Liability Cap. IN NO EVENT WILL CONTRACTOR'S AGGREGATE LIABILITY TO THE STATE UNDER THIS CONTRACT, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, INDEMNITY, BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT RELATING TO CONTRACTOR'S OBLIGATIONS WITH RESPECT TO STATE DATA IDENTIFIED IN SECTION 22 AND SCHEDULE E, EXCEED \$10,000,000.00.

20. Disclosure of Litigation, or Other Proceeding. Contractor must notify the State within 14 calendar days of receiving notice of any litigation, investigation, arbitration, or other proceeding (collectively, "**Proceeding**") involving Contractor, a Permitted Subcontractor, or an officer or director of Contractor or Permitted Subcontractor, that arises during the term of the Contract, including:

- (a) a criminal Proceeding;
- (b) a parole or probation Proceeding;
- (c) a Proceeding under the Sarbanes-Oxley Act;
- (d) a civil Proceeding involving:
 - (i) a claim that might reasonably be expected to adversely affect Contractor's viability or financial stability; or
 - (ii) a governmental or public entity's claim or written allegation of fraud; or
- (e) a Proceeding involving any license that Contractor is required to possess in order to perform under this Contract.

21. State Data.

21.1 Ownership. The State's data ("**State Data**"), which will be treated by Contractor as Confidential Information, includes:

- (a) User Data; and
- (b) any other data collected, used, Processed, stored, or generated in connection with the Services, including but not limited to:
 - (i) personally identifiable information ("**PII**") collected, used, Processed, stored, or generated as the result of the Services, including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements here listed; and
 - (ii) protected health information ("**PHI**") collected, used, Processed, stored, or generated as the result of the Services, which is defined under the Health Insurance Portability and Accountability Act ("**HIPAA**") and its related rules and regulations.

21.2 State Data is and will remain the sole and exclusive property of the State and all right, title, and interest in the same is reserved by the State.

21.3 Contractor Use of State Data. Contractor is provided a limited license to State Data for the sole and exclusive purpose of providing the Services, including a license to collect, process, store, generate, and display State Data only to the extent necessary in the provision of the Services. Contractor must:

(a) keep and maintain State Data in strict confidence, using such degree of care as is appropriate and consistent with its obligations as further described in this Contract and applicable law to avoid unauthorized access, use, disclosure, or loss;

(b) use and disclose State Data solely and exclusively for the purpose of providing the Services, such use and disclosure being in accordance with this Contract, any applicable Statement of Work, and applicable law;

(c) keep and maintain State Data in the continental United States and

(d) not use, sell, rent, transfer, distribute, or otherwise disclose or make available State Data for Contractor's own purposes or for the benefit of anyone other than the State without the State's prior written consent.

21.4 Discovery. Contractor will immediately notify the State upon receipt of any requests which in any way might reasonably require access to State Data or the State's use of the Software and Hosted Services, if applicable. Contractor will notify the State Program Managers or their designees by the fastest means available and also in writing. In no event will Contract provide such notification more than twenty-four (24) hours after Contractor receives the request. Contractor will not respond to subpoenas, service of process, FOIA requests, and other legal requests related to the State without first notifying the State and obtaining the State's prior approval of Contractor's proposed responses. Contractor agrees to provide its completed responses to the State with adequate time for State review, revision and approval.

21.5 Loss or Compromise of Data. In the event of any act, error or omission, negligence, misconduct, or breach on the part of Contractor of its obligations with respect to State Data under this Contract, that compromises or is suspected to compromise the security, confidentiality, integrity, or availability of State Data or the physical, technical, administrative, or organizational safeguards put in place by Contractor as identified in Schedule E, that relate to the protection of the security, confidentiality, or integrity of State Data; Subject to Section 19.3., Contractor must do the following, as applicable;

(a) notify the State as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence;

(b) cooperate with the State in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by the State;

(c) in the case of PII or PHI, at the State's sole election:

(i) with approval and assistance from the State help the State, notify the affected individuals who comprise the PII or PHI as soon as practicable but no later than is required to comply with applicable law, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or

(ii) reimburse the State for any reasonable costs in notifying the affected individuals;

(d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals;

(e) perform or take any other actions required to comply with applicable law as a result of the occurrence;

(f) pay for any reasonable costs associated with the occurrence, including but not limited to any costs incurred by the State in investigating and resolving the occurrence, including reasonable attorney's fees associated with such investigation and resolution;

(g) without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State, subject to Section 19.3, for any and all third-party claims, including reasonable attorneys' fees, reasonable costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the occurrence;

(h) be responsible for recreating lost State Data in the manner and on the schedule set by the State without charge to the State; and

(i) provide to the State a detailed plan within ten (10) calendar days of the occurrence describing the measures Contractor will undertake to prevent a future occurrence. Notification to affected individuals, as described above, must comply with applicable law, be written in plain language, not be tangentially used for any solicitation purposes, and contain, at a minimum: name and contact information of Contractor's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Contractor has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Contractor. The State will have the option to review and approve any notification sent to affected individuals prior to its delivery. Notification to any other party, including but not limited to public media outlets, must be reviewed and approved by the State in writing prior to its dissemination.

21.6 The parties agree that any damages relating to a breach of **Section 21.6** are to be considered direct damages and not consequential damages. **Section 21** survives termination or expiration of this Contract.

22. Non-Disclosure of Confidential Information. The parties acknowledge that each party may be exposed to or acquire communication or data of the other party that is confidential, privileged communication not intended to be disclosed to third parties. This **Section 22** survives termination or expiration of this Contract.

22.1 Meaning of Confidential Information. The term "**Confidential Information**" means all information and documentation of a party that:

(a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party;

(b) if disclosed orally or not marked "confidential" or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked "confidential" or with words of similar meaning; or,

(c) should reasonably be recognized as confidential information of the disclosing party.

The term "Confidential Information" does not include any information or documentation that was or is:

(d) in the possession of the State and subject to disclosure under the Michigan Freedom of Information Act (FOIA);

(e) already in the possession of the receiving party without an obligation of confidentiality;

(f) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party's proprietary rights;

(g) obtained from a source other than the disclosing party without an obligation of confidentiality; or,

(h) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure).

For purposes of this Contract, in all cases and for all matters, State Data is deemed to be Confidential Information.

22.2 Obligation of Confidentiality. The parties agree to hold all Confidential Information in strict confidence with a reasonable standard of care, and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with this Contract or to use such Confidential Information for any purposes whatsoever other than the performance of this Contract. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to the Contractor's subcontractor is permissible where:

- (a) the subcontractor is a Permitted Subcontractor;
- (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Permitted Subcontractor's responsibilities; and
- (c) Contractor obligates the Permitted Subcontractor in a written contract to maintain the State's Confidential Information in confidence. At the State's request, any of the Contractor's and Permitted Subcontractor's Representatives may be required to execute a separate agreement to be bound by the provisions of this **Section 22.2.**

22.3 Cooperation to Prevent Disclosure of Confidential Information. Each party must use its commercially reasonable efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract. Each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.

22.4 Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of this Contract or any Statement of Work corresponding to the breach or threatened breach.

22.5 Surrender of Confidential Information upon Termination. Upon termination or expiration of this Contract or a Statement of Work, in whole or in part, each party must, within five (5) Business Days from the date of termination, return or certify destruction of such Confidential Information if return is not possible, to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control. Upon confirmation from the State, of receipt of all data, Contractor must permanently sanitize or destroy the State's Confidential Information, including State Data, from all media including backups using National Security Agency ("NSA") and/or National Institute of Standards and Technology ("NIST") (NIST Guide for Media Sanitization 800-88) data sanitation methods or as otherwise instructed by the State. If the State determines that the return of any Confidential Information is not feasible or necessary, Contractor must destroy the Confidential Information as specified above. The Contractor must certify the destruction of Confidential Information (including State Data) in writing within five (5) Business Days from the date of confirmation from the State.

23. Records Maintenance, Inspection, Examination, and Audit.

23.1 Right of Audit. Pursuant to MCL 18.1470, the State or its designee may audit Contractor to verify compliance with this Contract. Contractor must retain and provide to the State or its designee and the auditor general upon request, all financial and accounting records related to this Contract through the Term of this Contract and for four (4) years after the latter of termination, expiration, or final payment under this Contract or any extension ("**Financial Audit Period**"). If an audit, litigation, or other action involving the records is initiated before the end of the Financial Audit Period, Contractor must retain the records until all issues are resolved.

23.2 Right of Inspection. Within ten (10) calendar days of providing notice, the State and its authorized representatives or designees have the right to enter and inspect Contractor's premises or any other places where Services are being performed, and examine, copy, and audit all records related to this Contract. Contractor must cooperate and provide reasonable assistance. If financial errors are revealed, the amount in error must be reflected as a credit or debit on subsequent invoices until the amount is paid or refunded. Any remaining balance at the end of this Contract must be paid or refunded within forty-five (45) calendar days.

23.3 Application. This **Section 23** applies to Contractor, any Affiliate, and any Permitted Subcontractor that performs Services in connection with this Contract.

24. Support Services. Contractor will provide the State with the Support Services described in the Service Level Agreement attached as **Schedule D** to this Contract. Such Support Services will be provided:

(a) During the Warranty Period, the Support Services will be provided at the cost identified in the SOW and any solution defects will be remedied free of charge during the Warranty Period.

(b) Thereafter, for so long as the State elects to receive Support Services for the Software or Deliverables, in consideration of the State's payment of Fees for such services in accordance with the rates set forth in the Pricing Schedule.

25. Data Security Requirements. Throughout the Term and at all times in connection with its actual or required performance of the Services, Contractor will maintain and enforce an information security program including safety and physical and technical security policies and procedures with respect to its Processing of the State's Confidential Information that comply with the requirements of the State's data security policies as set forth in **Schedule E** to this Contract.

26. Training. Contractor will provide the State with training on all uses of the Software permitted hereunder in accordance with the times, locations and other terms set forth in a Statement of Work. Upon the State's request, Contractor will timely provide training for additional Authorized Users or other additional training on all uses of the Software for which the State requests such training, at such reasonable times and locations and pursuant to such rates and other terms as are set forth in the Pricing Schedule.

27. Maintenance Releases; New Versions

27.1 Maintenance Releases. Provided that the State is current on its Fees, during the Term, Contractor will provide the State, at no additional charge, with all Maintenance Releases, each of which will constitute Software and be subject to the terms and conditions of this Contract.

27.2 New Versions. Provided that the State is current on its Fees, during the Term, Contractor will provide the State, at no additional charge, with all New Versions, each of which will constitute Software and be subject to the terms and conditions of this Contract.

27.3 Installation. The State has no obligation to install or use any Maintenance Release or New Versions. If the State wishes to install any Maintenance Release or New Version, the State will have the right to have such Maintenance Release or New Version installed, in the State's discretion, by Contractor or other authorized party as set forth in a Statement of Work. Contractor will provide the State, at no additional charge, adequate Documentation

for installation of the Maintenance Release or New Version, which has been developed and tested by Contractor and Acceptance Tested by the State. The State's decision not to install or implement a Maintenance Release or New Version of the Software will not affect its right to receive Support Services throughout the Term of this Contract.

28. Reserved

29. Contractor Representations and Warranties.

29.1 Authority. Contractor represents and warrants to the State that:

- (a) It is duly organized, validly existing, and in good standing as a corporation or other entity as represented under this Contract under the laws and regulations of its jurisdiction of incorporation, organization, or chartering;
- (b) It has the full right, power, and authority to enter into this Contract, to grant the rights and licenses granted under this Contract, and to perform its contractual obligations;
- (c) The execution of this Contract by its Representative has been duly authorized by all necessary organizational action; and
- (d) When executed and delivered by Contractor, this Contract will constitute the legal, valid, and binding obligation of Contractor, enforceable against Contractor in accordance with its terms.
- (e) Contractor is neither currently engaged in nor will engage in the boycott of a person based in or doing business with a strategic partner as described in 22 USC 8601 to 8606.

29.2 Bid Response. Contractor represents and warrants to the State that:

- (a) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other Bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other Bidder to the RFP; and no attempt was made by Contractor to induce any other Person to submit or not submit a proposal for the purpose of restricting competition;
- (b) All written information furnished to the State by or for Contractor in connection with this Contract, including Contractor's Bid Response, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make the information not misleading;
- (c) Contractor is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State within the previous five (5) years for the reason that Contractor failed to perform or otherwise breached an obligation of the contract; and
- (d) If any of the certifications, representations, or disclosures made in Contractor's Bid Response change after contract award, the Contractor is required to report those changes immediately to the Contract Administrator.

29.3 Software Representations and Warranties. Contractor further represents and warrants to the State that:

- (a) it is the legal and beneficial owner of the entire right, title and interest in and to the Software, including all Intellectual Property Rights relating thereto;
- (b) it has, and throughout the license term, will retain the unconditional and irrevocable right, power and authority to grant and perform the license hereunder;

(c) it has, and throughout the Term and any additional periods during which Contractor does or is required to perform the Services will have, the unconditional and irrevocable right, power and authority, including all permits and licenses required, to provide the Services and grant and perform all rights and licenses granted or required to be granted by it under this Contract;

(d) the Software, and the State's use thereof, is and throughout the license term will be free and clear of all encumbrances, liens and security interests of any kind;

(e) neither its grant of the license, nor its performance under this Contract does or to its knowledge will at any time:

- (i) conflict with or violate any applicable law;
- (ii) require the consent, approval or authorization of any governmental or regulatory authority or other third party; or
- (iii) require the provision of any payment or other consideration to any third party;

(f) when used by the State or any Authorized User in accordance with this Contract and the Documentation, the Software, the Hosted Services, if applicable, or Documentation as delivered or installed by Contractor does not or will not:

- (i) infringe, misappropriate, or otherwise violate any Intellectual Property Right or other right of any third party; or
- (ii) fail to comply with any applicable law;

(g) as provided by Contractor, the Software and Services do not and will not at any time during the Term contain any:

- (i) Harmful Code; or
- (ii) Third party or Open-Source Components that operate in such a way that it is developed or compiled with or linked to any third party or Open-Source Components, other than Approved Third Party Components specifically described in a Statement of Work.

(h) all Documentation is and will be complete and accurate in all material respects when provided to the State such that at no time during the license term will the Software have any material undocumented feature; and

(i) it will perform all Services in a timely, skillful, professional and workmanlike manner in accordance with commercially reasonable industry standards and practices for similar services, using personnel with the requisite skill, experience and qualifications, and will devote adequate resources to meet its obligations under this Contract and will devote adequate resources to meet Contractor's obligations under this Contract;.

(j) when used in the Operating Environment (or any successor thereto) in accordance with the Documentation, all Software as provided by Contractor, will be fully operable, meet all applicable specifications, and function in all respects, in conformity with this Contract and the Documentation;

(k) Contractor acknowledges that the State cannot indemnify any third parties, including but not limited to any third-party software providers that provide software that will be incorporated in or otherwise used in conjunction with the Services, and that notwithstanding anything to the contrary contained in any third-party software license agreement or end user license agreement, the State will not indemnify any third party software provider for any reason whatsoever;

(l) no Maintenance Release or New Version, when properly installed in accordance with this Contract, will have a material adverse effect on the functionality or operability of the Software.

(m) all Configurations or Customizations made during the Term will be forward-compatible with future Maintenance Releases or New Versions and be fully supported without additional costs.

(n) If Contractor Hosted:

- (i) Contractor will not advertise through the Hosted Services (whether with adware, banners, buttons or other forms of online advertising) or link to external web sites that are not approved in writing by the State;
- (ii) the Software and Services will in all material respects conform to and perform in accordance with the Specifications and all requirements of this Contract, including the Availability and Availability Requirement provisions set forth in the Service Level Agreement;
- (iii) all Specifications are, and will be continually updated and maintained so that they continue to be, current, complete and accurate and so that they do and will continue to fully describe the Hosted Services in all material respects such that at no time during the Term or any additional periods during which Contractor does or is required to perform the Services will the Hosted Services have any material undocumented feature;

(o) During the Term of this Contract, any audit rights contained in any third-party software license agreement or end user license agreement for third-party software incorporated in or otherwise used in conjunction with the Software or with the Hosted Services, if applicable, will apply solely to Contractor or its Permitted Subcontractors. Regardless of anything to the contrary contained in any third-party software license agreement or end user license agreement, third-party software providers will have no audit rights whatsoever against State Systems or networks.

29.4 Disclaimer. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN THIS AGREEMENT, CONTRACTOR HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, WITH RESPECT TO THIS CONTRACT.

30. Offers of Employment. During the first twelve (12) months of the Contract, should Contractor hire an employee of the State who has substantially worked on any project covered by this Contract without prior written consent of the State, the Contractor will be billed for fifty percent (50%) of the employee's annual salary in effect at the time of separation.

31. Conflicts and Ethics. Contractor will uphold high ethical standards and is prohibited from: (a) holding or acquiring an interest that would conflict with this Contract; (b) doing anything that creates an appearance of impropriety with respect to the award or performance of the Contract; (c) attempting to influence or appearing to influence any State employee by the direct or indirect offer of anything of value; or (d) paying or agreeing to pay any person, other than employees and consultants working for Contractor, any consideration contingent upon the award of the Contract. Contractor must immediately notify the State of any violation or potential violation of these standards. This Section applies to Contractor, any parent, affiliate, or subsidiary organization of Contractor, and any Permitted Subcontractor that provides Services and Deliverables in connection with this Contract.

32. Compliance with Laws. Contractor, its subcontractors, including Permitted Subcontractors, and their respective Representatives must comply with all laws applicable to it in connection with this Contract.

33. Nondiscrimination. Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, *et seq.*, the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, *et seq.*, and Executive Directive [2019-09](#), Contractor and its subcontractors agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex (as defined in Executive Directive [2019-09](#)), height, weight, marital status, partisan considerations, any mental or physical disability, or genetic information that is unrelated to the

person's ability to perform the duties of a particular job or position. Breach of this covenant is a material breach of the Contract.

34. Unfair Labor Practice. Under MCL 423.324, the State may void any Contract with a Contractor or Permitted Subcontractor who appears on the Unfair Labor Practice register compiled under MCL 423.322.

35. Governing Law. This Contract is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Contract are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Contract must be resolved in the Michigan Court of Claims. Complaints against the State must be initiated in Ingham County, Michigan. Contractor waives any objections, such as lack of personal jurisdiction or *forum non conveniens*. Contractor must appoint an agent in Michigan to receive service of process.

36. Non-Exclusivity. Nothing contained in this Contract is intended nor is to be construed as creating any requirements contract with Contractor, nor does it provide Contractor with a right of first refusal for any future work. This Contract does not restrict the State or its agencies from acquiring similar, equal, or like Services from other sources.

37. Force Majeure

37.1 Force Majeure Events. Neither party will be liable or responsible to the other party, or be deemed to have defaulted under or breached the Contract, for any failure or delay in fulfilling or performing any term hereof, when and to the extent such failure or delay is caused by: acts of God, flood, fire or explosion, war, terrorism, invasion, riot or other civil unrest, embargoes or blockades in effect on or after the date of the Contract, national or regional emergency, or any passage of law or governmental order, rule, regulation or direction, or any action taken by a governmental or public authority, including imposing an embargo, export or import restriction, quota or other restriction or prohibition (each of the foregoing, a "**Force Majeure Event**"), in each case provided that: (a) such event is outside the reasonable control of the affected party; (b) the affected party gives prompt written notice to the other party, stating the period of time the occurrence is expected to continue; (c) the affected party uses commercially reasonable efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

37.2 State Performance; Termination. In the event of a Force Majeure Event affecting Contractor's performance under the Contract, the State may suspend its performance hereunder until such time as Contractor resumes performance. The State may terminate the Contract by written notice to Contractor if a Force Majeure Event affecting Contractor's performance hereunder continues substantially uninterrupted for a period of five (5) Business Days or more. Unless the State terminates the Contract pursuant to the preceding sentence, any date specifically designated for Contractor's performance under the Contract will automatically be extended for a period up to the duration of the Force Majeure Event.

37.3 Exclusions; Non-suspended Obligations. Notwithstanding the foregoing or any other provisions of the Contract or this Schedule:

(a) in no event will any of the following be considered a Force Majeure Event:

- (i) shutdowns, disruptions or malfunctions of Hosted Services or any of Contractor's telecommunication or internet services other than as a result of general and widespread internet or telecommunications failures that are not limited to the Hosted Services; or
- (ii) the delay or failure of any Contractor Personnel to perform any obligation of Contractor hereunder unless such delay or failure to perform is itself by reason of a Force Majeure Event.

(b) no Force Majeure Event modifies or excuses Contractor's obligations under **Sections 21** (State Data), **22** (Non-Disclosure of Confidential Information), or **17** (Indemnification) of the Contract, Disaster Recovery and Backup requirements set forth in the Service Level Agreement, Availability Requirement (if Contractor Hosted) defined in the Service Level Agreement, or any data retention or security requirements under the Contract.

38. Dispute Resolution. The parties will endeavor to resolve any Contract dispute in accordance with this provision. The dispute will be referred to the parties' respective Contract Administrators. Such referral must include a description of the issues and all supporting documentation. The parties must submit the dispute to a senior executive if unable to resolve the dispute within 15 business days. The parties will continue performing while a dispute is being resolved, unless the dispute precludes performance. A dispute involving payment does not preclude performance. Litigation to resolve the dispute will not be instituted until after the dispute has been elevated to the parties' senior executive and either concludes that resolution is unlikely or fails to respond within fifteen (15) business days. The parties are not prohibited from instituting formal proceedings: (a) to avoid the expiration of statute of limitations period; (b) to preserve a superior position with respect to creditors; or (c) where a party makes a determination that a temporary restraining order or other injunctive relief is the only adequate remedy. This Section does not limit the State's right to terminate the Contract.

39. Media Releases. News releases (including promotional literature and commercial advertisements) pertaining to this Contract or project to which it relates must not be made without the prior written approval of the State, and then only in accordance with the explicit written instructions of the State.

40. Severability. If any part of this Contract is held invalid or unenforceable, by any court of competent jurisdiction, that part will be deemed deleted from this Contract and the severed part will be replaced by agreed upon language that achieves the same or similar objectives. The remaining Contract will continue in full force and effect.

41. Waiver. Failure to enforce any provision of this Contract will not constitute a waiver.

42. Survival. The rights, obligations and conditions set forth in this **Section 42** and **Section 1** (Definitions), **Section 16.3** (Transition Responsibilities), **Section 17** (Indemnification), **Section 19** (Disclaimer of Damages and Limitations of Liability), **Section 21** (State Data), **Section 22** (Non-Disclosure of Confidential information), **Section 29** (Contractor Representations and Warranties), **Section 53** (Effect of Contractor Bankruptcy) and **Schedule C** Insurance, and any right, obligation or condition that, by its express terms or nature and context is intended to survive the termination or expiration of this Contract, survives any such termination or expiration.

43. Reserved.

44. Reserved.

45. Contract Modification. This Contract may not be amended except by signed agreement between the parties (a "Contract Change Notice"). Notwithstanding the foregoing, no subsequent Statement of Work or Contract Change Notice executed after the Effective Date will be construed to amend this Contract unless it specifically states its intent to do so and cites the section or sections amended.

46. HIPAA Compliance. The State and Contractor must comply with all obligations under HIPAA and its accompanying regulations, including but not limited to entering into a business associate agreement, if reasonably necessary to keep the State and Contractor in compliance with HIPAA.

47. Accessibility Requirements.

47.1 All Software provided by Contractor under this Contract, including associated content and documentation, must conform to WCAG 2.0 Level AA. Contractor must provide a description of conformance with WCAG 2.0 Level AA specifications by providing a completed PAT for each product provided under the Contract. At a minimum, Contractor must comply with the WCAG 2.0 Level AA conformance claims it made to the State, including the level of conformance provided in any PAT. Throughout the Term of the Contract, Contractor must:

(a) maintain compliance with WCAG 2.0 Level AA and meet or exceed the level of conformance provided in its written materials, including the level of conformance provided in each PAT;

(b) comply with plans and timelines approved by the State to achieve conformance in the event of any deficiencies;

(c) ensure that no Maintenance Release, New Version, update or patch, when properly installed in accordance with this Contract, will have any adverse effect on the conformance of Contractor's Software to WCAG 2.0 Level AA;

(d) promptly respond to and resolve any complaint the State receives regarding accessibility of Contractor's Software;

(e) upon the State's written request, provide evidence of compliance with this Section by delivering to the State Contractor's most current PAT for each product provided under the Contract; and

(f) participate in the State of Michigan Digital Standards Review described below.

47.2 State of Michigan Digital Standards Review. Contractor must assist the State, at no additional cost, with development, completion, and on-going maintenance of an accessibility plan, which requires Contractor, upon request from the State, to submit evidence to the State to validate Contractor's accessibility and compliance with WCAG 2.0 Level AA. Prior to the solution going-live and thereafter on an annual basis, or as otherwise required by the State, re-assessment of accessibility may be required. At no additional cost, Contractor must remediate all issues identified from any assessment of accessibility pursuant to plans and timelines that are approved in writing by the State. For clarity this Section 47.2 only applies to Software and Deliverables provided by Contractor.

47.3 Warranty. Contractor warrants that all WCAG 2.0 Level AA conformance claims made by Contractor pursuant to this Contract, including all information provided in any PAT Contractor provides to the State, are true and correct. If the State determines such conformance claims provided by the Contractor represent a higher level of conformance than what is actually provided to the State, Contractor will, at its sole cost and expense, promptly remediate its Software to align with Contractor's stated WCAG 2.0 Level AA conformance claims in accordance with plans and timelines that are approved in writing by the State. If Contractor is unable to resolve such issues in a manner acceptable to the State, in addition to all other remedies available to the State, the State may terminate this Contract for cause under **Section 16.1**.

47.4 Contractor must, without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State arising out of its failure to comply with the foregoing accessibility standards

47.5 Failure to comply with the requirements in this **Section 47** shall constitute a material breach of this Contract.

48. Further Assurances. Each party will, upon the reasonable request of the other party, execute such documents and perform such acts as may be necessary to give full effect to the terms of this Contract.

49. Relationship of the Parties. The relationship between the parties is that of independent contractors. Nothing contained in this Contract is to be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the parties, and neither party has authority to contract for nor bind the other party in any manner whatsoever.

50. Headings. The headings in this Contract are for reference only and do not affect the interpretation of this Contract.

51. No Third-party Beneficiaries. This Contract is for the sole benefit of the parties and their respective successors and permitted assigns. Nothing herein, express or implied, is intended to or will confer on any other

person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Contract.

52. Equitable Relief. Each party to this Contract acknowledges and agrees that (a) a breach or threatened breach by such party of any of its obligations under this Contract may give rise to irreparable harm to the other party for which monetary damages would not be an adequate remedy and (b) in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto is, in addition to any and all other rights and remedies that may be available to such party at law, at equity or otherwise in respect of such breach, entitled to seek equitable relief, including a temporary restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction, without any requirement to post a bond or other security, and without any requirement to prove actual damages or that monetary damages will not afford an adequate remedy. Each party to this Contract agrees that such party will not oppose or otherwise challenge the appropriateness of equitable relief or the entry by a court of competent jurisdiction of an order granting equitable relief, in either case, consistent with the terms of this Section.

53. Effect of Contractor Bankruptcy. All rights and licenses granted by Contractor under this Contract are and will be deemed to be rights and licenses to "intellectual property," and all Software and Deliverables are and will be deemed to be "embodiments" of "intellectual property," for purposes of, and as such terms are used in and interpreted under, Section 365(n) of the United States Bankruptcy Code (the "**Code**"). If Contractor or its estate becomes subject to any bankruptcy or similar proceeding, the State retains and has the right to fully exercise all rights, licenses, elections, and protections under this Contract, the Code and all other applicable bankruptcy, insolvency, and similar laws with respect to all Software and other Deliverables. Without limiting the generality of the foregoing, Contractor acknowledges and agrees that, if Contractor or its estate will become subject to any bankruptcy or similar proceeding:

(a) all rights and licenses granted to the State under this Contract will continue subject to the terms and conditions of this Contract, and will not be affected, even by Contractor's rejection of this Contract; and

(b) the State will be entitled to a complete duplicate of (or complete access to, as appropriate) all such intellectual property and embodiments of intellectual property comprising or relating to any Software or other Deliverables, and the same, if not already in the State's possession, will be promptly delivered to the State, unless Contractor elects to and does in fact continue to perform all of its obligations under this Contract.

54. Schedules. All Schedules that are referenced herein and attached hereto are hereby incorporated by reference. The following Schedules are attached hereto and incorporated herein:

Schedule A	Statement of Work
Schedule B	Pricing Schedule
Schedule C	Insurance Schedule
Schedule D	Service Level Agreement
Schedule E	Data Security Requirements
Schedule F	Disaster Recovery Plan (if Contractor Hosted)
Schedule G	Transition Plan

55. Counterparts. This Contract may be executed in counterparts, each of which will be deemed an original, but all of which together are deemed to be one and the same agreement and will become effective and binding upon the parties as of the Effective Date at such time as all the signatories hereto have signed a counterpart of this Contract. A signed copy of this Contract delivered by facsimile, e-mail or other means of electronic transmission (to which a signed copy is attached) is deemed to have the same legal effect as delivery of an original signed copy of this Contract.

56. Entire Agreement. These Terms and Conditions, including all Statements of Work and other Schedules and Exhibits (again collectively the "Contract") constitutes the sole and entire agreement of the parties to this Contract with respect to the subject matter contained herein, and supersedes all prior and contemporaneous understandings and agreements, representations and warranties, both written and oral, with respect to such subject matter. In the event of any inconsistency between the statements made in the Terms and Conditions, the Schedules, Exhibits, and

a Statement of Work, the following order of precedence governs: (a) first, these Terms and Conditions and (b) second, Schedule E – Data Security Requirements and (c) third, each Statement of Work; and (d) fourth, the remaining Exhibits and Schedules to this Contract. NO TERMS ON CONTRACTOR'S INVOICES, WEBSITE, BROWSE-WRAP, SHRINK-WRAP, CLICK-WRAP, CLICK-THROUGH OR OTHER NON-NEGOTIATED TERMS AND CONDITIONS PROVIDED WITH ANY OF THE SERVICES, OR DOCUMENTATION HEREUNDER, EVEN IF ATTACHED TO STATE'S DELIVERY OR PURCHASE ORDER, WILL CONSTITUTE A PART OR AMENDMENT OF THIS CONTRACT OR IS BINDING ON THE STATE OR ANY AUTHORIZED USER FOR ANY PURPOSE. ALL SUCH OTHER TERMS AND CONDITIONS HAVE NO FORCE AND EFFECT AND ARE DEEMED REJECTED BY THE STATE AND THE AUTHORIZED USER, EVEN IF ACCESS TO OR USE OF SUCH SERVICE OR DOCUMENTATION REQUIRES AFFIRMATIVE ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

SCHEDULE A - STATEMENT OF WORK

1. DEFINITIONS

The following terms have the meanings set forth below. All initial capitalized terms that are not defined in this Schedule shall have the respective meanings given to them in Section 1 of the Contract Terms and Conditions.

Term	Definition
API	An API is a set of definitions and protocols for building and integrating application software. API lets a developer make a specific “call” or “request” to send or receive information.
API Endpoint Document	Document containing basic directions for interfacing with the API as well as data dictionary and format information for public data sets – MDOT will provide.
Bots	Is the short form for a "robot". An internet bot is a computer program that operates as an agent for a user or other program, or to simulate a human activity to automate certain tasks, meaning they can run without specific instructions from humans.
Cache	Local copy of source data used for processing and transformation within the system. Reduces calls to source systems.
Canned Report	A canned report is a preformatted report that can be distributed to a whole organization or to specifically, defined user groups.
Confidential Data	Confidential data is sensitive information wherein unauthorized disclosure could cause serious financial, legal, or reputational damage to an Agency or the SOM. Confidential data may include personal identifying information (PII) or confidential nonpublic information that relates to an Agency’s business. Confidential data should only be made available to authorized personnel on a need-to know basis and should require a signed non-disclosure agreement.
Data Classification	Data classification is a process that identifies and categorizes information and information systems based on their sensitivity, criticality, and risk. This categorization provides a common framework for effective management and oversight of information security controls for IT resources. Without data classification, an Agency has an increased risk of their data having inadequate security controls that may lead to a security incident or data breach. Classification levels to be used by the SOM are, public, internal, confidential, and restricted.
Data Element	Non-markup language attribute representing all instantiations within a data set available for transformation. Eg. “Vehicle Speed”.
Data Extraction Interval	Maximum allowable elapsed time between calls to specified source systems/data sets to retrieve new data.
Data Set	Collection of related data elements defined within a schema.
Data Set Tag	Informational string associated with a dataset to aid in dataset identification or administration. String includes special characters.
DTMB	Department of Technology, Management, and Budget
Dynamic Creation of Data Elements	Pre-publication transformation of data elements from source data elements based on predefined operations - performed within 1 minute of completion of data ingestion from source system.

Endpoint	External facing URI that contains API
Endpoint Key	Unique alphanumeric string with a minimum of 8 characters that identifies and authenticates user access to API
Internal Data	Internal data is information that is not sensitive to disclosure within the Agency. By default, data created, updated, or stored by the Agency is considered to be Internal information intended for use by Agency employees and authorized non-Agency employees, although it may be accessed by trusted partners covered by a non-disclosure agreement. This information shall be shared internally to further internal operations, lower costs, prevent duplication, and otherwise enhance the condition or operation of Agency systems.
JSON	JavaScript Object Notation is a language independent data interchange format defined by ECMA-404.
MDOT	Michigan Department of Transportation
Public Data	Public data is information that has been explicitly approved for distribution to the public and can be disclosed to anyone without violating an individuals' right to privacy or causing any potential harm. Public data is not sensitive in context or content and does not require special protection. If disclosed or compromised, it will not expose the SOM to financial loss or embarrassment, compromise a competitive advantage, or jeopardize the security information.
Public Data set	An outgoing data set classified as Public.
Public Facing	Accessible from the public internet
Real-time	Up to 10-minute timeframe between data creation/observation and replacement with new data.
RESTful Interface	A RESTful API is an architectural style for an application program interface (API) that uses HTTP requests to access and use data. That data can be used to GET, PUT, POST and DELETE data types, which refers to the reading, updating, creating, and deleting of operations concerning resources.
Restricted Data	Restricted data is information that is extremely sensitive, and any disclosure or corruption could be hazardous to life or health, cause extreme damage to integrity or image, and/or impair the effective delivery of services. Extreme damage includes loss of life, risks to public safety, substantial financial loss, social hardship and major economic impact. Restricted data can be made available to named individuals or specific positions on a need-to-know basis.
RIDE	Real time Data Exchange (RIDE) is a centralized, application agnostic hub for the continuous exchange of real-time transportation data (road weather information, vehicle detector data, etc.).
Schema	For RIDE data transformation, it defines the elements, specific structure, and the format for the data feed, which is important when sharing data files between multiple systems. Defining the schema ensures a feed will not contain unknown values, which may cause parsing errors. Note: This schema definition is only applicable to RIDE data within RIDE web application. It is not consistent with MDOT's standard definition of database schema.
SOM	State of Michigan

Terms of Use	Agreement between user and service provider (MDOT) regarding rules for data utilization and API access.
Time-synced Data Elements	Data elements that share the same, non-overlapping, timeframe measured from the time of retrieval from the source system to the end of the data extraction interval for that element's parent dataset.
Transformation of Data Elements	Creation or conversion of data elements based on various parsing operations, conditional statements, or static value input.
User Account	Token and email address representing entity accessing the API
XML	Extensible Markup Language is a markup language for encoding data defined by W3C XML 1.0

2. BACKGROUND

Currently real-time exchange of continuous transportation data (road weather information, vehicle detector data, etc.) occurs directly between internal applications or with applications that get data from the MiDrive endpoint. Data is shared with external users through the MiDrive endpoint or through other external parties contracted as necessary to support business needs. MDOT would like to create a centralized, application agnostic platform for the continuous exchange of real-time transportation data. The goal of the Real Time Data Exchange (RIDE) project to replace the current methods for ITS data exchange with a single new vendor solution that unifies all of MDOT's real time data exchange needs.

PURPOSE

The State is seeking a *State Hosted* Software Solution and applicable Services.

3. IT ENVIRONMENT RESPONSIBILITIES

Contractor must work with the State to implement a comprehensive set of controls, leveraging current investments in security, working to construct a set of layered defenses that meet all the State's public and non-public PSP's. Contractor will deploy a team with security at its core, develop a solution with the necessary security protocols, and employ comprehensive security processes throughout the program.

3.1. Team

3.2. Contractor Security Officer

Contractor understands that security, privacy, risk, and compliance is vital to the processes and tools implemented to protect state systems. Contractor must appoint a seasoned Security Officer who will serve as the main point-of-contact for all security inquiries related to the solution. Contractor must develop System Security Plans aligned with NIST 800-53, FISMA, CMS MARS-E, among other applicable frameworks and standards. Contractor must collaborate with the State to ensure risk and compliance components are accounted for and integrated as part of the overall solution.

3.3. Secure Solution

System Security Plan

The System Security Plan (SSP) will serve as a foundation and reference for the system security and privacy design. The SSP will enable and support compliance with various requirements, such as FISMA and NIST Special Publication 800-53 Moderate Controls, CMS, IRS, FBI, SSA, HIPAA, FERPA and PCI requirements, as applicable. The Contractor's Security Officer will work closely with the State's team to navigate the compliance process, such as documenting the in-scope controls leveraging the KeyLight Governance Risk and Compliance (GRC) solution as part of the development of the System Security Plan.

Contractor, under the State's direction will develop and maintain the System Security Plan through all stages of the system and application life-cycles. This plan will verify that all security requirements are identified and that vulnerabilities are not introduced as the system is developed, implemented, and maintained.

The State will provide required third-party assessments as needed for the Authority to Operate (ATO), Authority to Connect (ATC), and review and revise annually per regulatory requirements. Contractor will support the selected independent assessor by coordinating access provided to the system environment, review findings, and conduct remediation activities as applicable.

The Security Plan will focus on the security controls / safeguards described below.

Control Area	Implementation Scope and Responsibility
Identity and Access Management	<p>Identity and Access controls will be implemented that include authentication and authorization to restrict system access only to approved users with privileges commensurate with their role. Contractor will work with the State for integrating the MDOT RIDE solution with MILogin for federated authentication as described in Section 6.0 ACCESS CONTROL AND AUTHENTICATION.</p> <p>The DTMB infrastructure team will extend existing access management security controls to the infrastructure devices pertaining to the components of the MDOT RIDE solution.</p>
Application Security - SAST Scans	<p>Contractor's security team will perform Static Application Security Testing (SAST) as part of the SDLC process to perform static code analysis to detect potential application security vulnerabilities and remediate them as part of the release management process. During the implementation and build phase (the monthly development Sprints), Contractor will scan the code during each release.</p> <p>During the Run phase, Contractor will coordinate with DTMB's preferred SAST vendor to get the application scanned as part of the planned SAST scanning schedule, and remediate any issues found.</p>
Application Security - DAST Scans	<p>Contractor's security team will perform Dynamic Application Security Testing (DAST) that uses scanning techniques to analyze the external behavior of an application by mimicking real-world hacking techniques and analyzing responses. In contrast to SAST, it has no access or knowledge of the internal aspects of the application. During the implementation and build phase, Contractor would scan the new build for each release (corresponding to the monthly sprints).</p> <p>During the Run phase, Contractor will coordinate with DTMB's preferred DAST vendor to get the application scanned as part of the planned DAST scanning schedule, and remediate any issues found.</p>
Application Security - SCA	<p>Contractor's security team will perform Software Composition Analysis (SCA) scans for identifying open source components and verifying security issues within the software components, such as known vulnerabilities and licensing issues. During the implementation and build phase (the monthly development Sprints), Contractor must scan the code during each release.</p> <p>During the Run phase, Contractor will coordinate with DTMB's preferred SCA vendor to get Contractor's application scanned as part of the planned SCA scanning schedule, and remediate any issues found.</p>
Application Penetration Test	<p>Contractor's security team will coordinate with MDOT and DTMB, leveraging existing capabilities to perform a penetration test of the application prior to go live. The goal of this exercise is to determine whether any security weaknesses, whether through vulnerabilities or lack of adherence to security best practices, are applicable to a web application. Contractor will evaluate the security across the following key areas:</p> <ul style="list-style-type: none"> • Authentication Analysis: Review username quality, password policy, password change mechanism, password change on first login, password reset mechanism, brute force protection, concurrent authenticated sessions, logout functionality. • Session Management

Control Area	Implementation Scope and Responsibility
	<ul style="list-style-type: none"> • Authorization • Encryption <ul style="list-style-type: none"> – Application Information Leakage - test how well Contractor protects "application sensitive information" • Input Validation and Data Sanitization – Contractor will combine these two techniques to prove in-depth defense to the application <ul style="list-style-type: none"> – Validation: checks if the input meets a set of criteria (such as a string contains no standalone single quotation marks) – Sanitization: modifies the input to ensure that it is valid (such as doubling single quotes) • Application Logic • Server Configuration <p>These areas are the minimum to which the application must be assessed. Web application penetration testing will take place from two user types. One with privileged access, such as the system administrator role, and one with basic access to emulate a typical user. Contractor's penetration testing is based on "point-in-time" and "path of least resistance" penetration testing methodology that is not intended to identify all existing vulnerabilities and security weaknesses; Contractor recommends identifying all possible routes of compromise during allocated testing time.</p>
Data Protection	<p>Contractor must assist the State to implement the following technical controls for data protection as necessary:</p> <ul style="list-style-type: none"> • Transparent Data Encryption (TDE) for database level encryption • TLS encryption for all new interfaces and existing interfaces where supported, Web traffic would be encrypted using a strong security protocol, Transport Layer Security (TLS 1.2+) • TLS encryption will be required on database listener ports for encryption communication between applications and databases • Batch file transfers, such as EDI communication file transfers to and from Federal, local, or State agencies, would leverage Secure File Transfer Protocol (SFTP) where supported • ESB messages will use SOAP/REST over HTTPS protocol for secure web services communication • Encryption will be required for offsite backups / tapes • MDOT will provide non-production (fake) or anonymized data for development/testing within lower environments • All external applications and interfaces that will utilize the MDOT RIDE solution would support TLS 1.2 or higher for encryption
Audit Logging	<p>Contractor will enable adequate audit logging within the application components to support monitoring of the environment as required by applicable Federal and State security and privacy laws. For leveraging the existing investments and the ability to have an enterprise-wide view, Contractor recommends continuing to leverage the MDOT's existing SIEM capability for the MDOT RIDE solution. Managing the existing MDOT SIEM infrastructure, integrating it with the MDOT RIDE solution infrastructure for audit log collection and monitoring of these audit logs will be owned by MDOT.</p>
Certificate and Key Management	<p>Contractor will coordinate issuance of SSL certificates required for the MDOT RIDE solution. MDOT to provide SSL certificates for internal and external certificates required for the MDOT RIDE solution. The State will procure certificates from a trusted Certification Authority (CA) for public facing URLs. Contractor has assumed that MDOT already has an</p>

Control Area	Implementation Scope and Responsibility
	internal CA for issuing and managing SSL certificates for internal systems. Internal certificates needed for the MDOT RIDE solution will be issued by MDOT from this internal CA per requests from Contractor.
Disaster Recovery Planning	Contractor will design an application stack to provide high-availability and support MDOT disaster recovery capabilities. Contractor will provide inputs into the Contingency Plan document and participate in DR testing activities. However, overall ownership for Contingency Planning for the underlying infrastructure will be owned by MDOT and DTMB. There will be a maximum one full annual DR test and up-to four table-top exercises.
Web Application Firewalls	The State's existing Web Application Firewall (WAF) capability will be leveraged for the MDOT RIDE solution. Contractor will work with MDOT and DTMB administrators for implementing the necessary SSL offloading for enabling visibility into web traffic. Ongoing operations of the WAF policies will continue to be owned by MDOT and DTMB.

Table 1. Security Controls and Safeguards

3.3.1. MDOT Inherited Security Controls

MDOT/DTMB will own and manage the infrastructure level security controls such as those below:

- Network/host firewalls and boundary protection
- Network/host intrusion detection/protection system
- Anti-malware/endpoint protection
- Full-disk encryption
- Infrastructure vulnerability management and policy compliance
- Hardening and patching for underlying infrastructure, such as OS, database and application platforms
- Security Information & Event Management (SIEM) and security monitoring
- File Integrity Monitoring (FIM)
- Privileged Access Management (PAM)
- Data Leak Prevention (DLP)
- Software whitelisting & blacklisting

3.3.2. Security Accreditation Process:

Contractor will assist the State with its Security Accreditation Process at no additional cost. This will be done through the development and on-going maintenance of a System Security Plan (SSP) using the State's automated governance, risk, and compliance (GRC) platform (Keylight). Contractor acknowledges the requirement of annual re-assessment of the system's controls to receive and maintain authority to operate (ATO). All identified risks from the SSP will be remediated through a Plan of Action and Milestones (POAM) process with remediation time frames based on the risk level of the identified risk.

For all findings in such assessments, (i) Contractor will follow the State's risk management process, (ii) assist with the creation of State approved POAMs and perform related remediation activities, and (iii) request the appropriate level of risk acceptance.

3.3.3. Unauthorized Access

Contractor must assist the State with integrating MILogin and implement a strong role-based access control (RBAC) model. All State-authorized connectivity or attempted connectivity to State systems will require the State's express prior written authorization, not exceed the scope of the State's authorization, and will be following the State's security policies set forth in the contract. Because the system is hosted within the State data center, all such connectivity will be only through the State's security gateways and firewalls.

3.3.4. Application Scanning

Contractor will scan the MDOT RIDE solution using an approved scanning tool (e.g. Fortify and WebInspect). Contractor will remediate any issues identified in the scan according to the remediation time requirements documented in the State's PSPs.

3.3.5. Infrastructure Scanning

Since hosting is owned by the State, the infrastructure vulnerability scanning is not in Contractor's scope.

3.4. Security Processes

3.4.1. Contractor Responsibilities

The MDOT RIDE solution environment will be hosted in a DTMB managed infrastructure environment. Control areas in which Contractor has responsibility will be implemented and transitioned to the Contractor's Support Services Team for providing the necessary services for running the environment securely and maintaining compliance. Contractor will enforce strong application security testing processes with best of class tools (e.g., Micro Focus Fortify and WebInspect) and staff with deep Application Security expertise.

3.4.2. Contractor's CDP Verifies the Security and Confidentiality of State Data

Contractor is responsible for protecting the State's data. Contractor's Client Data Protection (CDP) program is part of Contractor's Information Security program and is directed by Contractor's Chief Information Security Officer (CISO). As part of the CDP program, the Contractor's delivery team would work very closely with MDOT and DTMB to verify the security and confidentiality of the State Data. Contractor will implement controls to:

- (a) Ensure the security and confidentiality of the State data;
- (b) Protect against any anticipated threats or hazards to the security or integrity of the State data;
- (c) Protect against unauthorized disclosure, access to, or use of the State data;
- (d) Ensure the proper disposal of any State data in Contractor's or its subcontractor's possession; and
- (e) Ensure that all Contractor Representatives comply with the foregoing.

These controls include the following:

- Allocation of senior-level responsibility for client data protection for every project.
- Appointment of a dedicated information security lead to support compliance with the State's data protection requirements.
- Clear documentation and communication of the client's requirements to Contractor's staff with access to client data.
- Data protection training for Contractor's staff on a client project to ensure compliance by all Contractor's representatives.
- Procedures for managing security incidents with full client involvement.
- Standards for secure transmission, storage, back-up, and destruction of client data to ensure the proper disposal of any State data.
- Technical, organizational, and physical security controls for the Contractor's personnel and facilities, including hard-drive encryption for laptops and other removable media, physical and logical access controls, and employee background checking, to protect against any anticipated threats or hazards to the security or integrity of the State data.

3.4.3 Contractor's Client Data Protection Program

The Client Data Protection program includes key controls and external certifications and must comply with all State PSP's. The Client Data Protection (CDP) program directly supports security and privacy risk management. Contractor will regularly audit the service delivery team to confirm compliance with the State's instructions and data privacy policies, and the standards and controls set out above.

3.4.4. Security Audits

Contractor will maintain rigorous audit trails, including complete and accurate records of data protection practices and IT security controls. The security logs relating to State data will be handled as follows: (i) application logs - which Contractor will push to the State's SIEM solution, (ii) infrastructure logs - since the hosting will be owned by the state, these logs will sent to the SIEM by the State. Contractor will work with the State to analyze and interpret these logs, in the case of a security incident or breach. Contractor acknowledges the State's right to review and perform onsite audits on Contractor's data privacy and information security program. Contractor will provide the necessary audit support. Since hosting is owned by the State, the FedRAMP Security plan is not in Contractor's scope

Definitions:

Application – Software programs which provide functionality for end user and Contractor services.

Development - Process of creating, testing and maintaining software components.

Component Matrix	Disclose subcontractor name(s), if applicable.
Application	N/A
Development	N/A

All responsibilities and deliverables for the RIDE solution will be carried out solely by the Contractor.

Contractor will only require access to State data files or data sources that must be available and accessible to both public and internal users of the solution.

4. ADA COMPLIANCE

The State is required to comply with the Americans with Disabilities Act of 1990 (ADA) and has adopted standards and procedures regarding accessibility requirements for websites and software applications. All websites, applications, software, and associated content and documentation provided by the Contractor as part of the Solution must comply with Level AA of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) 2.0.

Contractor must provide a description of conformance with WCAG 2.0 Level AA specifications by providing a completed PAT for the Solution. If the Solution is comprised of multiple products, a PAT must be provided for each product. In addition to PATs, Contractors may include a verification of conformance certified by an industry-recognized third-party. If the Contractor is including any third-party products in the Solution, Contractor must obtain and provide the third-party PATs as well.

Each PAT must state exactly how the product meets the specifications. All "Not Applicable" (N/A) responses must be fully explained. Contractor must address each standard individually and with specificity; and clarify whether conformance is achieved throughout the entire product (for example – user functionality, administrator functionality, and reporting), or only in limited areas. A description of the evaluation methods used to support WCAG 2.0 Level AA conformance claims, including, if applicable, any third-party testing, must be provided. For each product that does not fully conform to WCAG 2.0 Level AA, Contractor must provide detailed information regarding the plan to achieve conformance, including timelines.

The UrbanOS solution adheres to WCAG 2.0 Level AA conformance. The Contractor's implementation team will be staffed with a user interface designer with WCAG compliance experience to formulate standards and guidelines for the team while implementing the MDOT RIDE branding and visual configurations and perform regular compliance checks across the requirements. Contractor's user interface designer will work closely with State of Michigan WCAG governance personnel to review the standards and guidelines, verify alignment, and proactively address any concerns. WCAG standards and guidelines are part of the requirements documentation and will be checked during design validation as well as during the quality assurance phase.

5. USER TYPE AND CAPACITY

Type of User	Access Type	Number of Users	Number of Concurrent Users
Public Users***	Read Only	200+	200+
State Employee	Read, Write, Admin	15	15

*** Note "Public Users" are API users – they do not actually login to system, they are requestors of data. Contractor Solution must meet the expected number of concurrent Users.

The UrbanOS solution can support the expected number of concurrent users outlined above and is designed to scale up to accommodate 500 concurrent users performing standard API access and data discovery activities. The solution can scale up or down without any detrimental impacts on user performance through the deployment of Kubernetes, which monitors and manages resiliency above the application level. Furthermore, network, memory, and CPU usage are monitored and used to scale microservice clusters up and down. Each microservice independently scales so bottlenecks within the entire distributed system are resolved without incurring the extra cost of scaling up a microservice with little usage.

The UrbanOS solution is inherently designed to be highly responsive and follows standard software tenets for system performance. The application services are tuned for performance and linearly scalable to adjust as user demands change. The expected latency response times of the solution are as depicted in Table 2.

Action Type	Description	Response time
Page Load	Load response time for website pages such as case management screens and portal screens	Under 2 sec (95 th percentile)
Ad hoc/Self-service reports	Load response times for self-serve reports	Under 10 secs-1 min (95 th percentile)

Table 2. Latency Response Times

Network Connectivity: To benefit from the full efficiency of the system for latency response times, Contractor requires the following network connectivity and equipment from the State as a minimum:

- Wi-Fi IEEE 802.11 b/g/n standard

Network Requirements: Additionally, the solution can work on networks that use Internet Protocol Version 4 (IPv4) or Internet Protocol Version 6 (IPv6).

- **Minimum Network Requirements:** Connection between the web browser and the Application Server (AS) as well as between the AS and the database in an on-premises system should adhere to the following:

Network Response Times		
Value	Web to AS	AS to Database
Bandwidth	50 kilobytes per second (KBps) per user	100 megabytes per second (MBps)
Latency	Less than 250–300 milliseconds (ms)	Less than 1 ms (local area network [LAN] only). AS and the database must be co-located

Table 3. Network Response Times

- **Latency Requirements:** Contractor's solution is designed for networks that have a latency of 250–300 milliseconds (ms) or less. This latency is the latency from a browser client to the datacenter that hosts the solution.
- **Bandwidth Requirements:** Are dependent on various scenarios. Typical scenarios require a bandwidth of more than 50 KBps between the browser and the server. However, Contractor recommends higher bandwidth for scenarios that have high payload requirements, such as scenarios that involve extensive customization.
- **Location Requirements:** Deployments where the AS and the database are in different data centers are not supported. AS and the database must be co-located.
- **Browser-to-Server Roundtrips:** In general, the solution is optimized to reduce browser-to-server round trips. The number of round trips from a browser client to the data center should be zero to one for each user interaction, and the payload is compressed.
- **Standard Network Components:** The solution assumes standard network components such as Gateways, routers, DNS servers, Web Proxy, etc., as indicated in Figure 1 below.

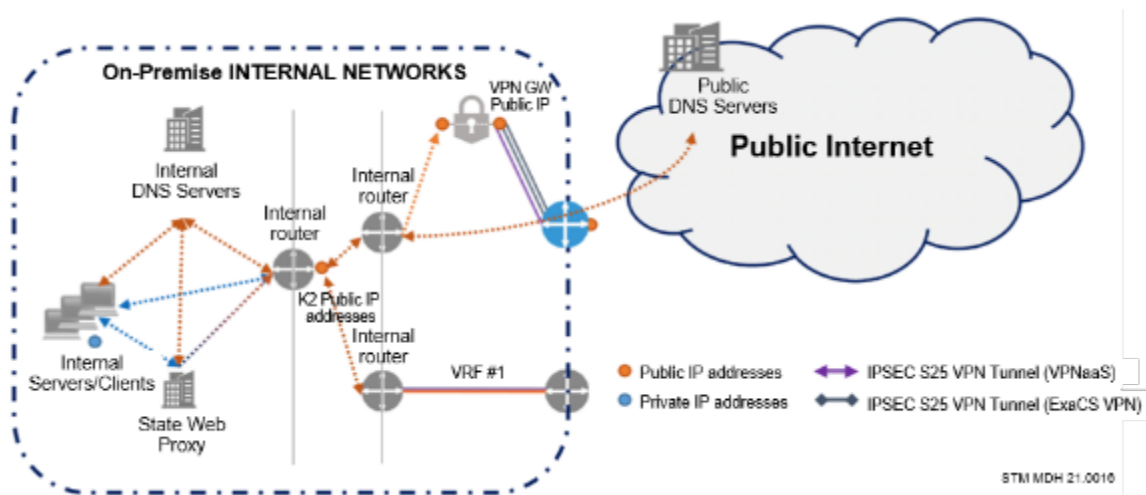


Figure 1. Standard Network Configuration

6. ACCESS CONTROL AND AUTHENTICATION

The Contractor's solution must integrate with the State's IT Identity and Access Management (IAM) environment as described in the State of Michigan Digital Strategy (https://www.michigan.gov/dtmb/0,5552,7-358-82547_56345_56351_69611-336646--,00.html), which consist of:

- 6.1 MILogin/Michigan Identity, Credential, and Access Management (MICAM). An enterprise single sign-on and identity management solution based on IBM's Identity and Access Management products including, IBM Security Identity Manager (ISIM), IBM Security Access Manager for Web (ISAM), IBM Tivoli Federated Identity Manager (TFIM), IBM Security Access Manager for Mobile (ISAMM), and IBM DataPower, which enables the State to establish, manage, and authenticate user identities for the State's Information Technology (IT) systems.
- 6.2 MILogin Identity Federation. Allows federated single sign-on (SSO) for business partners, as well as citizen-based applications.
- 6.3 MILogin Multi Factor Authentication (MFA, based on system data classification requirements). Required for those applications where data classification is Confidential and Restricted as defined by the 1340.00 Michigan Information Technology Information Security Policy (i.e. the solution must comply with PHI, PCI, CJIS, IRS, and other standards).

6.4 MILogin Identity Proofing Services (based on system data classification requirements). A system that verifies individual's identities before the State allows access to its IT system. This service is based on "life history" or transaction information aggregated from public and proprietary data sources. A leading credit bureau provides this service.

To integrate with the SOM MILogin solution, the Contractor's solution must support SAML, or OAuth or OpenID interfaces for the SSO purposes.

The UrbanOS solution leverages the Auth0 platform as the user interface for user logins and registration. The Auth0 platform supports OAuth 2.0 authorization that uses federated authentication with SAML 2.0-compliant identity providers (IDPs). The OAuth 2.0-based authorization can be configured to use the SAML2-bearer grant type with a SAML token profile. This configuration is used when a resource requestor is authenticated by using a SAML2.0-compliant IDP. Contractor will leverage this Auth0 capability for integrating with MILogin for federated authentication. By default, the solution will leverage the MILogin integration for administrator and curator users while end users will be stored and secured by the Auth0 platform.

Below is a visual representation of the authentication and authorization process for a user requesting (a) new user account and (b) for authenticating and accessing data and c) admin portal login. The solution will use MILogin as the authentication Users will have four entry points to the system:

- 1) **Data curation system** 2) **User portal** 3) **REST API** 4) **Real-Time Streaming API**

Auth0 is leveraged as the underlying platform for data curation and the user portal. The API endpoints are protected by requiring the caller to provide a valid API endpoint key. All data curator and administrator users will be authenticated through MILogin and public users will be managed by the UrbanOS solution.

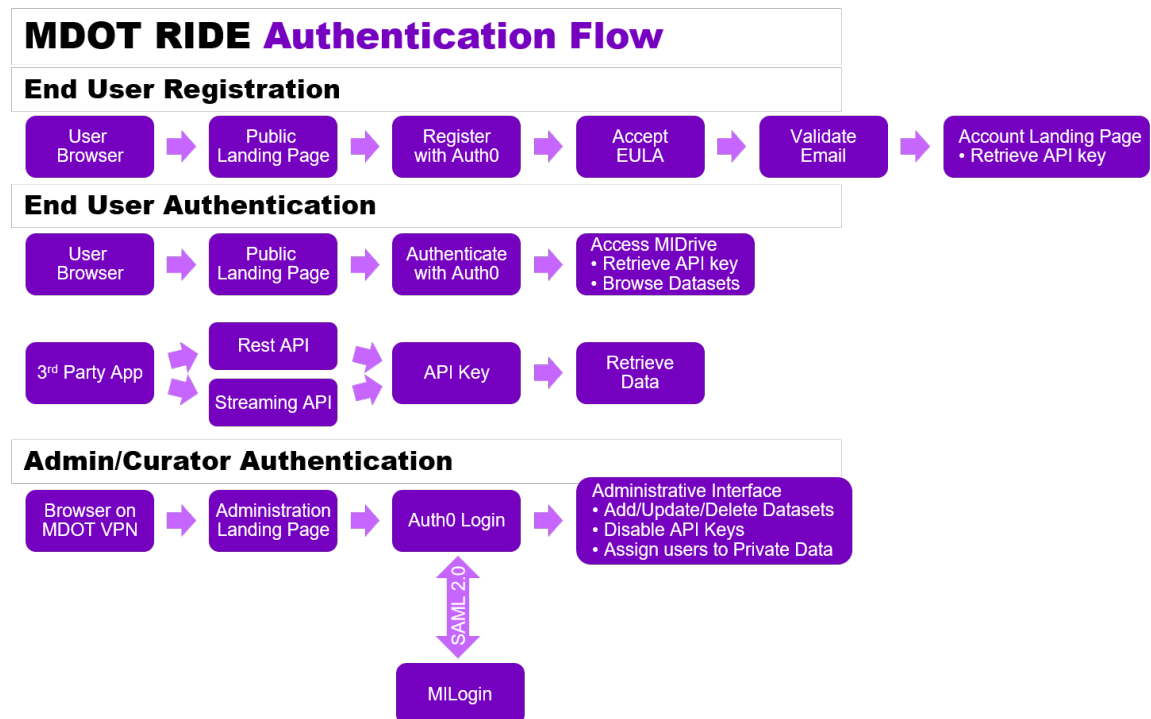


Figure 2. Authentication Process

7. DATA RETENTION AND REMOVAL

The State will need to retain all data for the entire length of the Contract unless otherwise direct by the State. There is no need for "data" retention, long term only for configurations and data mapping.

The State will need the ability to delete data, even data that may be stored off-line or in backups.

The State will need to retrieve data, even data that may be stored off-line or in backups.

The UrbanOS solution will comply with state requirements to retain all required data for the length of the Contract. There are no limitations to the volume or duration of storage with the ability to store data in perpetuity. The solution will not archive any data for retention purposes. The solution will be optimized for data retrieval by holding data needed for immediate access in online storage which can be searched, viewed, edited, and deleted in real-time by the solution users. Contractor will coordinate with the State to address backup and retrieval business requirements.

8. END USER AND IT OPERATING ENVIRONMENT

The SOM IT environment includes X86 VMware, IBM Power VM, MS Azure/Hyper-V and Oracle VM, with supporting platforms, enterprise storage, monitoring, and management running in house and in cloud hosting provides.

Contractor must accommodate the latest browser versions (including mobile browsers) as well as some pre-existing browsers. To ensure that users with older browsers are still able to access online services, applications must, at a minimum, display and function correctly in standards-compliant browsers and the state standard browser without the use of special plugins or extensions. The rules used to base the minimum browser requirements include:

- Over 2% of site traffic, measured using Sessions or Visitors (or)
- The current browser identified and approved as the State of Michigan standard

This information can be found at <https://www.michigan.gov/browserstats>. Please use the most recent calendar quarter to determine browser statistics. For those browsers with over 2% of site traffic, except Internet Explorer which requires support for at minimum version 11, the current browser version as well as the previous two major versions must be supported.

Contractor must support the current and future State standard environment at no additional cost to the State.

The optimal IT environment based on the environment choices set forth above is to deploy a database instance, network block storage, and a Kubernetes cluster to operate. The database is used as a user and dataset Meta Data Store which needs at least 10 GB of storage and should be PostgreSQL. The Block Data Storage backs a distributed SQL engine which is used as the primary dataset storage. The size and configuration of the Kubernetes cluster depends on upon the amount of data flowing through the pipeline. Contractor has the capability to deploy and manage a Kubernetes cluster on virtual compute resources. The system will require network ingress from the internet via HTTPS. The administrative interface can be configured to only be accessible via the VPN, in which case MDOT will be responsible for maintaining the VPN and the VPNs connection to the system. For the MILogin integration Auth0 will need to be able to access the MILogin service via SAML.

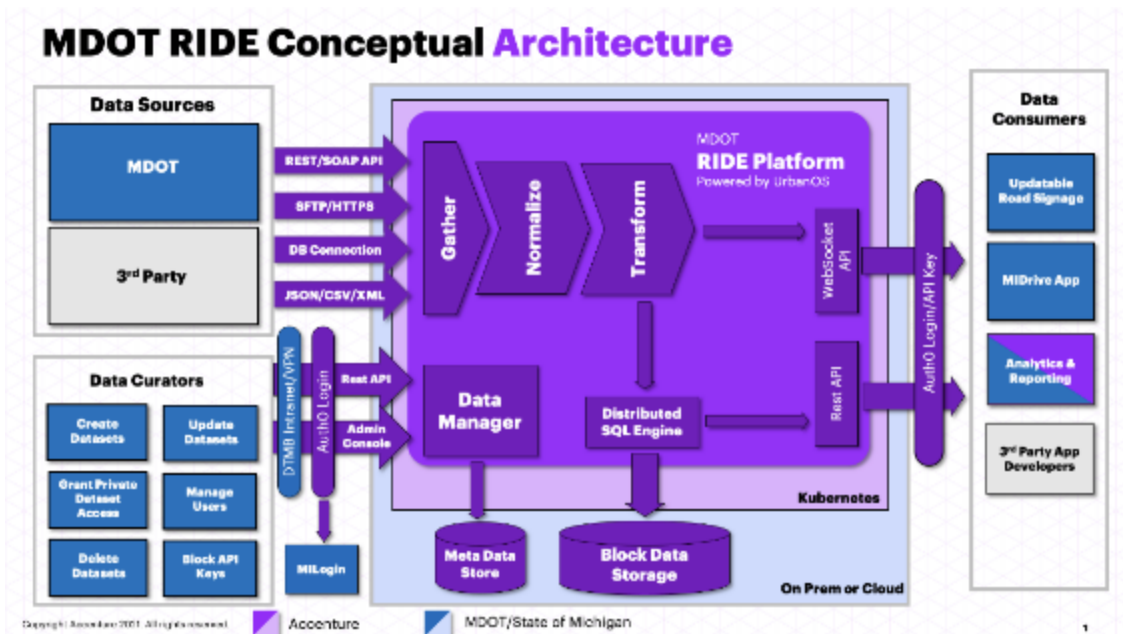


Figure 3. Reference Architecture Diagram

The Contractor's delivery team will need VPN access to the State of Michigan's intranet in order to perform system deployment and management duties. The team will need network access to whichever data sources the state wishes to integrate with the RIDE platform. In order to deploy and manage a Kubernetes cluster, the team will need access to the virtual compute resources within the DTMB datacenter.

Contractor must comply with the current environment for the solution. An impact assessment will be conducted for any future changes to the user IT environment to verify compliance can be met. The impact assessment will list any required changes to the solution to remain compliant with future changes to the user environment. Contractor's UrbanOS solution was built with infrastructure platform independence at the core of its architecture. The solution has been successfully deployed to multiple cloud platforms and the data backend natively supports cloud migrations.

Contractor's development team will build out and support the solution during the initial 120 days of the contract. Additionally, Contractor's core team will accommodate any support related requests during the post-production warranty phase. Beyond this point, Contractor will be able to facilitate ongoing maintenance and support for the environment.

During the implementation Contractor's team will communicate at the end of each Sprint all key decisions including software and architecture. Post implementation, the UrbanOS maintains a roadmap of software changes, enhancements and milestones which will be shared on a quarterly basis. As new features are added to the open-source software, the ongoing support team will work with the State to determine if the feature would benefit MDOT then determine when and how it can be implemented.

Required or wanted changes to the solution will be discussed at a bi-weekly change control meeting with the State. During this meeting all maintenance, upgrade, bug fix or enhancement changes will be discussed for approval. Decisions will be made jointly and in consideration of potential end-user disruption, system risk, and resource availability for dependent systems when required. Approved changes will be scheduled per the normal maintenance windows, or in an off-cycle schedule if required. Non-planned changes will also be coordinated with the solution users to determine the optimal time to deploy these changes and will follow the same testing path as planned upgrades. All changes will be tracked by the support services team to enable traceability of application changes over time.

Contractor's support services team will work with the State to determine the appropriate standard windows for upgrades, required maintenance, and changes to the solution.

Upgrades will be coordinated with the end-user business community to determine the optimal deployment timing. All upgrades will be tested in lower environments prior to migration to the production environment to verify expected functionality.

A standard schedule will be created for maintenance windows where standard tasks are completed such as patch management. Since the underlying infrastructure and OS will be managed by the State, Contractor will adhere to the State's schedule for these activities. If a maintenance window is scheduled at a time that will adversely affect State business, then the window will be moved to a more appropriate time.

The UrbanOS solution does not require any plugins to meet the system requirements defined in this Contract.

9. SOFTWARE

Software requirements are identified in **Schedule A – Table 1 Business Specification Worksheet**.

Contractor must provide a list of any third party components, and open source component included with or used in connection with the deliverables defined within this Contract. This information must be provided to the State on a quarterly basis and/or if a new third party or open source component is used in the performance of this Contract.

Look and Feel Standards

All software items provided by the Contractor must adhere to the State of Michigan Application/Site standards which can be found at <https://www.michigan.gov/standards>.

Mobile Responsiveness

If the software will be used on a mobile device as define in Schedule A – Table 1, Business Specification Worksheet, the Software must utilize responsive design practices to ensure the application is accessible via a mobile device.

SOM IT Environment Access

Contractor must access State environments using one or more of the following methods:

- State provided VDI (Virtual Desktop Infrastructure).
- State provided and managed workstation device.
- Contractor owned and managed workstation maintained to all State policies and standards.
- Contractor required interface with State systems which must be maintained in compliance with State policies and standards and as set forth in **Schedule E – Data Security Requirements**.

Contractor must identify any unique software requirements to full fill the terms of the Contract.

The Contractor's delivery team will need VPN access to the State of Michigan's intranet in order to perform system deployment and management duties. The team will need network access to whichever data sources the state wishes to integrate with the MDOT RIDE platform. In order to deploy and manage a Kubernetes cluster, the team will also need the ability to remotely provision and remotely access virtual compute resources within the DTMB datacenter. The Auth0 public user authentication solution will also need to be able to reach the state's SAML integration port from the internet. Contractor will work with the State of Michigan's DTMB in order to ensure the MILogin integration is done securely and to the state's standards.

To support internal State of Michigan systems, a 3rd party COTS custom Auth0 software will be required (MILogin). Otherwise, no other custom software will be required for the UrbanOS application to meet MDOT RIDE needs or specifications.

The UrbanOS application is built on a set of open-source tools under a grant from the US Department of Transportation and implemented at the City of Columbus (Columbus Smart City Program). Contractor is providing a perpetual license of the UrbanOS to the State of Michigan at no charge.

The UrbanOS solution also uses a 3rd-party solution, Auth0, that is required for public user authentication and subsequent lifecycle management. This software follows a consumption-based, tiered subscription licensing structure.

The UrbanOS solution leverages a rich set of open-source tools to deliver the most cost-effective solution to the State of Michigan by:

- Leveraging software already available within State supported technologies
- Leveraging open-source software where available
- Including minimal additional commercial software for specific functionality where required

The diagram (Figure 4) below lists all software components at each layer of the solution.

Urban OS Technology Stack

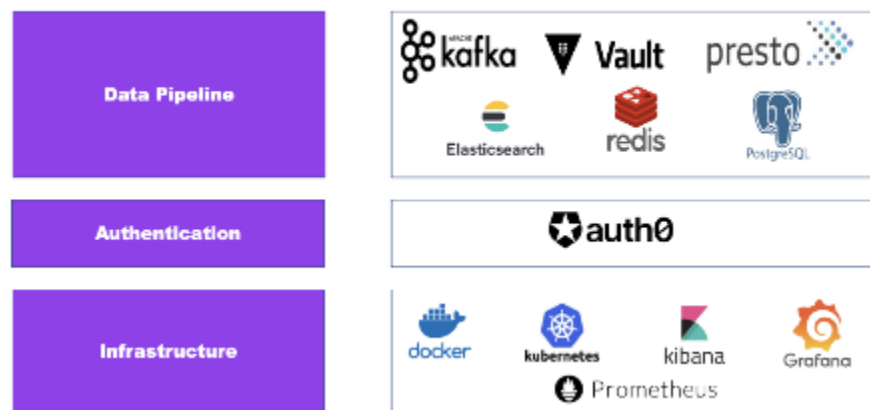


Figure 4. UrbanOS technology stack capitalizes on state-supported technologies while incorporating industry-leading tools and platforms.

Presto	Data is backed using PrestoDB, a distributed SQL database. Presto provides vertical and horizontal data scaling as well as advanced dataset querying capabilities to for data science and analytics.
PostgreSQL	The dataset metadata and user configurations are backed by a PostgreSQL database.
ElasticSearch	The UrbanOS solution supports dataset browsing and searching functionality backed by Elasticsearch.
Kafka	The UrbanOS data pipeline uses Kafka as a messaging queue to facilitate passing data between steps in the pipeline. Kafka offers an additional layer of resiliency enabling the solution to seamlessly pick up from unexpected crashes - hardware, software, or data errors – and keep data flowing.
Redis	The data pipeline pairs Kibana with Redis to persist application state to provide a high degree of system resiliency to reduce downtime and lost data.
Auth0	The administrative and user interfaces utilize Auth0 to handle login and user registration. Auth0 provides integration capabilities with the State of Michigan's MILogin system using SAML.

Kubernetes	Kubernetes functions as the backbone of the data platform onto which all other components are deployed. Kubernetes provides the solution with a high degree fault tolerance and handles automatic scaling to handle peak loads.
Docker	All UrbanOS components are served as Docker containers to ensure predictable behavior in unpredictable environments. These Docker containers are published publicly to Docker Hub, which serves as the default container registry for the Docker toolkit.
Kibana	Kibana provides an interface to review and analyze the system's aggregated logs to aid in handling support incidents.
Grafana	Grafana provides an interface to analyze system metrics. UrbanOS configures Grafana with a rich set of system health and monitoring dashboards.
Prometheus	A wide variety of metrics from every point in the UrbanOS solution are collected and transformed by Prometheus. These metrics provide a critical view of the system's health and performance.

Table 4. Description of the technology stack

The UrbanOS solutions supports all modern mobile devices. The user interface is provided as a web interface which was designed and built using reactive design principals ensuring that the solution supports any modern mobile device with a web browser.

All operations, including account creation and management, API key access, and data accessibility within the UrbanOS solution can be performed via mobile device. The solution's interface is provided as a reactive designed web interface which can support all interface functionality on any screen size.

The UrbanOS solution is an Extract, Transform, Load pipeline specially designed for aggregating dispersed data to made centrally available both publicly and internally.

The extraction mechanism is designed to be adaptable to work with any data source, supporting web, database and file-based data extraction out of the box. Data curators can define and manage data sets to be extracted in the administrative interface. The system supports extracting datasets on regular intervals for data that is expected to be updated regularly. Contractor's team can easily adapt the extraction mechanism to suit the State's needs.

Next, user defined data transformations are applied to ensure data can provide the most value to its consumers. Data curators can apply transformations to data elements in the administrative interface. The solution currently supports date, time, and number parsing. Enhanced transformation functionality is a standard feature in the latest version of UrbanOS, which will support the rest of MDOTs needs. The data transformation mechanism is designed for a high level of customization enabling the Contractor's team to easily implement any additional transformation mechanisms that MDOT may need.

Finally, data is then made instantly available to the real time streaming API and then written to a distributed SQL database. The UrbanOS solution was specifically designed for high performance with real time data, providing the ability to make extracted data available to the real time API in less than one second. The system will also include a REST interface to make the latest data from the real time API instantly available in a more traditional interface. The solution also stores data to a distributed SQL database to enable advanced analytics on the data extracted.

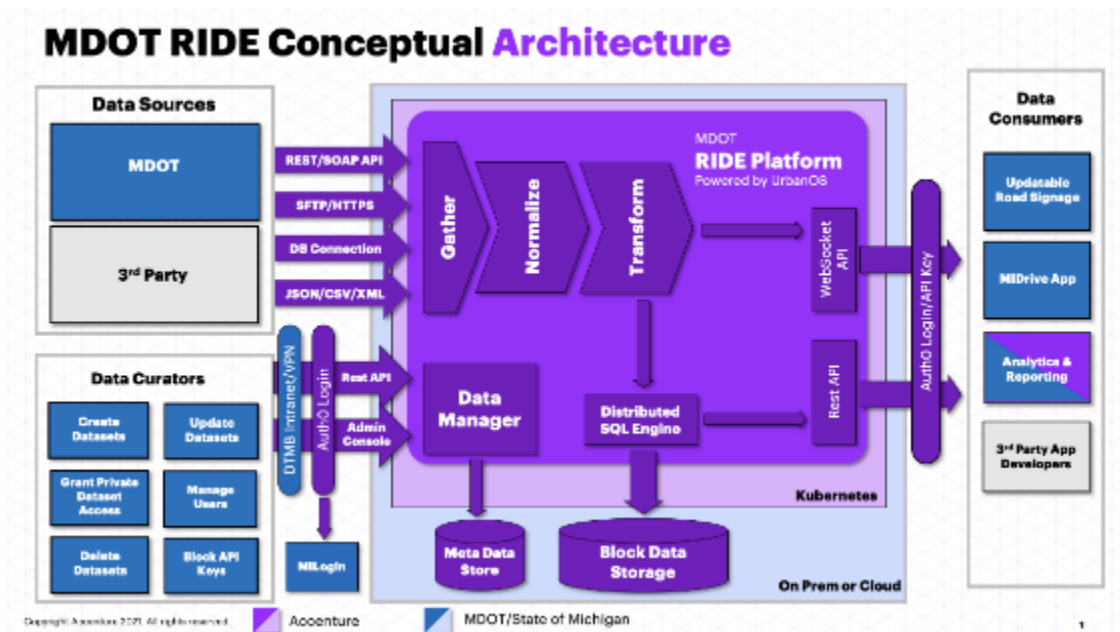


Figure 5. Conceptual Architecture

10. INTEGRATION

Contractor must integrate their solution to the following technologies:

Current Technology	REST API, FTP, Direct Database Query
Affected Systems	Advanced Traffic Management System (ATMS), Maintenance Decision Support System (MDSS), TFM,
Volume of Data	File size is less than 1 MB each
Format of the input & export files	(See Business Requirements – Schedule A, Table 1)

Contractor is responsible for configuring the consumption/ingestion of data and initial output data schema to match existing connections.

The UrbanOS solution is flexibly designed to support a wide variety of data extraction methods and formats. The extraction mechanism currently supports REST data extraction over HTTPS, plain file extraction from cloud file storage or over FTP, and database connections. Data can be ingested in either CSV, JSON, or XML format; the system can also handle abnormal data that contains combinations of formats. The extraction mechanism supports file sizes beyond 1 MB in size.

The solution currently provides a REST, and WebSocket APIs for data consumption, these mechanisms can be expanded by the Contractor's team to support MDOTs needs.

11. MIGRATION

There are no requirements to migrate any data from another source. The UrbanOS solution will only interact with live data.

12. TRAINING SERVICES

The Contractor must provide administration and end-user training for implementation, go-live support, and transition to customer self-sufficiency.

Contractor will work with the identified stakeholders to align the training approach, develop the required training materials, and support the delivery of training to identified users. Each component of this approach is further outlined below. The cost for these training services is included in the overall fixed price of the Contract.

Training Approach Overview

The Contractor's team will, with input from the State, create the training curriculum and development plan for the provided Personas to meet the needs of the varying stakeholders.

The training curriculum and development plan will include:

- The training materials development and review process
- The training materials delivery methods, definitions, and duration of key training objectives
- The training curriculum offered to each stakeholder group
- Training maintenance approach
- Delivery timeframe, as applicable
- Material creation tool recommendations

Learners prefer self-service training methods, focusing on just-in-time training in bite-sized segments of learning. Contractor's training development approach builds on these experiences and will help to provide training materials which are concise, transaction focused, and available on-demand delivered when needed. Agile co-creation hand in hand with the project team will lead to successful learning, and ultimately a successful handoff of the system post go-live.

Training Development

UrbanOS is a mature product and has a catalog of training materials. Contractor will leverage this content, updating the solution as per MDOT RIDE specifications. Contractor will match the training curricula to meet the needs of the impacted stakeholders (Personas). Contractor will develop the customized learning path with training objects to provide MDOT UrbanOS System Administrators, Data Curators, and expected external users with the right level of training. The training curriculum will focus on system and process training to help users effectively leverage the new solution.

The training curriculum will include course descriptions, course duration estimates, audience, and delivery method across all the identified training objects and the learning objects will follow these guiding principles:

- For static training objects, such as step-by-step job aids or short video recordings, Contractor will limit each object to two or fewer pages of instructional content or 5 minutes of recorded video
 - Such learning objects would be hosted and shared via the State's Learning Management System and a location that will be accessible to any public users if applicable
- For transaction-based, on-demand tutorial videos/recordings, Contractor will limit the duration of each object to less than 10 minutes

- Such learning objects would be hosted and shared via the State's Learning Management System and a location that will be accessible to any public users if applicable
- For any webinar (less-formalized agenda than classroom training), Contractor will limit attendance to 50 participants.
 - Participants will be provided with a copy of the presentation materials, and any applicable user guides or reference materials prepared as part of the session.

Formal courses will be limited given the small State of Michigan internal and external audience sizes.

- **State of Michigan System Administrators / Data Curators:** will be able to learn the system through participation in planned project sprint completion reviews, scheduled sessions with the project team on targeted topics, and user acceptance testing milestones.
- **For Public users,** 25 job aids or various video recordings (no more than 10 minutes each in length) totaling up to one hour of total instructional content, hosted on demand. These video recordings will be made available to end users and hosted via a State of Michigan platform and must meet all accessibility requirements.

Note: Applicable trainings and video recordings will be hosted and shared via the State's Learning Management System (LMS). As public users will be unable to access the State's LMS, Contractor will coordinate with the State of Michigan to publish and share online training resources with those stakeholders.

All training material is subject to the State's Non-Software Acceptance process.

Training Delivery

Multiple delivery methods will be leveraged to maximize the audience impact, as described above. Specifics will be identified as part of the training curriculum (e.g., job aids and webinars). Some needs by stakeholder group may be:

Audience	Example Audience Needs	Example Delivery Methods
State of Michigan System Administrators / Data Curators	What has changed in my role? What are the new processes, and how do I conduct my role in the new system? What kind of reskilling do I need to perform my job or use the new solution?	Job aids, video recordings, knowledge transfer reviews, webinars
Public Users	How can I interface with this system in the most efficient way possible? How can I extract meaning and gain insights from this data?	Job aids, video recordings,

Table 5. Training Delivery Plan for Go-live Support by Persona

Contractor will work with State resources to align content and materials to "real-life" scenarios applicable to learners. It is important for State staff to participate in training development and delivery, as doing so will support them in becoming super-users that can also provide support both at go-live and beyond.

Lastly, as part of go-live preparation and the transition to post-go-live support, Contractor will develop job aids for MDOT system administrators / data curators. Contractor will be available after go-live for additional, general user support to answer training-related questions. This is described below in the 'Training Plan for Go-Live Support' section.

Contractor will provide job aids that meet the just-in-time needs of both State and public users. Contractor will create workflow/task specific job aids that provide concise, transaction focused, on-demand training materials when needed. Contractor will create up to 25 job aids or short videos for the most common and critical business processes which end users must complete. The instructional content of each job aid will be two or fewer pages and each video a duration of less than 10 minutes.

Below is an illustrative example of written instructions (job aid) for public users on how to use UrbanOS.

HOW TO USE THIS SITE

We challenge and encourage you to access our data to help make the city smarter. Data on the Open Data Platform has been vetted by a Smart Columbus Data Curator. We strive to provide high quality data. Metadata is curated in compliance with Project Open Data (<https://project-open-data.cio.gov/>) standards, to maximize machine readability and thus utility. Data is also curated to preserve the privacy of people traversing our city. We are committed to protecting the individual privacy and security of all data.

- Exploring the Data
- Visualizing the Data
- Accessing and Querying Via API
- Reviewing Data Stories for Inspiration (/data-stories)

EXPLORING THE DATA

Start by visiting the Data (/data) page of this site.

You can navigate the datasets by:

- 1 Searching by keyword** using the search bar. You can choose how the results are sorted by clicking "Order by."
- 2 Filter by organization.** Find data by contributor, including City departments, private companies and other sources
- 3 Filtering by keyword.** Keywords are assigned to the dataset by the Data Curator.

Figure 6. Illustrative example of a transaction-based job aids that Contractor will create for critical business process transactions in the State's new solution.

The goal will be to keep learning materials succinct and task-oriented to help end users quickly find answers to their common questions.

Training Plan for Go-Live Support

Training will be provided to State of Michigan throughout the course of the development effort via Sprint closeout activities. User acceptance testing at the completion of the development and test process steps will include the production of job aids relevant to latest created content and features.

In the warranty period, training required beyond the provided in-development training and provided job aids will be supported via access to Contractor's product experts over the course of the 90 days, during normal business hours. Warranty and training support team details are shown below:

- **Dedicated personnel:** 2 FTE
- **Staff location:** Columbus, OH
- **Hours available:** Normal business hours (0900-1700 Eastern time)
- **Duration of go-live support:** 90 days during the warranty period

Should the State determine more specific training is required, Contractor will work with the State to meet the need, as Contractor has the capability to flex up and down the level of support based on the requirements and audience needs.

13. TRANSITION RESPONSIBILITIES

For details, including expectations of the State, please review Schedule G – Transition In and Out Plan.

14. DOCUMENTATION

Contractor must provide all user manuals, operating manuals, technical manuals and any other instructions, specifications, documents or materials, in any form or media, that describe the functionality, installation, testing, operation, use, maintenance, support, technical or other components, features or requirements of the Software.

Contractor must develop and submit for State approval complete, accurate, and timely Solution documentation to support all users, and will update any discrepancies, or errors through the life of the contract.

The Contractor's user documentation must provide detailed information about all software features and functionality, enabling the State to resolve common questions and issues prior to initiating formal support requests.

The UrbanOS solution is open source, documentation, manuals, and source code will always be freely available and accessible to MDOT. Where there are gaps, Contractor will provide user manuals to enable MDOT's data curators and system administrators to operate and troubleshoot the administration and curation interfaces as well as technical manuals will be developed to enable MDOT to operate and troubleshoot the UrbanOS deployment independently. The solution's documentation including a full list of software features and functionality will be hosted on the UrbanOS GitHub page and are kept up to date by the ongoing development team.

15. ADDITIONAL PRODUCTS AND SERVICES

The UrbanOS solution is a modern application that has been built from the ground up to take advantages and benefits of the "cloud first" architecture to both cloud and on-premises deployments. Contractor is able to achieve this by leveraging the Kubernetes and Kubernetes clusters to simplify and automate the management of containerized applications. When coupled with a microservices application architecture, Contractor is able to deliver the advantages of an elastic cloud architecture to an on-premises deployment.

Contractor understands the State's objective to have a modern, on-premises, virtualization-based technology architecture that provides the first level of abstraction of applications from physical hardware. Kubernetes provides a secondary level of abstraction that is required for cloud-like elastic applications.

This Kubernetes cluster infrastructure is required to run the UrbanOS solution. This technology is very much in line with DTMB objectives and is something that can be supported by DTMB. If necessary, Contractor will provide Kubernetes advisors, per provided rate card in Schedule B, to assist the DTMB team to standup and run the Kubernetes cluster over the term of the build and run of the MDOT RIDE Solution.

16. CONTRACTOR PERSONNEL

Contractor Contract Administrator. Contractor resource who is responsible to(a) administer the terms of this Contract, and (b) approve and execute any Change Notices under this Contract.

Contractor	
Name:	Kathleen (Lisa) Cawley
Address:	1001 Woodward Avenue, 4 th Floor, Detroit, Michigan, 48226
Phone:	859-248-1187
Email:	Kathleen.cawley@accenture.com

Classification	Years of Experience
Technology Related Developers	5 years of related experience
Training Technical Lead	5 years of related experience
System Architect	5 years of related experience
Data Security Specialist	5 years of related experience
Data Architect	5 years of related experience

17. CONTRACTOR KEY PERSONNEL

Contractor Project Manager. Contractor resource who is responsible to serve as the primary contact with regard to services who will have the authority to act on behalf of the Contractor in matters pertaining to the implementation services, matters pertaining to the receipt and processing of Support Requests and the Support Services.

Contractor
Name: Rick Seiden Address: 1001 Woodward Avenue 4th Floor, Detroit, MI 48226 Phone: 703-947-3490 Email: richard.seiden@accenture.com

18. CONTRACTOR PERSONNEL REQUIREMENTS

Background Checks. Contractor must present certifications evidencing satisfactory Michigan State Police Background checks, ICHAT, and drug tests for all staff identified for assignment to this project.

In addition, Contractor personnel will be required to complete and submit an RI-8 Fingerprint Card for the National Crime Information Center (NCIC) Finger Prints, if required by project.

Contractor will pay for all costs associated with ensuring their staff meets all requirements.

Offshore Resources.

Contractor will use offshore resources as part of the ongoing support of the new system. Contractor has scheduled the start of the offshore support team to begin 18 months after the maintenance and operations support has started. The first 18 months will be supported by US based developers. Offshore Resources subject to SOM review and approval.

19. STATE RESOURCES/RESPONSIBILITIES

The State will provide the following resources as part of the implementation and ongoing support of the Solution.

State Contract Administrator. The State Contract Administrator is the individual appointed by the State to (a) administer the terms of this Contract, and (b) approve and execute any Change Notices under this Contract.

State Contract Administrator
Name: Christopher Martin Phone: 517-643-2833 Email: martinc20@michigan.gov

Program Managers. The DTMB and Agency Program Managers (or designee) will jointly approve all Deliverables and day to day activities.

DTMB Program Manager
Name: Dave Work Phone: 517-719-2250 Email: workd@michigan.gov

Agency Program Manager
Name: Joseph Gorman Phone: 517-636-0635 Email: gormanj4@michigan.gov

20. MEETINGS

At start of the engagement, the Contractor Project Manager must facilitate a project kick off meeting with the support from the State's Project Manager and the identified State resources to review the approach to accomplishing the project, schedule tasks and identify related timing, and identify any risks or issues related to the planned approach.

From project kick-off until final acceptance and go-live, Contractor Project Manager must facilitate weekly meetings (or more if determined necessary by the parties) to provide updates on implementation progress. Following go-live, Contractor must facilitate monthly meetings (or more or less if determined necessary by the parties) to ensure ongoing support success.

The Contractor must attend the following meetings, at a location and time as identified by the state, at no additional cost to the State:

- Due to current COVID requirements and remote working situations – virtual meetings via Teams are acceptable.

Contractor will work with MDOT project leadership to schedule and facilitate key meetings including a Project Kickoff, Weekly Status meetings, and an on-going Support Status meeting. As needed, Contractor will schedule additional touchpoints, status updates, and/or working sessions to support project management, communications, organizational change management, and delivery.

Project Kickoff

Upon contract initiation, Contractor's Project Manager, will schedule and facilitate a project kickoff meeting with the State's Project Manager and identified State resources to:

- Introduce team members
- Confirm understanding of the project vision and success criteria
- Review the project approach including project plan and team structure
- Identify risks or issues related to the planned approach
- Schedule key tasks and identify related timing
- Review status templates and confirm cadence

Bi-Weekly Status Meetings

Contractor will facilitate bi-weekly status meetings (or more if determined necessary by the stakeholders) to provide implementation progress updates. The standing agenda is to:

1. Review work completed and other accomplishments
2. Review the status dashboard and metrics (e.g. burn down rate) by workstream
3. Review risks, issues, and decisions requiring attention
4. Review upcoming activities and milestones

These meetings will be supported by a status dashboard to be circulated to MDOT stakeholders as necessary.

Monthly Demos

- Demonstrations of work completed to get feedback early and often
- Review of progress to the project plan

Ongoing Support Meetings

During the period immediately following Go-Live (i.e. hypercare), Contractor will facilitate weekly meetings (or more frequently as mutually agreed) with stakeholders to review:

1. System stability and performance
2. Training effectiveness
3. Process gaps
4. Incident volume
5. Critical and high priority incident resolution status

These meetings will continue until system stability conditions and incident volume indicate a shift to steady state support operations. Thereafter, Contractor will continue to hold monthly touchpoints during ongoing support to provide an update on program operations post go-live. Topics of monthly operations reviews will include:

1. Incident volume
2. Critical and high priority incident resolution status
3. Monthly SLA performance
4. Service Credits, if applicable
5. Continuous improvement opportunities

6. Operational issues and risks
7. Review of pending change control items
8. Plans for the upcoming month

21. PROJECT CONTROL & REPORTS

Once the Project Kick-Off meeting has occurred, the Contractor Project Manager will monitor project implementation progress and report on a weekly basis to the State's Project Manager the following:

- Progress to complete milestones, comparing forecasted completion dates to planned and actual completion dates
- Accomplishments during the reporting period, what was worked on and what was completed during the current reporting period
- Indicate the number of hours expended during the past week, and the cumulative total to date for the project. Also, state whether the remaining hours are sufficient to complete the project
- Tasks planned for the next reporting period
- Identify any existing issues which are impacting the project and the steps being taken to address those issues
- Identify any new risks and describe progress in mitigating high impact/high probability risks previously identified
- Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

Across the lifecycle of the contract, Contractor will actively monitor implementation and production support and will provide a consolidated weekly report tailored to the project phase. Contractor will also provide specific reports to manage critical milestones. In addition to these reports, Contractor will make key metrics available on-demand through existing reporting capabilities of relevant to MDOT's UrbanOS implementation where possible. Finally, following an Agile methodology, the Product Backlog will be used to provide visibility into functionality prioritization, management, and delivery across each sprint.

The reports to be provided after contract execution are summarized below:

1. Project Management Bi-Weekly Status Report
2. Critical Milestone Reports
 - a. External Dependency Check Report
 - b. Test Closure Reports SEM 0607
 - c. Project Closure Report PMM 0104
 - d. Service Readiness Report
3. Support Services Weekly Report
4. On Demand Production Reporting

Contractor will work with the State's Project Manager to further customize these and/or additional reports and solidify reporting timing, metrics, format, and processes that will best enable project success and transparency.

21.1 Project Management Bi-Weekly Status Report

The Bi-weekly status report will pull together details from across workstreams for review with the State's Project Manager in the bi-weekly status meeting and through distribution to stakeholders following the jointly defined communication management plan.

This report will include the following details referenced with context on how metrics are captured/validated:

- Progress to complete milestones, comparing forecasted completion dates to planned and actual completion dates
 - Overall milestone progress and forecasts pulled from the project plan (in MPP or a State-preferred equivalent)
 - Project Status confirmed with the State's Project Manager in alignment to SUITE criteria. This will be supported by a short description explaining the status rationale

- Key Agile progress, productivity, predictability, and quality metrics. An example is depicted in Figure 16 on the following page. Contractor will work to make these directly available live via a dashboard in the State's preferred available agile project management tool. A snapshot will be included in the bi-weekly status.
- Accomplishments, the activities conducted, and their status of completion during the reporting period.
 - Workstream accomplishments based directly on team member input collected on a bi-weekly (or more frequent basis)
- An update on the remaining backlog and team velocity are sufficient to complete the project
 - Update will be based on forecasted completion from the project plan, actuals, and relevant agile metrics (e.g., velocity)
- A list and details of the planned tasks for the next reporting period
 - Workstream-based tasks pulled from the project plan with validation/refinement directly by workstream leads
- Reporting on existing issues impacting the project, the mitigation steps being taken, and the progress of mitigation for high impact/high probability risks
 - Pulled from the RAID log following the Risk Management Plan and Issue Management Plan defined in the overall Project Management Plan PMM 0102
- Identification, assessment, and documentation of new risks
 - All team members will be encouraged to proactively identify and raise risks or issues at any point in the project. Additionally, there will be an opportunity to discuss these as part of a weekly status. Contractor will work with the State Project Manager to confirm an appropriate process to triage and/or escalate risks to be documented in the Risk Management Plan
- Reporting on the amount of funds expended during the current reporting period, and the cumulative total to date for the project
 - Funds expended will be pulled directly from the State's program management tool. If necessary, Contractor will supplement and track any costs that may have a reporting delay or require manual adjustment due to system limitation

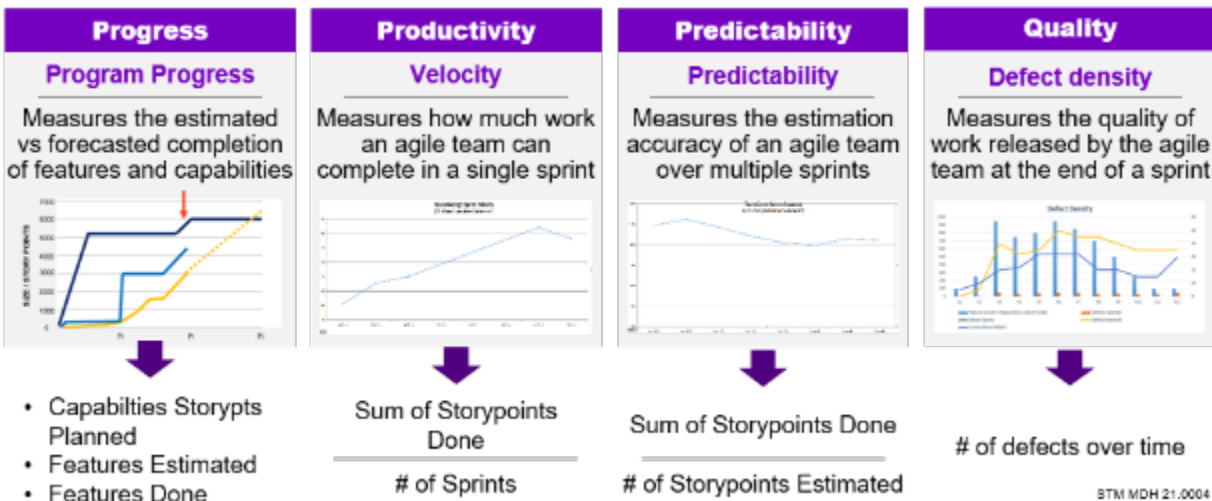


Figure 7. Creating a trusted partnership with MDOT through transparency

21.2.a External Dependency Check Report

This report will be used throughout the project to manage external dependencies in alignment with the overall project plan. Contents of the report will:

- Confirm that all the data dependencies (API and Non-API) are recorded properly
- Record typical and expected response results
- Ensure stress test scenarios for API load tests are recorded
- Raise any failure handling response mechanisms to be determined

21.2.b Test Closure Report (SEM-0607)

The SUITE SEM test closure report will provide a summary of the results of the testing activities and is intended to assist stakeholders in making Stage Exit and (Go/No Go) decisions. Metrics are summarized below and will be pulled directly from the State's preferred test tracking or defect tracking system (e.g. Remedy). Key Metrics Pulled from the test tracking and defect management system(s) include:

- Test Counts (Completed, Passed, Failed)
- Defect Counts Status (Opened, closed, on hold)
- Change Request(s) tracked in the State's Enterprise PPM Tool
- Exit criteria pass/fail to be confirmed during test planning

Five instances of the report will be generated for the following activities:

- Mock Data Load 1
- Mock Data Load 2
- Data Migration UAT
- UrbanOS UAT

21.2.c Project Closure Report PMM-0104-

This report will be completed at the end of implementation to provide a unified summary for the project, pulling together insights available directly through the enterprise PPM tool and project artifacts. This is intended to support easy access in one document for a project synopsis. The process for pulling metrics and insights are summarized below:

- Schedule Performance pulled directly from the enterprise-PPM Tool
- Budget Performance pulled directly from the enterprise-PPM Tool
- Investment Management Performance pulled directly from the enterprise-PPM Tool
- Change Management pulled directly from the enterprise-PPM Tool
- Quality Management pulled from Sprint Reviews & Test Closure Reports
- Risk and Issue Management pulled from enterprise-PPM Tool Risk and Issue log
- Lessons Learned built over the course of the project during Sprint Retrospectives
- Customer Feedback pulled from Customer Surveys (if conducted)
- Acceptance Information Including information from SUITE SEM approval forms (e.g. Sprint or Release Review and Approval SEM-0185 and/or Structured Walkthrough Meeting Record SEM 0187)

21.2.d Service Readiness Report

This report will be completed at the end of User Acceptance Testing and prior to release deployment. It will provide a unified checklist of project readiness for production Go-Live across stakeholder groups, leveraging insights available through project tools and other project artifacts. Key items included in this report are:

- User Acceptance Testing Results - % UAT scripts executed, % USA scripts passed, list of approved Critical/High UAT defects, 0 unapproved Critical/High UAT defects
- Batch Testing Results – % batch/operational test scripts executed, % batch/operational test scripts passed, list of approved Critical/High batch/operational defects, 0 unapproved Critical/High batch/operational defects

- Security Reviews / Certifications - 100% of App Scan results analyzed, list of App Scan findings, list of App Scan findings remediated, 0 Critical/High security vulnerabilities except those approved or deemed false positives, certification in place for appropriate interfaces
- Defect Resolution Plan - Defect resolution approach agreed for any approved outstanding defects, workarounds documented for system defects where additional user or operational steps are needed until the defect is resolved
- Training - % training complete against the plan by user group/profile, reference/help documentation available as needed
- Support Services Readiness – Support Services staff fully enabled, operations calendar complete, knowledge transfer sessions for support team complete, operations runbook complete, Post Go-Live support process & logistics complete
- Deployment Readiness - Deployment plan complete, dry run of deployment complete, cutover communication plan complete, roll back plan complete

21.3 Support Services Weekly Report

During Post-Production Support, the weekly status report will evolve to focus more on maintenance activities and metrics. Reported metrics will reflect operational priorities including:

- Production incident volume over the preceding week
 - Incident volume will be reported from the state's ITSM tool (e.g. Remedy)
 - Metrics will include incident arrival by priority and historical trends by priority
- Operational metrics pertaining to integration
 - API access rates
 - Number of users
- Operational metrics pertaining to MDOT UrbanOS
 - System Uptime
 - #Issues broken down by type

21.4 On Demand Production Reporting

The UrbanOS Solution will include standard reports directly through the application to support management. During discovery, Contractor will confirm whether any modifications or additional reporting is needed.

22. PROJECT MANAGEMENT

The Contractor Project Manager will be responsible for maintaining a project schedule (or approved alternative) identifying tasks, durations, forecasted dates and resources – both Contractor and State - required to meet the timeframes as agreed to by both parties. The project schedule must be approved in writing by the State.

Changes to scope, schedule or cost must be addressed through a formal change request process with the State and the Contractor to ensure understanding, agreement and approval of authorized parties to the change and clearly identify the impact to the overall project.

SUITE Documentation

In managing its obligation to meet the above milestones and deliverables, the Contractor is required to utilize the applicable [State Unified Information Technology Environment \(SUITE\)](#) methodologies, or an equivalent methodology proposed by the Contractor.

SUITE's primary goal is the delivery of on-time, on-budget, quality systems that meet customer expectations. SUITE is based on industry best practices, including those identified in the Project Management Institute's PMBoK and the Capability Maturity Model Integration for Development. It was designed and implemented to standardize methodologies, processes, procedures, training, and tools for project management and systems development lifecycle management. It offers guidance for efficient, effective improvement across multiple process disciplines in the organization, improvements to best practices incorporated from earlier models, and a common, integrated vision of improvement for all project and system related elements.

While applying the SUITE framework through its methodologies is required, SUITE was not designed to add layers of complexity to project execution. There should be no additional costs from the Contractor, since it is expected that they are already following industry best practices which are at least similar to those that form SUITE's foundation.

SUITE's companion templates are used to document project progress or deliverables. In some cases, Contractors may have in place their own set of templates for similar use. Because SUITE can be tailored to fit specific projects, project teams and State project managers may decide to use the Contractor's provided templates, as long as they demonstrate fulfillment of the SUITE methodologies.

Contractor has fully reviewed the State's Unified Information Technology Environment (SUITE) Project Management Methodology (PMM) and Systems Engineering Methodology (SEM). The methodologies and associated forms are highly consistent with Contractor's approach and industry standards. Similar to the SUITE Framework, Contractor's Program Management Methodology templates and processes follow Project Management Body of Knowledge (PMBOK) and use a Capability Maturity Model Integration (CMMI) Level 4-assessed agile software delivery approach called Accenture Delivery Methods for Agile (ADM for Agile) to deliver similar implementations. Contractor will be using the majority of PMM & SEM documentation following the SUITE methodology.

Contractor will leverage the state's available tools (e.g., Enterprise PPM, Defect Tracking Tools, Agile Project Management etc.) to support efficiency and transparency. Contractor will also work with the DTMB representatives to confirm any modifications for areas open to Project Manager discretion as needed for an agile implementation or leveraging best practices from other State engagements. For agile modifications, Contractor's approach is similar to the State's mapping of PMM documents with Agile Project Tailored equivalents in it the Agile Project Guide found on the SUITE website.

Table 6 depicts how Contractor will specifically meet each PMM and SEM requirement.

PMM / SEM Requirements		Changes or Equivalent (If relevant)
Project Charter	PMM-0101	No changes.
Project Management Plan	PMM-0102	<p>The project plan will be jointly confirmed in Discovery and maintained by the Contractor Project Manager across the project. Where possible, Contractor will leverage tools to support tracking and visibility of the project plan, including the State's Enterprise PPM tool and a project management plan tool consistent with State practices like Microsoft Project, Jira, Azure DevOps or similar. Limited changes to adapt for agile delivery are as follows:</p> <ul style="list-style-type: none"> • Project Summary – No changes. • Project Schedule – No changes. • HR Management Plan – Addition of agile roles (e.g. Product Owner). • Project Budget Estimate – No changes. • Communication Management Plan – Adjustment for agile ceremonies (e.g. Sprint Reviews). • Change Management Plan – No changes. • Quality Management Plan – No changes. • Risk Management Plan – No changes. • Issue Management Plan – No changes. • Approval Information – No changes.
Project Lessons Learned	PMM-0103	No changes – Content will include updates from sprint retrospectives throughout the project.

PMM / SEM Requirements		Changes or Equivalent (If relevant)
Project Closure Report	PMM-0104	Limited adjustments to mirror any confirmed changes to the project management plan PMM-0102.
Readiness Checklist Template	PMM-0105	No changes.
Sprint or Release Review and Approval	SEM-0185	No changes.
Structured Walkthrough Meeting Record	SEM-0187	No changes.
Defect Tracking Log	SEM-0186	Contractor will use the State's preferred tool to track and manage defects.
Stage Exit Approvals	SEM-0189	The SEM-0185 Sprint or Release Review and Approval will be used instead for releases. If needed SEM-0185 can be used for sprint approval. Agile processes, including sprint reviews, will be leveraged to capture detailed review and acceptance of deliverables.
Maintenance Plan	SEM-0301	No changes – This will be leveraged in sprint planning.
Software Configuration Management Plan	SEM-0302	No changes – Contractor will work with State's Project Manager to confirm applicability in this project.
Requirements Traceability Matrix	SEM-0401	Replacing SEM-0401 with test cases aligned to product backlog user stories in an agile PMO tool.
Requirements Specifications	SEM-0402	Replace with a product backlog consisting of user stories with acceptance criteria. Use the product backlog template provided with Attachment 1 or equivalent capability in an agile project management tool.
Functional Design Document	SEM-0501	N/A Prototype(s)/ wireframes can serve as documentation of the functional design. The individual sprint reviews will serve as the approval for the design.
Use Cases	SEM-0502	Replace by product backlog. Documentation in an agile project management / requirement tracking tool as high-level user stories.
Test Strategy	SEM-0600	No changes.
Data Conversion Plan	SEM-0601	No changes.
Detailed Test Plan	SEM-0603	No changes. Test planning, including resource planning, environment preparation, any automated scripting, and process for defect resolution should be included in either the quality section of the project management plan or in a SEM test plan document. Contractor will confirm the desired approach working with the State's Project Manager.
System Design Document	SEM-0604	Replace System Design with: <ul style="list-style-type: none"> • Commented Code • Source to Target Mapping • Logical / Physical Data Models • Wireframes

PMM / SEM Requirements		Changes or Equivalent (If relevant)
System Design Checklist	SEM-0605	N/A Following adaption of System Design Document for agile implementation.
Test Case	SEM-0606	No changes. This will be written with steps to execute against the user story acceptance criteria, including expected results. Contractor will leverage a preferred tool by the State or a spreadsheet or the SEM Test case document.
Test Closure Report	SEM-0607	No changes.
Transition Plan	SEM-0701	No changes.
Installation Plan	SEM-0702	No changes.
Training Plan	SEM-0703	No changes.
Training Checklist	SEM-0704	No changes.
System Maintenance Document	SEM-0931	No changes.

Table 6. Contractor's approach meets PMM and SEM requirements.

Contractor will follow the SUITE framework and leverage additional leading practices to define and guide the project operational activities—including Program Overview, Program Organization, and Program Schedule Management—required to execute the project and maintain alignment with overall project objectives as formalized in the PMM 0102 Project Management Plan. This will leverage Contractor's Program Management Methodology, as shown in Figure 17, to manage concurrent activities and work streams, schedules, resources, risks, issues, quality, and changes to scope. It also addresses communication needs for affected stakeholders.

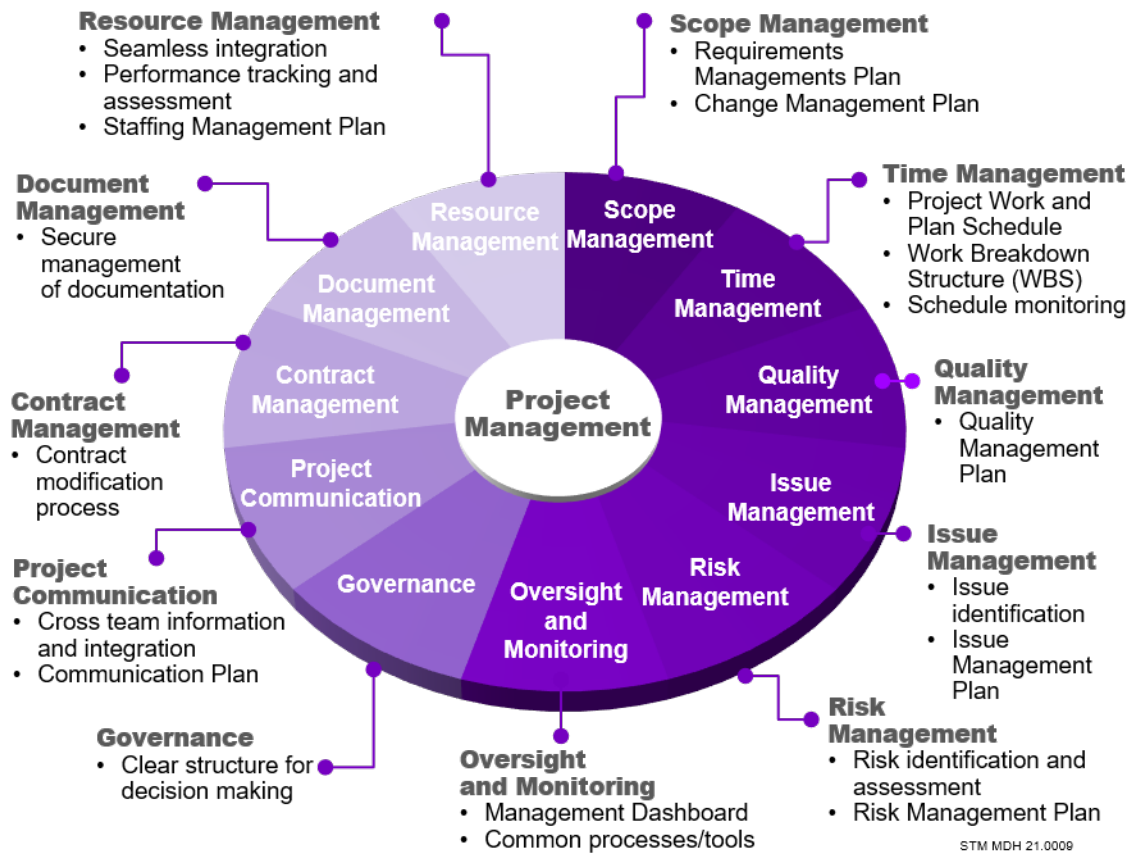


Figure 8. Contractor's Program Management Methodology draws from industry standards, including PMI and CMMI, and Contractor's experience

Milestones/Deliverables for Implementation

The State's milestone schedule and associated deliverables are set forth below.

Milestone Event	Associated Milestone Deliverable(s)	Schedule
Project Planning	Project Kickoff	Contract Execution + 10 calendar days
Requirements and Design Validation	Validation sessions, Final Requirement Validation Document, Final Design Document, Final Implementation Document	Execution + 60 calendar days
Provision environments	Validate Test and Production environments	Execution + 75 calendar days
Installation and Configuration of software	Final Solution and Testing Document	Execution + 90 calendar days
Training	Training	Execution +120 calendar days
Testing and Acceptance	Final Test Results Report, Final Training Documentation, Final Acceptance	Execution+120 calendar days
Post Production Warranty	Included in the cost of Solution.	Production + 90 calendar days

Production Support Services	Ongoing after Final Acceptance.	Ongoing
-----------------------------	---------------------------------	---------

WBS Number	WBS Element	Project Activates and Responsibilities	Start Date
1.0	Discovery	Start: Contract Execution + 10 calendar days Duration: 14 Calendar Days To run in parallel with Sprint 0	9/1/2021
1.1	Project Kickoff	MDOT and Contractor hold Joint Kick-off Meeting: Contractor to develop Kick-off Deck	
1.2	Project Plan	Joint Project Plan Development	
1.3	High Level User Stories	Contractor creates and MDOT reviews and approves user stories	
1.4	High Level Data Governance and Data Quality Stories	Create, review and approve data governance	
1.5	Infrastructure Requirements	Joint requirements gathering session(s)	
1.6	Tested Access to On-premises Infrastructure	Contractor tests infrastructure access and communicate any issues to MDOT	
1.7	Stakeholder Validation*	MDOT to provide a list of MDOT Stakeholders to Contractor to include name, title, project role, phone number and email address	
2.0	Sprint 0	Duration: 14 Calendar Days Start: Contract Execution + 10 calendar days To run in parallel with Discovery	9/1/2021
2.1	Dev & Test Environment	Contractor to test environment and communicate any issues to MDOT	
2.2	Backlog	Contractor creates the Product Backlog and MDOT advises on order	
2.3	Initial Sprint Plan	Contractor to Create a draft Sprint Schedule and MDOT reviews and approves	
2.4	Data Management Design		
3.0	Sprint 1	Duration: 14 Calendar Days	9/15/2021
3.1	Accessibility Design Review	Joint Design Review	
3.2	Dev/Test Environments	Set-up DEV/Test Environments	
4.0	Sprint 2	Duration: 14 Calendar Days	9/29/2021
4.1	Staging & PROD Environment	Joint stand-up Staging& Production Environments	
4.2	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans	
5.0	Sprint 3	Duration: 14 Calendar Days	10/13/2021

WBS Number	WBS Element	Project Activates and Responsibilities	Start Date
5.1	System Security Plan (completed deliverable)	Contractor delivers System Security Plan for review and approval for MDOT	
5.2	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans	
6.0	Sprint 4	Duration: 14 Calendar Days	10/27/2021
6.1	Integrate Data API	Integrate required APIs	
7.0	Sprint 5	Duration: 21 Calendar Days *Adjusted for holidays	11/10/2021
7.1	End to End Integration Testing	Validate MDOT data has been ingested, transformed and exposed correctly	
8.0	Sprint 6	Duration: 21 Calendar Days Adjusted for holidays	12/1/2021
8.1	UAT Execution	Perform and create and UAT	
8.2	Train the Trainer	Contractor to train the designated MDOT Trainer	
8.3	Accessibility Verification Audit	Perform audit	
8.4	Security Audit	Security audit	
8.5	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans	
8.6	Penetration Test Report	Contractor Submit Penetration Report	
9.0	Deploy/Hypercare	Duration:90 Calendar Days	1/5/2022
9.1	Pre-Production	Deploy system to pre-prod	
9.2	Hypercare	Defect remediation extended 90 day support	
9.3	Training Delivery	MDOT provides training to end users after the Train the Trainer Session	
9.4	Go Live	Release	
10.0	Post-Production Support	Start: Post-Production Warranty End Duration: Ongoing Duration 5 Years	1/5/2022
10.1	Incident Resolution	Contractor to work with MDOT to address end user incidents	
10.2	Open-Source new feature support	Contractor to provide support	
10.3	Security updates	Security updates made	

Table 7. MDOT RIDE High Level Work Breakdown Schedule

The project plan depicted below in Figure 10 aligns requirements defined as deliverables, milestones, and associated dates in the Work Breakdown Structure above with how they will be met, including workstreams and supporting activities across project phases. These are further described following the figure.

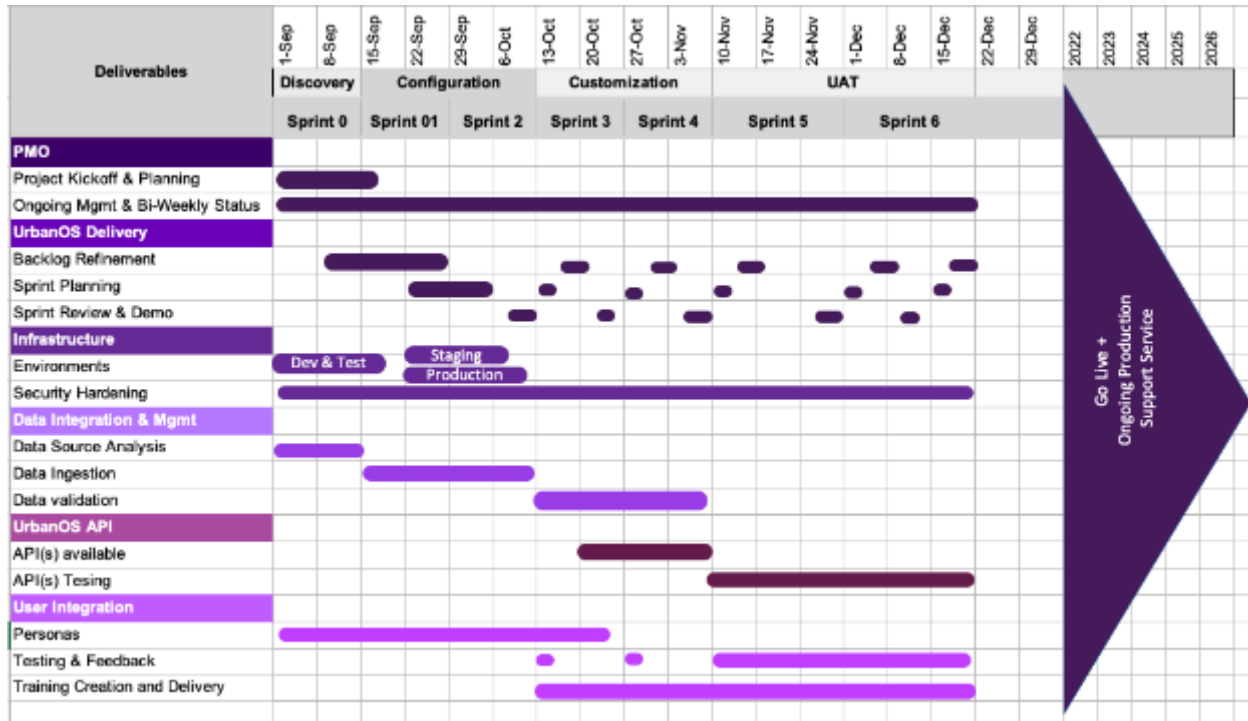


Figure 9. Project Plan

Across the phases and workstreams depicted in the project plan, there are five critical success factors that guide how Contractor will meet the requirements set forth above including milestones, deliverables, and timeline as follows:

1. Constant collaboration with the State on product ownership, project management, and change management to verify the solution maximizes business value and is delivered on time and budget.
2. Coordinated releases aligning data integration across all systems to eliminate any unnecessary effort in temporary integrations and business process changes that add risk of negative impact to clients/patients and partners.
3. An iterative deployment to reduce risk and impact of unintentional impacts that otherwise would not be caught until post-production warranty.
4. Milestones for locking backlog and design to balance agility with budget, timeline, and scope.
5. Continuity of resources across phases into post-production warranty and production support.

With these success factors in mind, Contractor has organized Contractor's teams across four (4) phases and six (6) primary workstreams. The descriptions below articulate how Contractor will support successful execution, building on the responsibilities described for each WBS element and agile project management methodologies covered in the previous sections.

Phases

1. Discovery
2. Sprints and UAT
3. Deployment
4. Post-Production Warranty and Support Services

Workstreams

1. Project Management – Provide oversight following an agile methodology grounded in SUITE to deliver an on-time, on-budget, quality solution that meets stakeholder expectations.
2. UrbanOS Customization & Configuration – Customize the UrbanOS to facilitate processes across stakeholder personas.
3. Reporting and Analytics – Develop reports, extracts, and dashboards to enable priority needs across stakeholders.
4. Data Integration and Management – Consolidate legacy data into a common data store powering reporting, extracts, and user interface.
5. Infrastructure – Leverage the State’s infrastructure maximize security and efficiency.

Discovery

During a 2-week Discovery period, Contractor will partner with MDOT to review the functional requirements, stakeholders, integrations, data assets, reports, and extracts that will be provided after contract execution. Contractor will use these inputs to refine the target state solution supported by high-level user stories for case management, data governance & quality, and reporting/extract requirements. Throughout this process, Contractor will validate the delivery approach and project plan.

Key Outcomes:

- Documented understanding of business needs and use cases as user stories.
- Alignment on a refined Project Plan and Solution grounded in priority business needs and use cases and technical dependencies.

Sprints and UAT

Building on the optimized solution, user stories, and supporting project plan from Discovery, Contractor will move into a series of six (6), 2-week sprints to iteratively design, build, and test. The last sprint will be dedicated for UAT, where in addition to testing, accessibility verification, and security auditing, Contractor will conduct train-the-trainer sessions and kick off training delivery. While ongoing refinement of the product backlog and sprint planning will drive activities, there are some important milestones and dependencies between the project supporting the outcome of an on-time and on-budget delivery that meets stakeholder expectations.

Deployment

Solution is expected to Go Live after the review of the positive results from the UAT.

Post-Production Warranty and Production Support

After deployment Contractor will retain a subset of the team for 5 years post-production warranty period to resolve any issues, integrate enhancements and provide higher level support. The MDOT team will handle initial response and triage of low-level support. Contractor’s team will maintain a backlog of desired enhancements to ingrate over time. Contractor will also continue integrate updates for security enhancements and new open-source features. Contractor’s team will continue as the production support team to support long-term continuity.

Key Outcome:

- Stable long-term support with deep understanding of the overall solution.

23. ADDITIONAL INFORMATION

The State reserves the right to purchase any additional services or products from the Contractor during the duration of the Contract.

UrbanOS was developed using funding awarded by the USDOT specifically to create a Mobility solution that can "address how emerging transportation and other data, technologies, applications, and clean energy can be integrated with existing and new systems in a city to address transportation challenges". The USDOT intended for UrbanOS to serve as an open-source, sharable template to be used by cities, states, and transportation organizations across the country. The State of Michigan will benefit from the \$40M that the USDOT has invested in the program associated with UrbanOS, but also gain access to collaboration with the user communities outside of Michigan and any new features or insights developed by the City of Columbus or any future UrbanOS platform implementer.

Contractor will help Michigan on its ITS journey. This includes migrating UrbanOS to the cloud if the state sees the need for the scale and efficiencies that can be achieved through an Azure or other cloud implementation. It also includes incorporating features from Contractor's AIP+ asset to accelerate the creation and management of advanced analytics applications and models. Possible future integration with some of Contractor's transportation-specific insights application partners like Mobi, who bring comprehensive solutions aimed at monitoring and predicting traffic network issues and delivering AI-powered mitigation strategies.

SCHEDULE A – TABLE 1 - Business Specification Worksheet

Instructions for Completing the Business Specifications Worksheet

Contractors must respond to each business Specification on how they will meet the requirements in the document provided. Contractor must not alter the document.

The Business Specifications Worksheet contains columns and is defined as follows:

Column A: Business Specification number.

Column B: Requirement Type.

NOTE:

- If there is a **“Mandatory Minimum”** section included in the Business Specifications Worksheet, any items listed under this section must be met by the Contractor to avoid disqualification. Further, Contractor must provide adequate documentation to support such Mandatory Minimum requirements.
- The **“Required”** section of the Business Specifications Worksheet lists items that the State requires to be part of the Solution. “Required” items will be evaluated and scored upon per the State evaluation process.
- The **“Optional”** section of the Business Specifications Worksheet lists items that are not required at the time of the solicitation but may be desired by the State in the future. Such “Optional” items will be evaluated and used in a best value award recommendation

Column C: Business Specification description.

Column D: Contractor must indicate how it will comply with the business Specification. Contractor must enter **“Y”** to one of the following:

- **Current Capability** – This capability is available in the Solution with no additional configuration or cost
- **Requires Configuration** – This capability can be met through Contractor-supported changes to existing settings and application options as part of the initial implementation at no additional cost (e.g., setting naming conventions, creating user-defined fields).
- **Customizations to Software Required** – The requirement can be met through Contractor modifying the underlying source code, which can be completed as part of the initial implementation.
- **Future Enhancement** – This capability is a planned enhancement to the base software and will be available within the next 12 months of contract execution at no additional cost.
- **Not Available** – This capability is not currently available, and a future enhancement is not planned.

NOTE: Configuration is referred to as a change to the Solution that must be completed by the awarded Contractor prior to Go-Live but allows an IT or non-IT end user to maintain or modify thereafter (i.e. no source code or structural data model changes occurring).

Customization is referred to a modification to the Solution's underlying source code, which can be completed as part of the initial implementation. All configuration changes or customization modifications made during the term of the awarded contract must be forward-compatible with future releases and be fully supported by the awarded Contractor without additional costs.

Contractor shall understand that customizations (i.e. changes made to the underlying source code of the Solution) may not be considered and may impact the evaluation of the Contractor's proposal.

Column E: The Contractor must also fully disclose how they will meet the requirements in their proposal response. This column is for Contractor to describe how they will deliver the business Specification and if the Contractor proposes configurations or customizations, the Contractor must explain the details of the impacted risk that may be caused if configured or customized to meet the business Specification. Description must be no more than 250 words for each business Specification.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
		Common Requirements						
1.0	Mandatory Minimum	System must be public facing.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS Solution employs a user interface and an API that is accessible to the public over HTTPs. The solution can be deployed onto the State of Michigan's standard IT infrastructure. It is recommend that the good security practices needed for public facing sites be implemented (e.g.: and protected behind DMZ firewall, VPN with whitelisting for private administrative functions, etc.)</p> <p>In keeping with Michigan Mobility 2045 vision of the future, the design of the UrbanOS solution is future-driven, and adaptable consistent with USDOT standards for a templated transportation data exchange. Should MDOT's needs evolve in the coming years, the solution has been proven to be highly flexible and scalable and allows for hosting in a MDOT private or public cloud tenant / subscription.</p>
2.0	Mandatory Minimum	<p>System must maintain security roles.</p> <p>Additional Information:</p> <p>Complete role functionality matrix will be provided during the implementation phase of the project.</p> <p>Users internal to MDOT or external users will have access to the system based on their role.</p>	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS Solution allows for selected security roles and associated access requirements (Read/Write, Read Only, No Access).</p>

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
3.0	Required	System design must be responsive. All of its functionality is same and can be accessed using any device such as a desktop, tablet, laptop and a mobile phone. Additional Information: SOM responsive design standards link- https://www.michigan.gov/som/0,4669,7-192-86761---,00.html	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution currently has been built with responsive design principles, and can be fully utilized on mobile, tablet, and laptop/desktop devices. As part of the implementation scope of work after award, Contractor will incorporate the SOM digital standards and digital guidelines to match the desired look and feel to the application.
4.0	Optional	System should store event, date/time stamp of event, and user credentials pertaining to data for all adds/changes/deletes. Additional Information: This information is stored for the audit of application events.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution provides the ability to store all dataset, user, and organization creations, modifications, and deletions in a secure database for auditing purposes.
		User Control: This section describes requirements for the public facing, user registration page functionality of the application. A user (public or internal to MDOT) is a subscriber or a consumer of Real Time Data Exchange (RIDE) data. On the page, a user enters required information and accepts terms of use policy. Upon successful registration, system automatically approves user's access to RIDE public data sets and generates an API Endpoint Key using which RIDE data can be read programmatically. The RIDE Administrator alone has the ability to control user's access to the system and data sets.						
5.0	Required	System must provide a public facing user account registration page. Additional Information: GUI/Form for user registration has these Required field/details - Contact E-mail address, Optional fields/details - Organization, Contact Phone Number, Contact Name, Data Usage Type	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution implements external user registrations using a 3rd party tool (Auth0) for user account authentication, registration, and third-party authentication integrations.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
6.0	Optional	System should provide a link to the Application Programming Interface (API) Endpoint document on the registration form. Additional Information: API Document to be linked will be provided by DTMB during implementation phase.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution allows for the URL link to be included as part of the registration process, and this link will provide access to the DTMB provided API Document.
7.0	Optional	System should allow the user to download and print API Endpoint document.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution allows for the end user to access the API Endpoint documentation from the registration page, and then print out that documentation as they so choose to do so.
8.0	Required	System must provide a mechanism to protect against user account registration by bots by generating and grading tests that only humans can pass.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution includes a CAPTCHA mechanism to block user account registration by bots and implementing tests that only humans can pass.
9.0	Required	System must validate entry of all required field details entered on the registration form.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution includes the ability to apply a set of data entry business rules to validate the information that has been entered as part of the registration process.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
10.0	Required	System must validate entered email address, if address existing in the database, display a message and prevent the creation of user account. Additional Information: Message text to be provided during implementation. Existing users will email to get a lost key. One Email address - to - One User Account.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution validates the email address that is entered as part of the user registration process to ensure it is a properly formed email address. Additional business rules check to ensure that this particular email address had not previously used to successfully register to the DOT. If a user attempts to create an account with an email that has already been registered, they are notified that an account already with the email address already exists. The user interaction / workflow also provides users for the ability to obtain their API key again post registration.
11.0	Required	System must present 'Terms of Use' details/text upon successful validation of required field details. Additional Information: 'Terms of Use' text will be provided during the implementation phase of the project after MDOT finalizes the same.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution provides for the display of a MDOT specific "Terms of Use" as part of the registration process.
12.0	Required	System must allow the user to Agree/Disagree (Cancel) 'Terms of Use'.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS Solution's User Interaction / User Experience workflow requires a user accept / disagree to the Terms of Use.
13.0	Required	System must allow the user to submit registration upon successful agreement of 'Terms of Use'.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. After a new user has successfully accepted the terms of use and entered valid information into the registration field, Contractor's standard UrbanOS Solution's allows the user complete the registration, and instantly creating an account, and then prompting the user to log in to gain access to the system.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
14.0	Required	System must automatically approve access and generate an Endpoint Key upon successful submission of user registration form.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Upon the first successful login by the end user, Contractor's standard UrbanOS solution generates the API key that is tied to this particular user account.</p>
15.0	Required	<p>System must display on the registration page, the Endpoint Key, and a message indicating that the key has been emailed.</p> <p>Additional Information:</p> <p>Message text to be provided during implementation.</p>	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Upon successful login authentication, Contractor's standard UrbanOS solution will display the API endpoint key on that user's account settings page. The solution also displays a notification that a copy of this API Endpoint key has been sent to the email address registered for this user. The standard email template will be configured to as per the MDOT provided message text.</p>
16.0	Required	System must send an e-mail notification with the Endpoint Key to the email address entered on registration details.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS solution will allow for the standard outbound email template to be configured to include the dynamically populate Endpoint API Key for each specific user; Contractor will leverage and integrate with MDOT provided email gateway so that the emails are generated with the proper MDOT email domains, etc.</p>
17.0	Required	<p>System must assign (or give access to) all public data set(s) by default to every user upon successful registration.</p> <p>Additional Information:</p> <p>Any user (public or MDOT internal user) by default is given access to public data sets upon registration (auto approval), if internal data is needed, user will contact RIDE Admin via email and registered account's access to data sets will be changed per approved data request.</p>			Y			<p>By default, Contractor's standard UrbanOS solution is intended to provide open access to all public data sets for unregistered users.</p> <p>To meet this MDOT requirement, the Contractor UrbanOS solution will be customized to prevent access to non-registered / un-authenticated users as per the MDOT specifications.</p>

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
18.0	Required	System must allow RIDE Administrator (Admin) to deny access to a particular existing user.			Y			By default, Contractor's standard UrbanOS solution is intended to provide open access to all public data sets for unregistered users. In order to meet this MDOT requirement, the Contractor UrbanOS solution will be customized to revoke access for a particular user as per the MDOT specifications
19.0	Required	System must allow the Admin to assign or un-assign data sets to a particular user as approved by the Admin.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution's user management interface allows administrators to have flexible access controls to either permit or revoke users access to private datasets.
		COTS Requirements: This section describes requirements for RIDE system's core functionality for a COTS solution. Some of the core system functions are: interfacing with RIDE data sources via different communication protocols to extract data, setting up of data extraction interval, extracting data elements, defining schema for data elements, formatting data elements per specified schema, bundling data elements into data sets, role based user access, and data set assignment to users.						
20.0	Required	System must be capable of programmatically interfacing with its data sources to read real-time data via direct database query, REST, SOAP API, SFTP, FTP, flat file, XML files, JSON files, and CSV.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution allows for data to be programmatically ingested over the internet using the REST, SOAP & API based integration as well as flat file ingestion over HTTP/HTTPS, FTP/SFTP and S3. The solution also supports the ingestion of data formats such as JSON, CSV and XML. UrbanOS can also handle abnormally structured data sources that are structured in combinations of JSON, CSV and XML.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
21.0	Optional	System should be capable of programmatically interfacing with its data sources to read real-time data using additional communication protocols and formats not listed in Requirement # 20 above. e.g. HTTP, HTTPS, ODBC, ASN.1, Messaging Services.			Y			Contractor's standard UrbanOS solution does not currently support ODBC and ASN.1 formats. To meet MDOT requirements, the UrbanOS solution will be customized to accept these data protocols.
22.0	Required	System must at least allow the RIDE admin to use configuration files to configure/add new data sources and corresponding data extraction interval.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS solution's administrative interface for managing data is built around the concept of a configuration file mechanism. The configuration file has access to all the features available within the administrative interface and is leveraged when creating or updating datasets via the administrative API.</p>
23.0	Optional	System should provide a User Interface instead of allowing configuration file change (as in above requirement) for the RIDE admin to configure/add new data sources and corresponding data extraction interval.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS solution provides an administrative console user interface in which datasets can be created and fully configured.</p>
24.0	Required	<p>System must allow to configure unique data extraction intervals for individual datasets to specify range.</p> <p>Additional Information:</p> <p>1-59 minutes range would meet current ITS needs.</p>	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>Contractor's standard UrbanOS solution allows for the data administrator to configure the interval at which data is retrieved from the source system. The system can accommodate data retrievals ranging from seconds to years and can absolutely accommodate the proscribed time ranges.</p>

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
25.0	Required	System must be capable of extracting data from data sources at pre-configured intervals in other words, system doesn't read data from its sources based on the request from data consumer.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT.</p> <p>By design, the UrbanOS solution retrieves data from source systems with the preestablished credentials and data retrieval intervals. Contractor affirms that the UrbanOS solution does not wait for a user query to retrieve data. Instead, the data is pulled at regular intervals to be stored or cached and made ready for users to pull from in a performant manner.</p>
26.0	Required	System must cache or otherwise locally store data retrieved from source systems for further processing and redistribution.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution, by design, has an ingestion pipeline that uses a message queue for short term caching and stores all successfully ingested data into a distributed SQL database for storage and querying</p>
27.0	Required	System must provide cache or locally store approximately 1 GB worth of data that it extracts from current data sources and be able to extend/ stretch as new data sources get added in future.	Y					<p>This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution uses modern architecture principles to store data into a distributed SQL database that can be scaled to match the MDOT desired storage volume and retention policies.</p>
28.0	Required	System must overwrite the cache or previously extracted, locally stored data each time it brings in data			Y			<p>Contractor's standard UrbanOS solution was designed to support both near real-time data streaming and data analytics where historical values were needed. In order to meet MDOT's specified requirement, the solution will be customized to discard outdated values and keep the cache current were desired.</p>

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
29.0	Required	System must provide the capability to define schema for incoming data Additional Information: Refer requirements #29,30 for the type of operations/functions used to specify schema.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. The Contractor's standard UrbanOS solution includes a dataset schema model that is fully configurable within the data curation interface.
30.0	Required	System must allow transformation of data elements. System must be capable of dynamic creation of new data elements based on transformations of single or multiple time-synced data elements using but not limited to following operations: date/time parsing basic string parsing operations integer/float/string conversion generic parsing by means of regular expressions concatenation conditional statements static/constant values Basic mathematical operations	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. The Contractor's standard UrbanOS solution provides data transformation functionality that can perform the required transformations. Data curators can configure transformations to be applied to individual data elements make the data conform to the applications needs.
31.0	Optional	System should provide the ability to combine multiple operations into a single, re-usable function for the purpose of transformation of data elements.			Y			This feature is not currently available in the Contractor's standard UrbanOS solution. In order to meet MDOT's specified requirements, the solution will be customized to provide the ability to combine multiple options into single functions as part of the project implementation.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
32.0	Required	System must provide a mechanism for the RIDE Admin to uniquely identify data elements with their respective source. Additional Information: This identification of data element source with the data set helps Admin manage the data set.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. The Contractor's standard UrbanOS solution provides for all of the data elements from a data source to be contained within a data set that is aware of the source of the data elements it keeps track of. When data sets are created, the source of the data is input by the data curator; this information is then available to be viewed by the data curators.
33.0	Required	System must provide a way to define schema for outgoing data sets. Additional Information: Refer requirements #29,30 for the type of operations/functions used to specify schema.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Data curators are able to define a final schema for the data set post-transformation. This schema is the schema the data is stored and presented to the end users in.
34.0	Required	System must provide a mechanism to bundle separate data elements into data set(s) for the data it extracts from one given source (useful to create a private/internal data set). Additional Information: An 'Internal Data Set' is created and made accessible for MDOT's consumption and may contain sensitive data. If data need to be bundled from different sources, then a database view will be created outside of RIDE for RIDE to use.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution uses data sets to manage data extracted and transformed from external data sources. These data sets are the backbone of the data pipeline and provide data curators with powerful tools for managing the data the system collects. Data sets can be flagged as private which requires users to be assigned to the data set in order to access.
35.0	Required	System must allow the RIDE Admin to classify (or) mark each data set. Additional Information: A data set can be classified as Public Data, Internal Data, Confidential Data, or Restricted Data. See glossary for definitions of data classifications. If SOM bundles elements from different sources, the data classification for the bundle is inherited from the source with the highest data classification.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution has a curation console that provides a rich set of metadata attributes to assign to datasets. Datasets can be classified by source type, geographic boundaries, temporal boundaries, and whether or not it is public.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
36.0	Required	System must allow the RIDE Admin to add multiple tags to a data set. Additional Information: RIDE Admin needs the ability to add tags to a data set, for example, 'Restrictive Third-Party Data Sharing Licenses' is a tag.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution has the ability to tag datasets using a comma separated list. Users can then perform searches based on tags, or browse the list of tags when searching the data hub
37.0	Required	System must provide a mechanism to allow the creation of multiple data sets from a single source.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution provides data curators the ability to create multiple unique data sets with their own sets of transformations, metadata attributes, and privacy restrictions from the same data source.
38.0	Required	System must provide a RESTful interface for its data consumers to access data sets.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution provides a rich REST API for to give 3rd party developers programmatic access to data hosted within the RIDE platform. The API supports retrieving data sets, searching for data sets based on keywords and tags.
39.0	Required	System must be capable of providing the data sets in XML and JSON formats based on supplied schema.			Y			The UrbanOS solution can delivery datasets in JSON and CSV; however, customization will be required to generate data sets in XML formats. Contractor's standard UrbanOS solution was designed from the ground up to be highly extensible, and allows for easy extensions via customization with minimal impact to MDOT. In order to meet MDOT's requirements, the UrbanOS solution will be customized to add XML output support for data consumers.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
40.0	Required	System must be extensible to allow for connecting to future data sources and data manipulation.	Y					<p>The UrbanOS solution can delivery datasets in JSON and CSV; however, customization will be required to generate data sets in XML formats.</p> <p>Contractor's standard UrbanOS solution has a very flexible and extensible data ingestion pipeline can easily support new protocols and data formats. The solution is also designed to enable new steps in the pipeline to be added when needed for easy extensibility. Once MDOT has determined the future of data sources to be integrated, this can be accommodated via the planned support team or as a separate project via configuration or customization as required.</p>
41.0	Optional	System should provide a solution to serve data requests beyond the real-time	Y					<p>The UrbanOS solution can delivery datasets in JSON and CSV; however, customization will be required to generate data sets in XML formats.</p> <p>Contractor's standard UrbanOS solution is able to handle data requests that is as little as sub-second ranges. In addition to the REST API, the UrbanOS solution includes a streaming WebSocket API to push data directly to data consumers. Data consumers using this API can receive beyond real time updates as soon as they are available within the system. By using this API, the data consumers will have a lower latency and additionally reduces load on the solution itself since data consumers do not have to poll regularly for data changes.</p>

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
42.0	Required	System must provide an administrative Graphical User Interface(GUI) to manage data consumer user credentials. Additional Information: User Accounts information, Endpoint Key, Data Set Permissions.	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution provides administrative users with a modern web user interface and a user management system to manage users & roles (personas). Contractor will apply the additional information constraints noted in the business specification.
43.0	Required	System must provide a GUI to manage data access/authorizations. Additional Information: Data Sets, Data Classification Level, Data Set Tags, Access List (Users with permission to a particular data set).	Y					This feature is available per requested timing (September 1, 2021) as a standard UrbanOS capability at no cost and risk to MDOT. Contractor's standard UrbanOS solution provides administrative users with a modern web user interface and a user management system to manage and access to the system. Contractor will apply the Additional Information constraints noted in the business specification.
44.0	Required	System must authenticate RIDE Admin accounts to access RIDE Admin GUI. Additional Information: Admin Role: Accesses Admin GUI and config file, runs report. Admin-Reporting Role: Runs report(s) on admin GUI only. Provide reset password functionality on this page.			Y			The UrbanOS Solution uses the concept of role-based access; there are several default roles to cover the administrative elements required. One of those is the overall System Administrator role that manages access to the privileged parts of the solution, including the admin portal. However, in order to address the granular Admin Reporting role functionality, customization will be required to add this functionality to the UrbanOS solution. The administrative system was designed to be extensible; this customization will be of minimal impact to MDOT.

A	B	C	D					E
Business Specification Number	Requirement Type	Business Specification	Current Capability	Requires Configuration	Requires Customization	Future Enhancement	Not Available	Contractor to explain how they will deliver the business Specification. Explain the details of any configuration/customization and the impacted risk that may be caused if configured or customized to meet the business specification.
45.0	Required	<p>System must provide a canned report that the RIDE admin can run to see the list of data sets with respective current user account assignment.</p> <p>Additional Information:</p> <p>Report displays current assignment at the time of running the report (not historical). It includes details such as, data set and email address of the user account.</p>			Y			<p>The UrbanOS solution provides API functionality to run reporting on user-dataset associations.</p> <p>However, in order to address specification for the canned reports, Contractor will add a customization to add the user interface to the administrative console so that the Access Administrators' can easily run the required reporting and download the results if necessary.</p>

SCHEDULE B – PRICING

Price proposals must include all costs for the licensing, support, implementation, and training for the Solution.

1. **Licensing Fees.** If Contractor is proposing a perpetual license, Contractor shall include the one-time cost of the license, which shall cover all intended users of the Solution (please refer to the estimated number and type of users identified in the **User Type and Capacity Section of Schedule A - Statement of Work**). If Contractor is proposing a term-based license, Contractor shall include annual costs for the term-based license for, which shall cover all intended users of the Solution (please refer to the estimated number and type of users identified in the **User Type and Capacity Section of Schedule A - Statement of Work**). While the State is looking for precise pricing based on the estimated number of users, Contractor is encouraged to also provide a separate, tiered pricing structure to afford the State discounted pricing based on potential increases in volume in the future. If Contractor offers an enterprise pricing model (e.g. unlimited number of users), it is encouraged to separately provide that pricing option as well.

If Contractor is proposing a subscription License Model, only Table A must be completed. If Contractor is proposing a Perpetual License Model, License costs must be included in Table B.

2. **Support Service Fees.** If the Contractor is proposing a perpetual license, the Contractor must identify any annual costs for ongoing support of the Solution (the “**Support Service Fees**”) to meet the requirements of **Schedule D to the Contract Terms - Service Level Agreement**. Separate Support Service fees must be documented in Table B below.

3. **Hosting Fees.** If Contractor is proposing a perpetual license with a separate hosting cost (direct or through a subcontractor), Contractor must provide the monthly hosting cost in Table B below. Contractor shall include the hosting costs to accommodate all intended users of the Solution (please refer to the estimated number and type of users identified in the **User Type and Capacity Section of Schedule A - Statement of Work**). Contractor must also provide tiered pricing for hosting to accommodate future growth or reductions.

Table A - Subscription License Model

Subscription Based - Product Name	Annual License Subscription Fee (Price per user)	Annual Tiered Pricing	Annual Enterprise Licensing – Unlimited Number of Users
N/A - Contractor is not licensing any products	\$0	\$0	\$0

Table B – Non-Subscription License Model

Licensed Product Name	Perpetual Licensing – One Time Cost	Annual Term-Based Pricing	Annual Tiered Pricing	Annual Enterprise Pricing Model – Unlimited Number of Users	Monthly Support Service Fees	Monthly Hosting Fees including tiered pricing
N/A - Contractor is not licensing any products	\$0	\$0	\$0	\$0	\$0	\$0

Licensing and Hosting costs will be paid after installation, configuration, and State testing and acceptance of the Solution.

The contract pricing for Support Fees will be awarded based on a firm fixed fee. However, for price evaluation purposes, Contractor must provide a breakdown of how Support Fees were calculated.

4. **Implementation Fees.** All costs associated with Implementation Services are included below (e.g. configuration, customization, migration, integration, testing, etc.) (the "**Implementation Fees**"). All costs are firm fixed.

Contractor must provide detailed pricing and a payment schedule for the implementation of their product.

Implementation Fees will be awarded based on a firm fixed fee. However, for price evaluation purposes, Contractor must provide a detailed breakdown of how Implementation Fees were calculated.

WBS Number	WBS Element	Project Activates and Responsibilities	Start Date	Fees (USD)
1.0	Discovery	Start: Contract Execution + 10 calendar days Duration: 14 Calendar Days To run in parallel with Sprint 0	tbd	\$206,167
1.1	Project Kickoff	MDOT and Contractor hold Joint Kick-off Meeting: Contractor to develop Kick-off Deck		
1.2	Project Plan	Joint Project Plan Development		
1.3	High Level User Stories	Contractor creates and MDOT review and approve user stories		
1.4	High Level Data Governance and Data Quality Stories	Create, review and approve data governance		
1.5	Infrastructure Requirements	Joint requirements gathering session(s)		
1.6	Tested Access to On-premise Infrastructure	Contractor test infrastructure access and communicate any issues to MDOT		
1.7	Stakeholder Validation*	MDOT to provide a list of MDOT Stakeholders to Contractor to include name, title, project role, phone number and email address		
2.0	Sprint 0	Duration: 14 Calendar Days Start: Contract Execution + 10 calendar days To run in parallel with Discovery	tbd	
2.1	Dev & Test Environment	Contractor to test environment and communicate any issues to MDOT		

WBS Number	WBS Element	Project Activates and Responsibilities	Start Date	Fees (USD)
2.2	Backlog	Contractor creates the Product Backlog and MDOT advises on order		
2.3	Initial Sprint Plan	Contractor to Create a draft Sprint Schedule and MDOT reviews and approves <i>Note: This plan removes two optional business requirements 21 and 31</i>		
2.4	Data Management Design			
3.0	Sprint 1	Duration: 14 Calendar Days	tbd	
3.1	Accessibility Design Review	Joint Design Review		\$206,167
3.2	Dev/Test Environments	Set-up DEV/Test Environments		
4.0	Sprint 2	Duration: 14 Calendar Days	tbd	
4.1	Staging & PROD Environment	Joint stand-up Staging& Production Environments		\$206,167
4.2	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans		
5.0	Sprint 3	Duration: 14 Calendar Days	tbd	
5.1	System Security Plan (completed deliverable)	Contractor delivers System Security Plan for review and approval for MDOT		\$206,167
5.2	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans		
6.0-7.0	Sprint 4	Duration: 14 Calendar Days	tbd	
6.1	Integrate Data API	Integrate required APIs		\$206,167
7.1	End to End Integration Testing	Validate MDOT data has been ingested, transformed and exposed correctly		
8.0	Sprint 5	Duration: 14 Calendar Days	tbd	
8.1	UAT Execution	Perform and create and UAT		\$206,167
8.2	Train the Trainer	Contractor to train the designated MDOT Trainer		
8.3	Accessibility Verification Audit	Perform audit		
8.4	Security Audit	Security audit		

WBS Number	WBS Element	Project Activates and Responsibilities	Start Date	Fees (USD)
8.5	Application Security Scan Reports (DAST, SAST, SCA as applicable because not all sprints may require all three types of scans)	Run required scans		
8.6	Penetration Test Report	Contractor Submit Penetration Report		
9.0	Deploy/Hypercare	Duration:90 Calendar Days	tbd	
9.1	Pre-Production	Deploy system to pre-prod		\$106,036
9.2	Hypercare	Defect remediation extended 90-day support		
9.3	Training Delivery	MDOT provides training to end users after the Train the Trainer Session		
9.4	Go Live	Release		
10.0	Post-Production Support	Start: Post-Production Warranty End Duration: Ongoing Duration 5 Years	tbd	
10.1	Incident Resolution	Contractor to work with MDOT to address end user incidents		Year 1: \$141,000 Year 2: \$95,000 Year 3: \$95,000 Year 4: \$95,000 Year 5: \$95,000
10.2	Open-Source new feature support	Contractor to provide support		
10.3	Security updates	Security updates made		
11	MILogin	Integrate with SOM SSO solution	tbd	\$50,000
12	Migration of Solution	Convert Software from Docker to OpenShift to run on SOM servers	tbd	\$50,000
Total Fees				\$1,964,038

Table 8. Fees

5. Postproduction Warranty. The Contractor must provide a 90 calendar day postproduction warranty at no cost to the State. The postproduction warranty will meet all requirements of the contract, including all Support Services identified in Schedule D.

During the Warranty Period, the Support Services will be provided at the cost identified in Table B – Maintenance and Support Service Fees and any solution defects will be remedied free of charge during the Warranty Period. The postproduction warranty will meet all requirements of the contract. The State reserves the right to extend the warranty period for a fully customized solution.

6. Rate Card for Ancillary Professional Services.

Resource	On-Site Hourly Rate	US Onshore Rate	Offshore Rate
Delivery Lead / Enterprise Architect / Sr. Solution Architect / Agile Coach	N/A	\$285.00	\$75.00
Sr. Workstream Lead / Solution Architect / Sr. Application Architect	N/A	\$265.00	\$65.00
Workstream Lead / Application Architect / Sr. Scrum Master/Experience Architect	N/A	\$250.00	\$56.00
Sr. Functional Consultant / Sr. Technology Consultant / Scrum Master	N/A	\$220.00	\$49.00
Functional Consultant / Technology Consultant / Lead Developer	N/A	\$195.00	\$42.00
Sr. Functional Analyst / Sr. Technology Analyst / Sr. Developer	N/A	\$175.00	\$35.00
Functional Analyst / Technology Analyst / Developer	N/A	\$154.00	\$30.00
Jr. Developer / Test Analyst	N/A	\$132.00	\$27.00

Table 2. Rate Card for Ancillary Professional Services

Price proposals must include a fixed-price hourly-rate rate card for ancillary professional services (e.g. future enhancement configuration services) broken down by role (e.g. Solution design architect). If Contractor differentiates between on-site and remote services, provide pricing for both.

7. Open Source or Third Party Products

The Contractor must identify any open source or third-party products that include a separate licensing fee and will be used in connection with the Solution.

Product	Price
Auth0 Enterprise	State will be responsible for Auth0 licensing
Apache Kafka	Kafka is open source and has no fees
Hashicorp Vault	Vault is open source and has no fees
PrestoDB	PrestoDB is open source and has no fees
ElasticSearch	ElasticSearch is open source and has no fees
Redis	Redis is open source and has no fees
PostgreSQL	PostgreSQL is open source and has no fees
Docker	Docker is open source and has no fees
Kubernetes	Kubernetes is open source and has no fees
ElasticSearch Kibana	Kibana is open source and has no fees
Grafana	Grafana is open source and has no fees
Prometheus	Prometheus is open source and has no fees
UrbanOS	UrbanOS is open source and has no fees

Table 9. Open Source or Third Party Products

8. Additional Pricing Terms

The Contractor is encouraged to offer quick payment terms. The number of days must not include processing time for payment to be received by the Contractor's financial institution.

Quick payment terms: 1% discount off invoice if paid within 15 days after receipt of invoice.

If Contractor reduces its prices, or offers a lower price to any other entity, private or public, for any of the software or services during the term of this Contract, the State shall have the immediate benefit of such lower prices for new purchases. Contractor shall send notice to the State's Contract Administrator with the reduced prices within fifteen (15) Business Days of the reduction taking effect.

Travel and Expenses

The State does not pay for overtime or travel expenses.

SCHEDULE C - INSURANCE SCHEDULE

Required Coverage.

1.1 **Insurance Requirements.** Contractor, at its sole expense, must maintain the insurance coverage identified below. All required insurance must: (i) protect the State from claims that arise out of, are alleged to arise out of, or otherwise result from Contractor's or subcontractor's performance; (ii) be primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State; and (iii) be provided by a company with an A.M. Best rating of "A-" or better, and a financial size of VII or better.

Required Limits	Additional Requirements
Commercial General Liability Insurance	
<u>Minimal Limits:</u> \$1,000,000 Each Occurrence \$1,000,000 Personal & Advertising Injury \$2,000,000 Products/Completed Operations \$2,000,000 General Aggregate Limit	Policy must be endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 20 10 12 19 and CG 20 37 12 19.
Automobile Liability Insurance	
If a motor vehicle is used in relation to the Contractor's performance, the Contractor must have vehicle liability insurance on the motor vehicle for bodily injury and property damage as required by law.	
Workers' Compensation Insurance	
<u>Minimal Limits:</u> Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
<u>Minimal Limits:</u> \$500,000 Each Accident \$500,000 Each Employee by Disease \$500,000 Aggregate Disease.	
Professional Liability Insurance, which includes Cyber Liability Insurance	
<u>Minimal Limits:</u> \$1,000,000 Each Occurrence \$1,000,000 Annual Aggregate	Policy must cover information security and privacy liability, privacy notification costs, regulatory defense and penalties, and website media content liability.

1.2 If any required policies provide claims-made coverage, the Contractor must: (i) provide coverage with a retroactive date before the Effective Date of the Contract or the beginning of Contract Activities; (ii) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (iii) if coverage is cancelled or not renewed, and not replaced with another claims-made policy form with a retroactive date

prior to the Effective Date of this Contract, Contractor must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

1.3 Contractor must: (i) provide insurance certificates to the Contract Administrator, containing the agreement or delivery order number, at Contract formation and within twenty (20) calendar days of the expiration date of the applicable policies; (ii) require that subcontractors maintain the required insurances contained in this Section; (iii) notify the Contract Administrator within fifteen (15) business days if any policy is cancelled; and (iii) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

1.1 This Section is not intended to and is not to be construed in any manner as waiving, restricting or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Contractor to indemnify, defend and hold harmless the State).

SCHEDULE D - SERVICE LEVEL AGREEMENT

The parties agree as follows:

1. Definitions. For purposes of this Schedule, the following terms have the meanings set forth below. All initial capitalized terms in this Schedule that are not defined in this Schedule shall have the respective meanings given to them in the Contract Terms and Conditions.

“Contact List” means a current list of Contractor contacts and telephone numbers set forth in the attached **Schedule D – Attachment 1** to this Schedule to enable the State to escalate its Support Requests, including: (a) the first person to contact; and (b) the persons in successively more qualified or experienced positions to provide the support sought.

“Critical Service Error” has the meaning set forth in the Service Level Table.

“Error” means, generally, any failure or error referred to in the Service Level Table.

“First Line Support” means the identification, diagnosis and correction of Errors by the State.

“High Service Error” has the meaning set forth in the Service Level Table.

“Low Service Error” has the meaning set forth in the Service Level Table.

“Medium Service Error” has the meaning set forth in the Service Level Table.

“Resolve” and the correlative terms, **“Resolved”**, **“Resolving”** and **“Resolution”** each have the meaning set forth in **Section 2.4**

“Service Credit” has the meaning set forth in **Section 3.1**

“Second Line Support” means the identification, diagnosis and correction of Errors by the provision of (a) telephone and email assistance by a qualified individual on the Contact List and remote application support, or (b) on-site technical support at the State's premises by a qualified individual on the Contact List.

“Service Levels” means the defined Error and corresponding required service level responses, response times, Resolutions and Resolution times referred to in the Service Level Table.

“Service Level Table” means the table set out in **Section 2.4**

“State Cause” means any of the following causes of an Error: (a) a State server hardware problem; (b) a desktop/laptop hardware problem; or (c) a State network communication problem.

“State Systems” means the State's information technology infrastructure, including the State's computers, software, databases, electronic systems (including database management systems) and networks.

“Support Hours” means 24/7, 365 days a year, including holidays.

“Support Period” means the period of time beginning 90 days after the date the Software has entered full production mode and ending on the date the Contract expires or is terminated.

“**Support Request**” has the meaning set forth in **Section 2.2**.

2. Support Services. The State will provide First Line Support prior to making a Service Request for Second Line Support. Contractor shall perform all Second Line Support and other Support Services during the Support Hours throughout the Support Period in accordance with the terms and conditions of this Schedule and the Contract, including the Service Levels and other Contractor obligations set forth in this **Section 3**.

2.1 Support Service Responsibilities. Contractor shall:

- (a) provide unlimited telephone support during all Support Hours;
- (b) respond to and Resolve all Support Requests in accordance with the Service Levels;
- (c) provide unlimited remote Second Line Support to the State during all Support Hours;
- (d) provide on-premise Second Line Support to the State if remote Second Line Support will not Resolve the Error; and
- (e) provide to the State all such other services as may be necessary or useful to correct an Error or otherwise fulfill the Service Level requirements, including defect repair, programming corrections and remedial programming.

2.2 Support Requests. Once the State has determined that an Error is not the result of a **State Cause**, the State may request Support Services by way of a Support Request. The State shall classify its requests for Error corrections in accordance with the support request classification and definitions of the Service Level Table set forth in **Section 3.4** (each a “**Support Request**”). The State shall notify Contractor of each Support Request by e-mail or telephone. The State shall include in each Support Request a description of the reported Error and the time the State first observed the Error.

2.3 State Obligations. The State shall provide the Contractor with each of the following to the extent reasonably necessary to assist Contractor to reproduce operating conditions similar to those present when the State detected the relevant Error and to respond to and Resolve the relevant Support Request:

- (i) if not prohibited by the State’s security policies, remote access to the State Systems, and if prohibited, direct access at the State’s premises;
- (ii) output and other data, documents and information, each of which is deemed the State’s Confidential Information as defined in the Contract; and
- (iii) such other reasonable cooperation and assistance as Contractor may request.

2.4 Service Level Table. Response and Resolution times will be measured from the time Contractor receives a Support Request until the respective times Contractor has (a) responded to that Support Request, in the case of response time and (b) Resolved that Support Request, in the case of Resolution time. “**Resolve**”, “**Resolved**”, “**Resolution**” and correlative capitalized terms mean, with respect to any particular Support Request, that Contractor has corrected the Error that prompted that Support Request and that the State has confirmed such correction and its acceptance of it in writing. Contractor shall respond to and Resolve all Support Requests within the following times based on the State’s designation of the severity of the associated Error, subject to the parties’ written agreement to revise such designation after Contractor’s investigation of the reported Error and consultation with the State:

Support Request Classification	Definition	Service Level Metric (Required Response Time)	Service Level Metric (Required Resolution Time)
Critical Service Error	<p>(a) Issue affecting entire Software system or single critical production function;</p> <p>(b) Software down or operating in materially degraded state;</p> <p>(c) Data integrity at risk;</p> <p>(d) Material financial impact;</p> <p>(e) Widespread access interruptions: or</p> <p>(f) Classified by the state as a Critical Service Error</p>	Contractor shall acknowledge receipt of a Support Request within thirty (30) minutes.	<p>Contractor shall Resolve the Support Request as soon as practicable and no later than four (4) hours after Contractor's receipt of the Support Request.</p> <p>If the Contractor Resolves the Support Request by way of a work-around accepted in writing by the State, the support classification assessment will be reduced to a High Service Error.</p>
High Service Error	<p>(a) A Critical Service Error for which the State has received, within the Resolution time for Critical Service Errors, a work-around that the State has accepted in writing; or</p> <p>(b) Primary component failure that materially impairs Software's performance;</p> <p>(c) Data entry or access is materially impaired on a limited basis; or</p> <p>(d) performance issues of severe nature impacting critical processes</p>	Contractor shall acknowledge receipt of a Support Request or, where applicable, the State's written acceptance of a Critical Service Error work-around, within twenty-four (24) hours.	Contractor shall Resolve the Support Request as soon as practicable and no later than two (2) Business Days after Contractor's receipt of the Support Request or, where applicable, the State's written acceptance of a Critical Service Error work-around.

Support Request Classification	Definition	Service Level Metric (Required Response Time)	Service Level Metric (Required Resolution Time)
Medium Service Error	An isolated or minor Error in the Software that meets any of the following requirements: (a) does not significantly affect Software functionality; (b) can or does impair or disable only certain non-essential Software functions; or (c) does not materially affect the State's use of the Software	Contractor shall acknowledge receipt of the Support Request within two (2) Business Days.	Contractor shall Resolve the Support Request as soon as practicable and no later than ten (10) Business Days after Contractor's receipt of the Support Request.
Low Service Error	Request for assistance, information, or services that are routine in nature.	Contractor shall acknowledge receipt of the Support Request within five (5) Business Days.	N/A

2.5 Escalation. If Contractor does not respond to a Support Request within the relevant Service Level response time, the State may escalate the Support Request to the Contractor Project Manager and State Program Managers, or their designees, and then to the parties' respective Contract Administrators.

2.6 Time Extensions. The State may, on a case-by-case basis, agree in writing to a reasonable extension of the Service Level response or Resolution times.

2.7 Contractor Updates. Contractor shall give the State monthly electronic or other written reports and updates of:

- (a) the nature and status of its efforts to correct any Error, including a description of the Error and the time of Contractor's response and Resolution;
- (b) its Service Level performance, including Service Level response and Resolution times; and
- (c) the Service Credits to which the State has become entitled.

3. Service Credits.

3.1 Service Credit Amounts. If the Contractor fails to respond to a Support Request within the applicable Service Level response time or to Resolve a Support Request within the applicable Service Level Resolution time,

the State will be entitled to the corresponding service credits specified in the table below ("**Service Credits**"), provided that the relevant Error did not result from a State Cause.

Support Request Classification	Service Level Credits (For Failure to Respond to any Support Request Within the Corresponding Response Time)	Service Level Credits (For Failure to Resolve any Support Request Within the Corresponding Required Resolution Time)
Critical Service Error	An amount equal to 5% of the then current monthly Support Fee for each hour by which Contractor's response exceeds the required Response time.	An amount equal to 5% of the then current monthly Support Fee for each hour by which Contractor's Resolution of the Support Request exceeds the required Resolution time.
High Service Error	An amount equal to 3% of the then current monthly Support Fee for each Business Day, and a pro-rated share of such percentage for each part of a Business Day, by which Contractor's response exceeds the required Response time.	An amount equal to 3% of the then current monthly Support Fee for each Business Day, and a pro-rated share of such percentage for each part of a Business Day, by which Contractor's Resolution of the Support Request exceeds the required Resolution time.

3.2 Compensatory Purpose. The parties intend that the Service Credits constitute compensation to the State, and not a penalty. The parties acknowledge and agree that the State's harm caused by Contractor's delayed delivery of the Support Services would be impossible or very difficult to accurately estimate as of the Effective Date, and that the Service Credits are a reasonable estimate of the anticipated or actual harm that might arise from Contractor's breach of its Service Level obligations.

3.3 Issuance of Service Credits. Contractor shall, for each monthly invoice period, issue to the State, together with Contractor's invoice for such period, a written acknowledgment setting forth all Service Credits to which the State has become entitled during that invoice period. Contractor shall pay the amount of the Service Credit as a debt to the State within fifteen (15) Business Days of issue of the Service Credit acknowledgment, provided that, at the State's option, the State may, at any time prior to Contractor's payment of such debt, deduct the Service Credit from the amount payable by the State to Contractor pursuant to such invoice.

3.4 Additional Remedies for Service Level Failures. Contractor's repeated failure to meet the Service Levels for Resolution of any Critical Service Errors or High Service Errors, or any combination of such Errors, within the applicable Resolution time set out in the Service Level Table will constitute a material breach under the Contract. Without limiting the State's right to receive Service Credits under this **Section 4**, the State may terminate this Schedule for cause in accordance with terms of the Contract.

4. Communications. In addition to the mechanisms for giving notice specified in the Contract, unless expressly specified otherwise in this Schedule or the Contract, the parties may use e-mail for communications on any matter referred to herein.

SCHEDULE D - Attachment 1 – Contact List

Accenture	Email	Phone Number
Rick Seiden	Richard.Seiden@accenture.com	703-947-3490
Andrew Hagman	Andrew.M.Hagman@accenture.com	517-614-5069
Lisa Cawley	Kathleen.Cawley@accenture.com	859-248-1187

SCHEDULE E – DATA SECURITY REQUIREMENTS

1. Definitions. For purposes of this Schedule, the following terms have the meanings set forth below. All initial capitalized terms in this Schedule that are not defined in this **Schedule** shall have the respective meanings given to them in the Contract.

“Contractor Security Officer” has the meaning set forth in **Section 2** of this Schedule.

“FedRAMP” means the Federal Risk and Authorization Management Program, which is a federally approved risk management program that provides a standardized approach for assessing and monitoring the security of cloud products and services.

“FISMA” means The Federal Information Security Modernization Act of 2014 (Pub.L. No. 113-283 (Dec. 18, 2014.)).

“Hosting Provider” means any Permitted Subcontractor that is providing any or all of the Hosted Services under this Contract.

“NIST” means the National Institute of Standards and Technology.

“PCI” means the Payment Card Industry.

“PSP” or **“PSPs”** means the State’s IT Policies, Standards and Procedures.

“SSAE” means Statement on Standards for Attestation Engagements.

“Security Accreditation Process” has the meaning set forth in **Section 6** of this Schedule

2. Security Officer. Contractor will appoint a Contractor employee to respond to the State’s inquiries regarding the security of the Hosted Services who has sufficient knowledge of the security of the Hosted Services and the authority to act on behalf of Contractor in matters pertaining thereto (**“Contractor Security Officer”**).

3. Contractor Responsibilities. Contractor is responsible for establishing and maintaining a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that is designed to:

- (a) ensure the security and confidentiality of the State Data;
- (b) protect against any anticipated threats or hazards to the security or integrity of the State Data;
- (c) protect against unauthorized disclosure, access to, or use of the State Data;
- (d) ensure the proper disposal of any State Data in Contractor’s or its subcontractor’s possession; and
- (e) ensure that all Contractor Representatives comply with the foregoing.

The State has established Information Technology (IT) PSPs to protect IT resources under the authority outlined in the overarching State 1305.00 Enterprise IT Policy. In no case will the safeguards of Contractor’s data privacy and information security program be less stringent than the safeguards used by the State, and Contractor must at all times comply with all applicable public and non-public State IT policies and standards, of which the publicly available ones are at https://www.michigan.gov/dtmb/0,5552,7-358-82547_56579_56755---,00.html.

This responsibility also extends to all service providers and subcontractors with access to State Data or an ability to impact the contracted solution. Contractor responsibilities are determined from the PSPs based on the services being provided to the State, the type of IT solution, and the applicable laws and regulations.

4. Acceptable Use Policy. To the extent that Contractor has access to the State's IT environment, Contractor must comply with the State's Acceptable Use Policy, see https://www.michigan.gov/documents/dtmb/1340.00.01_Acceptable_Use_of_Information_Technology_Standard_458958_7.pdf. All Contractor Personnel will be required, in writing, to agree to the State's Acceptable Use Policy before accessing State systems. The State reserves the right to terminate Contractor's and/or subcontractor(s) or any Contractor Personnel's access to State systems if the State determines a violation has occurred.

5. Protection of State's Information. Throughout the Term and at all times in connection with its actual or required performance of the Services, Contractor will:

5.1 If Hosted Services are provided by a Hosting Provider, ensure each Hosting Provider maintains FedRAMP authorization for all Hosted Services environments throughout the Term, and in the event a Hosting Provider is unable to maintain FedRAMP authorization, the State, at its sole discretion, may either a) require the Contractor to move the Software and State Data to an alternative Hosting Provider selected and approved by the State at Contractor's sole cost and expense without any increase in Fees, or b) immediately terminate this Contract for cause pursuant to **Section 15.1** of the Contract;

5.2 for Hosted Services provided by the Contractor, maintain either a FedRAMP authorization or an annual SSAE 18 SOC 2 Type II audit based on State required NIST Special Publication 800-53 MOD Controls using identified controls and minimum values as established in applicable State PSPs.

5.3 ensure that the Software and State Data is securely hosted, supported, administered, accessed, and backed up in a data center(s) that resides in the continental United States, and minimally meets Uptime Institute Tier 3 standards (www.uptimeinstitute.com), or its equivalent;

5.4 maintain and enforce an information security program including safety and physical and technical security policies and procedures with respect to its Processing of the State Data that complies with the requirements of the State's data security policies as set forth in this Contract, and must, at a minimum, remain compliant with FISMA and NIST Special Publication 800-53 MOD Controls using identified controls and minimum values as established in applicable State PSPs;

5.5 provide technical and organizational safeguards against accidental, unlawful or unauthorized access to or use, destruction, loss, alteration, disclosure, encryption, transfer, commingling or processing of such information that ensure a level of security appropriate to the risks presented by the processing of State Data and the nature of such State Data, consistent with best industry practice and applicable standards (including, but not limited to, compliance with FISMA, NIST, CMS, IRS, FBI, SSA, HIPAA, FERPA and PCI requirements as applicable);

5.6 take all reasonable measures to:

(a) secure and defend all locations, equipment, systems and other materials and facilities employed in connection with the Services against "malicious actors" and others who may seek, without authorization, to destroy, disrupt, damage, encrypt, modify, copy, access or otherwise use Hosted Services or the information found therein; and

(b) prevent (i) the State and its Authorized Users from having access to the data of other customers or such other customer's users of the Services; (ii) State Data from being commingled with or

contaminated by the data of other customers or their users of the Services; and (iii) unauthorized access to any of the State Data;

5.7 ensure that State Data is encrypted in transit and at rest using FIPS validated AES encryption modules and a key size of 128 bits or higher;

5.8 ensure the Hosted Services support Identity Federation/Single Sign-on (SSO) capabilities using Security Assertion Markup Language (SAML), Open Authentication (OAuth) or comparable State approved mechanisms;

5.9 ensure the Hosted Services implements NIST compliant multi-factor authentication for privileged/administrative and other identified access.

6. Security Accreditation Process. Throughout the Term, Contractor will assist the State, at no additional cost, with its **Security Accreditation Process**, which includes the development, completion and on-going maintenance of a system security plan (SSP) using the State's automated governance, risk and compliance (GRC) platform, which requires Contractor to submit evidence, upon request from the State, in order to validate Contractor's security controls within two weeks of the State's request. On an annual basis, or as otherwise required by the State such as for significant changes, re-assessment of the system's controls will be required to receive and maintain authority to operate (ATO). All identified risks from the SSP will be remediated through a Plan of Action and Milestones (POAM) process with remediation time frames based on the risk level of the identified risk. For all findings associated with the Contractor's solution, at no additional cost, Contractor will be required to create or assist with the creation of State approved POAMs and perform related remediation activities. The State will make any decisions on acceptable risk, Contractor may request risk acceptance, supported by compensating controls, however only the State may formally accept risk. Failure to comply with this section will be deemed a material breach of the Contract.

7. Unauthorized Access. Contractor may not access, and shall not permit any access to, State systems, in whole or in part, whether through the Hosted Services or otherwise, without the State's express prior written authorization. Such authorization may be revoked by the State in writing at any time in its sole discretion. Any access to State systems must be solely in accordance with the Contract and this Schedule, and in no case exceed the scope of the State's authorization pursuant to this Section. All State-authorized connectivity or attempted connectivity to State systems shall be only through the State's security gateways and firewalls and in compliance with the State's security policies set forth in the Contract as the same may be supplemented or amended by the State and provided to Contractor from time to time.

8. Security Audits.

8.1 During the Term, Contractor will maintain complete and accurate records of its data protection practices, IT security controls, and the security logs relating to State Data, including but not limited to any backup, disaster recovery or other policies, practices or procedures relating to the State Data and any other information relevant to its compliance with this Contract.

8.2 Without limiting any other audit rights of the State, the State has the right to review Contractor's data privacy and information security program prior to the commencement of Services and from time to time during the term of this Contract. The State, at its own expense, is entitled to perform, or to have performed, an on-site audit of Contractor's data privacy and information security program. If the State chooses to perform an on-site audit, Contractor will, make all such records, appropriate personnel and relevant materials available during normal business hours for inspection and audit by the State or an independent data security expert that is reasonably acceptable to Contractor, provided that the State: (i) gives Contractor at least five (5) Business Days prior notice of any such audit; (ii) undertakes such audit no more than once per calendar year, except for good cause shown; and (iii) conducts or causes to be conducted such audit in a manner designed to minimize disruption of Contractor's normal business operations and that complies with the terms and conditions of all data

confidentiality, ownership, privacy, security and restricted use provisions of the Contract. The State may, but is not obligated to, perform such security audits, which shall, at the State's option and request, include penetration and security tests, of any and all Hosted Services and their housing facilities and operating environments.

8.3 During the Term, Contractor will, when requested by the State, provide a copy of Contractor's or Hosting Provider's FedRAMP System Security Plan(s) or SOC 2 Type 2 report(s) to the State within two weeks of the State's request. The System Security Plan and SSAE audit reports will be recognized as Contractor's Confidential Information.

8.4 With respect to State Data, Contractor must implement any required safeguards as identified by the State or by any audit of Contractor's data privacy and information security program.

8.5 The State reserves the right, at its sole election, to immediately terminate this Contract or a Statement of Work without limitation and without liability if the State determines that Contractor fails or has failed to meet its obligations under this **Section 8**.

9. Application Scanning. During the Term, Contractor must, at its sole cost and expense, scan all Contractor provided applications, and must analyze, remediate and validate all vulnerabilities identified by the scans as required by the State Secure Web Application and other applicable PSPs.

Contractor's application scanning and remediation must include each of the following types of scans and activities:

9.1 Dynamic Application Security Testing (DAST) – Scanning interactive application for vulnerabilities, analysis, remediation, and validation (may include Interactive Application Security Testing (IAST)).

(a) Contractor must either a) grant the State the right to dynamically scan a deployed version of the Software; or b) in lieu of the State performing the scan, Contractor must dynamically scan a deployed version of the Software using a State approved application scanning tool, and provide the State a vulnerabilities assessment after Contractor has completed such scan. These scans and assessments i) must be completed and provided to the State quarterly (dates to be provided by the State) and for each major release; and ii) scans must be completed in a non-production environment with verifiable matching source code and supporting infrastructure configurations or the actual production environment.

9.2 Static Application Security Testing (SAST) - Scanning source code for vulnerabilities, analysis, remediation, and validation.

(a) For Contractor provided applications, Contractor, at its sole expense, must provide resources to complete static application source code scanning, including the analysis, remediation and validation of vulnerabilities identified by application source code scans. These scans must be completed for all source code initially, for all updated source code, and for all source code for each major release and Contractor must provide the State a vulnerability assessment after Contractor has completed the required scans.

9.3 Software Composition Analysis (SCA) – Third Party and/or Open Source Scanning for vulnerabilities, analysis, remediation, and validation.

(a) For Software that includes third party and open source software, all included third party and open source software must be documented and the source supplier must be monitored by the Contractor for notification of identified vulnerabilities and remediation. SCA scans may be included as part of SAST and DAST scanning or employ the use of an SCA tool to meet the scanning requirements. These scans must be completed for all third party and open source software initially, for all updated third party and open source software, and for all third party and open source software in each major release and Contractor

must provide the State a vulnerability assessment after Contractor has completed the required scans if not provided as part of SAST and/or DAST reporting.

9.4 In addition, application scanning and remediation may include the following types of scans and activities if required by regulatory or industry requirements, data classification or otherwise identified by the State.

(a) If provided as part of the solution, all native mobile application software must meet these scanning requirements including any interaction with an application programming interface (API).

(b) Penetration Testing – Simulated attack on the application and infrastructure to identify security weaknesses.

10. Infrastructure Scanning.

10.1 For Hosted Services, Contractor must ensure the infrastructure and applications are scanned using an approved scanning tool (Qualys, Tenable, or other PCI Approved Vulnerability Scanning Tool) at least monthly and provide the scan's assessments to the State in a format that is specified by the State and used to track the remediation. Contractor will ensure the remediation of issues identified in the scan according to the remediation time requirements documented in the State's PSPs.

11. Nonexclusive Remedy for Security Breach.

11.1 Any failure of the Services to meet the requirements of this Schedule with respect to the security of any State Data or other Confidential Information of the State, including any related backup, disaster recovery or other policies, practices or procedures, is a material breach of the Contract for which the State, at its option, may terminate the Contract immediately upon written notice to Contractor without any notice or cure period, and Contractor must promptly reimburse to the State any Fees prepaid by the State prorated to the date of such termination.

SCHEDULE G – Transition In and Out

Transition In services are an established part of Contractor's project mobilization and included in the Project Discovery activities and milestones described in Schedule A – Statement of Work - Section 22. Project Management. Transition Out services will not exceed the Rate Card for Ancillary Professional Services on Schedule B – Pricing Schedule.

Transition In

Starting a project off on the right path is important. The groundwork that's laid within the first few weeks of the project sets the tone and lays the foundation for an ongoing successful collaboration.

Table 1 identifies high-level roles and responsibilities for the Transition In phase.

Transition IN Components	Contractor's Responsibilities	State's Responsibilities
Planning	Facilitate Project Kick-Off Develop Project Plan	Participate in Project Kick-Off Review and approve Project Plan
Onboarding Staff	Identify individuals to fill open project roles Perform activities to effectively role-on project team members (see Onboarding Staff below)	Perform State responsibilities for team staff onboarding (see Onboarding Staff below)
Knowledge Transfer	Facilitate Knowledge Transfer of solution, providing demonstrations as applicable Participate in job shadowing	Support provision of existing process and system documentation Provide demonstrations of existing systems Identify individuals for job shadowing

Table 10. Transition In Responsibilities

For additional details, please see *Schedule A – Statement of Work, Section 22. Project Management*, which describes Contractor's approach to initiating and executing the project

Onboarding Staff

Effective onboarding of project team members improves performance levels, productivity, and retention rates. Contractor has used Contractor's onboarding process to effectively roll-on new resources to other State of Michigan projects, in alignment with DTMB policies. Contractor will work with the State during initiation of the project to review the approach and tailor it as needed for the RIDE Initiative.

Key steps of the onboarding process, including expectations of Contractor and the State in Table 2.

	Contractor's Responsibilities	State's Responsibilities
Onboarding Email	<ul style="list-style-type: none"> Identify new individuals joining the team and complete onboarding email 	<ul style="list-style-type: none"> Confirm receipt of onboarding email and support State responsibilities in process
Background Check	<ul style="list-style-type: none"> Complete background check form Provide required data and documentation 	<ul style="list-style-type: none"> Approve background check results
Client Confidentiality Agreement	<ul style="list-style-type: none"> Sign and return Client Confidentiality Agreement 	<ul style="list-style-type: none"> Receive and approve agreements

	Contractor's Responsibilities	State's Responsibilities
Contractor's Client Data Protection	<ul style="list-style-type: none"> Complete Client Data Protection training 	
SOM System Access	<ul style="list-style-type: none"> Submit request Change password upon receipt of temporary password 	<ul style="list-style-type: none"> Provide State ID and temporary password Provide VPN token
Complete Project-Specific Training	<ul style="list-style-type: none"> Complete training on project processes 	

Table 11. Onboarding Staff

Transition Out

During Transition Out, Contractor's team supports the successful transition of the RIDE solution and Production Support Services to MDOT/DTMB or a successor contractor, while maintaining system performance and service levels and preventing disruption to users and business operations. The goal of Transition Out is to provide MDOT and any successor contractor the necessary support, training, documentation, and system information to support a seamless project transition.

Contractor's approach minimizes risks to the State by applying proven and repeatable processes to the transition using Contractor's Accenture Delivery Methods' (ADM) Service Transition methodology. Designed as a reverse transition, Contractor's approach to aid in the effectiveness of planning, mobilizing, and ultimately turning over the RIDE solution and Product Support Services. Contractor's Transition Out approach is designed to promote collaboration and transparency and includes the following key components:

- **Planning** – Transition planning begins with a Transition Kick-Off and includes development of a Transition Plan that defines roles and responsibilities, transition tasks, processes, schedule and exit criteria.
- **Knowledge Transfer** – Contractor's team provides the State with current operational and systematic processing procedures, data, documentation, and other information on a schedule approved by the State. Contractor will facilitate knowledge transfer through activities like job shadowing and training sessions.
- **Transition Management & Reporting** – Throughout the Transition, Contractor's team supports open communication with the State and designated stakeholders through regular meetings and status reports. The use of a common repository for sharing Transition documentation and status will be utilized.
- **Project Closeout & Offboarding Resources** – During project closeout, Contractor's team confirms with the state that transition activities are complete and the exit criteria for the transition have been met. This phase also includes validation that all Contractor's project team members have formally rolled-off the project in alignment with defined policies.

To help provide consistency throughout the transition, Contractor will select a Transition Team, led by a Transition Manager, and consisting of experienced management and technical personnel who remain assigned to transition activities through the end of the Transition Out phase. This team, in coordination with the State and other stakeholders, plans, executes and provides oversight and decision-making for the transition.

Table 3 identifies high-level roles and responsibilities for the Transition Out phase.

Transition Out Components	Contractor's Responsibilities	State's Responsibilities
Planning	<ul style="list-style-type: none"> Draft Transition Plan Facilitate reviews of Transition Plan, incorporating State and stakeholder feedback Plan for and facilitate kick-off meeting 	<ul style="list-style-type: none"> Identify State and other stakeholder participants for transition Review and approve Transition Plan, including issue escalation procedures

Transition Out Components	Contractor's Responsibilities	State's Responsibilities
		<ul style="list-style-type: none"> • Assign ownership for tasks requiring State or Third-Party participation • Collaborate on Transition goals and objectives • Participate in Transition Kick-Off
Knowledge Transfer	<ul style="list-style-type: none"> • Support knowledge transfer activities as defined within the Transition Plan • Support job shadowing • Conduct knowledge transfer sessions and trainings with MDOT and State-designated stakeholders • Confirm placement of application and system documentation in agreed upon location 	<ul style="list-style-type: none"> • Identify individuals for Knowledge Transfer sessions • Encourage and manage participation in Knowledge Transfer sessions • Confirm location for placement of transition-related documentation
Transition Management & Reporting	<ul style="list-style-type: none"> • Conduct regular status to discuss transition progress, risks, and issues • Distribute transition reports, identifying status of transition activities against defined plan 	<ul style="list-style-type: none"> • Participate in transition status meetings • Assist in resolution of transition issues requiring state participation
Project Closeout & Offboarding Resources	<ul style="list-style-type: none"> • Draft Project Closure Report and Project Lessons Learned • Facilitate project closeout meeting • Resolve open transition actions and/or issues • Confirm roll-off date for project team members • Verify alignment with roll-off procedures, including return of any state-provided assets 	<ul style="list-style-type: none"> • Participate in project closeout meetings • Resolve open transition actions and/or issues assigned to the State • Confirm receipt of State assets • Terminate access to State systems

Table 12. Transition Out Responsibilities

Offboarding Staff

Project team member transitions will occur throughout the project, not just during the Transition Out phase. When these transitions occur, Contractor's team will work in conjunction with the State to enable an efficient and low-risk transition that supports retaining knowledge, documents, and information for the project. Contractor will work with the State to verify alignment with MDOT and DTMB policies when individual project team members leave the project. This includes notifying the State of project team member changes and verifying team members leaving the project no longer have access to State systems or data. Contractor will work with the State during initiation of the project to review the offboarding approach and tailor it as needed for the RIDE Initiative.

Key steps of the offboarding process, including expectations of Contractor's team and the State below.

	Contractor's Responsibilities	State's Responsibilities
Offboarding Email	<ul style="list-style-type: none"> Identify individuals leaving the team 	<ul style="list-style-type: none"> Confirm receipt of offboarding email and support state responsibilities in process
Roll-Off Activities	<ul style="list-style-type: none"> Complete any required documentation, such as roles and responsibilities and open items or unfinished work Complete any required knowledge transfer with successor Participate in roll-off interview as requested 	<ul style="list-style-type: none">
SOM Project and System Access	<ul style="list-style-type: none"> Submit request for staff removal Return State assets, such as badges, equipment, and materials 	<ul style="list-style-type: none"> Revoke building and system access Verify receipt of all State assets

Table 13. Offboarding Staff

SCHEDULE H - Federal Provisions Addendum

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in [41 CFR Part 60-1.3](#), and except as otherwise may be provided under [41 CFR Part 60](#), then during performance of this Contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of [Executive Order 11246](#) of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by [Executive Order 11246](#) of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in [Executive Order 11246](#) of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in [Executive Order 11246](#) of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of [Executive Order 11246](#) of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contracts** in excess of \$2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act ([40 USC 3141-3148](#)) as supplemented by Department of Labor regulations ([29 CFR Part 5](#), "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

- (1) All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.
- (2) Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.
- (3) Additionally, contractors are required to pay wages not less than once a week.

3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of \$2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-Kickback" Act ([40 USC 3145](#)), as supplemented by Department of Labor regulations ([29 CFR Part 3](#), "Contractors and Subcontractors on Public Building or Public Work Financed in

Whole or in Part by Loans or Grants from the United States”), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

- (1) Contractor. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- (2) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- (3) Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of \$100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with [40 USC 3702](#) and [3704](#), as supplemented by Department of Labor regulations ([29 CFR Part 5](#)), as applicable, and during performance of this Contract the Contractor agrees as follows:

- (1) Overtime requirements. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The State shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal “funding agreement” as defined under [37 CFR §401.2 \(a\)](#) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with [37 CFR Part 401](#), “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of \$150,000**, the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act ([42 USC 7401-7671g](#)) and the Federal Water Pollution Control Act ([33 USC 1251-1387](#)), and during performance of this Contract the Contractor agrees as follows:

Clean Air Act

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

Federal Water Pollution Control Act

- (1) The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- (2) The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
- (3) The Contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

7. Debarment and Suspension

A “contract award” (see [2 CFR 180.220](#)) must not be made to parties listed on the government-wide exclusions in the [System for Award Management](#) (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement [Executive Orders 12549](#) ([51 FR 6370; February 21, 1986](#)) and [12689](#) ([54 FR 34131; August 18, 1989](#)), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than [Executive Order 12549](#).

- (1) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor’s principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any

lower tier covered transaction it enters into.

- (3) This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of **\$100,000 or more** shall file the required certification in Exhibit 1 – Byrd Anti-Lobbying Certification below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

9. Procurement of Recovered Materials

Under [2 CFR 200.322](#), Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

- (1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
 - a. Competitively within a timeframe providing for compliance with the contract performance schedule;
 - b. Meeting contract performance requirements; or
 - c. At a reasonable price.
- (2) Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- (3) The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

- (1) Access to Records. The following access to records requirements apply to this contract:
 - a. The Contractor agrees to provide the State, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

- b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.
- d. In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

(2) Changes.

See the provisions regarding modifications or change notice in the Contract Terms.

(3) DHS Seal, Logo, And Flags.

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

(4) Compliance with Federal Law, Regulations, and Executive Orders.

This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

(5) No Obligation by Federal Government.

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract.”

(6) Program Fraud and False or Fraudulent Statements or Related Acts.

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

Schedule H, Attachment 1 - Byrd Anti-Lobbying Certification

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than \$100,000.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, _____ certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

 Signature of Contractor's Authorized Official

 Name and Title of Contractor's Authorized Official

 Date