Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Vehicle Operations Garage System Migration   **Project ID: DJ3142VO**

Leadership Group: Finance Administration		
Department: Facilities Management	**Division:** Support Services	
Project Sponsor: Todd Birkle	**Date Requested:** 2/14/2022	**PM Customer No.** 142
Request Type: ***New Development* X** ***Enhancement*** ***Customer Support*** ***Planned System Maintenance or Upgrade***		
IT Team Name: eCommerce	**IT Team No: J**	
Project Manager/Leader: Dawn Clark		

Account Number:	65498	Account Description:	Garage Support	Customer Name:	Support Services
Grant Funded? Yes **No**			**Mandate?** Yes **No** **Mandate Source:**		

Project Goal

To migrate the existing on-premises version of the Faster to the cloud-based, SaaS solution, so that the Vehicle Operations staff can more efficiently process vehicle requests, streamline the vehicle maintenance tracking process as well as report on and monitor key performance indicators.

Business Objective

To implement the new cloud-based, SaaS version of Faster to enable Vehicle Operations to track and monitor key performance indicators, utilize bar coding to improve vehicle tracking and manage assets, rental and reservation electronically as well as migrate data from the existing system to the new system.

> **Major Deliverables**
> - Detailed Project Plan
> - Vendor SOW
> - Application and/or System Requirements
> - End User Hardware and Software Requirements Document
> - Technical Design Document
> - Technical Architecture Diagram
> - Training Plan
> - User Acceptance Test Plan
> - Implementation Plan
> - Training/User Manual(s)
> - Application Code
> - Service Level Agreement
> - Disaster Recovery Toolkit
> - Service Center Knowledge Documents

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Vehicle Operations Garage System Migration   Project ID: DJ3142VO

       Approach
- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Collaborate with vendor on contract and SOW
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Order hardware and software if needed
- Develop Implementation Plan
- Develop new system
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop User Documentation, SLA, Disaster Recovery
- Toolkit, Service Center Knowledge Documents
- Train users on new system
- Release new system into production

Research & Analysis

Gartner Research Recommendation – TBD

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	<10 (Oakland County Vehicle Operations staff)
Divisions	Support Services
Leadership Groups	Finance Administration

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Vehicle Operations Garage System Migration   Project ID: DJ3142VO

Risk

Business Environment   MED – Project requires some changes to existing business processes.

Technical Environment   MED – Proven implemented technologies with new aspects and /or new requirements

Assumptions

Staffing   IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

Role:	Name	Hours per Day
Project Sponsor:	Todd Birkle	As Needed

Facilities

- None
-

Technical

- Data from the current system will be migrated into the new system.
-

Funding

- IT

Other

-

Priority

Project Name: Vehicle Operations Garage System Migration   Project ID: DJ3142VO

Constraints

- None

-

Exclusions

- None

-

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Vehicle Operations Garage System Migration   **Project ID: DJ3142VO**

PROJECT PHASE AUTHORIZATION

Phase(s):		
Total Estimated Application Services	**Hours: 1,406**	
Total Estimated Technical Systems	**Hours: 192**	
Total Estimated CLEMIS	**Hours:**	
Total Estimated Internal Services	**Hours:**	
IT Application Services Division Manager Approval:		**Date:**
IT Technical Systems Division Manager Approval:		**Date:**
IT CLEMIS Division Manager Approval:		**Date:**
IT Internal Services Division Manager Approval:		**Date:**
IT Management Approval:		
Approved: Yes No		Date:
Reason:		
Project Sponsor Approval:		
Title:		Date:

PROJECT SUMMARY

Authorized Development (see above)	**Hours:**	
Previously Authorized Development	**Hours:**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 1,598**	**Cost: $263,670**

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Vehicle Operations Garage System Migration   **Project ID: DJ3142VO**

PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:	
Title:	Date:
Project Office Review:	Date:

Vehicle Operations Garage System Migration - Size Estimate (+/- 10% to 50%) (Read-Only) ×

	Type	ID	Task Name	Estimated Hours	Estimate Notes
1	Phase	000000	PROJECT MANAGEMENT	366	
2	Phase	100000	DEVELOP RFP & SELECT VENDOR	72	
3	Phase	200000	DEFINE BUSINESS REQUIREMENTS	110	
4	Phase	300000	DESIGN SYSTEM ARCHITECTURE	106	
5	Phase	400000	IMPLEMENT VENDOR APPLICATION	765	
6	Phase	500000	IMPLEMENTATION PHASE	102	
7	Phase	600000	POST IMPLEMENTATION SUPPORT	77	
8					
1				1,598	

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	271,920	60,123	11,899	12,078	12,259	12,443	380,721
Hardware Subtotal:	0	8,623	0	162	0	166	8,951
Software Subtotal:	61,438	61,988	62,547	63,114	63,690	64,274	377,051
Infrastructure Subtotal	0	0	0	0	0	0	0
Training Subtotal:	15,950	813	825	837	850	863	20,138
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	0	0	0	0	0	0	0
Annual Total Costs	349,308	131,548	75,271	76,191	76,799	77,746	786,862
Annual Return on Investment	(349,308)	(131,548)	(75,271)	(76,191)	(76,799)	(77,746)	(786,862)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	349,308	480,855	556,126	632,317	709,116	786,862	786,862
Cumulative Return on Investment	(349,308)	(480,855)	(556,126)	(632,317)	(709,116)	(786,862)	(786,862)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Establish a barcoding method for vehicle and asset tracking to reduce manual tracking efforts	Intangible Benefit					0	
Customer Portal: Establish electronic vehicle maintence request to improve efficiencies and reduce paper consumption	Intangible Benefit					0	
Establish electronic vehicle rental request to improve effiiciencies and reduce paper consumption	Intangible Benefit					0	
Interactive Shop Calender: Better scheduling of repairs and staff availability.	Intangible Benefit					0	
Ability to import electric vehicle kWh consumption.	Intangible Benefit					0	
Ability to set PM plan for time/Mileage/kWp used	Intangible Benefit					0	
Asset Management: Life cycle Management, Acquisition Planning, Asset Meter Reading.	Intangible Benefit					0	
Abiluity to utilize API (Mulitiple APIs) to additional system integrations	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Establish a barcoding method for vehicle and asset tracking to reduce manual tracking efforts	Intangible Benefit												
Customer Portal: Establish electronic vehicle maintence request to improve efficiencies and reduce paper consumption	Intangible Benefit												
Establish electronic vehicle rental request to improve effiiciencies and reduce paper consumption	Intangible Benefit												
Interactive Shop Calender: Better scheduling of repairs and staff availability.	Intangible Benefit												
Ability to import electric vehicle kWh consumption.	Intangible Benefit												
Ability to set PM plan for time/Mileage/kWp used	Intangible Benefit												
Asset Management: Life cycle Management, Acquisition Planning, Asset Meter Reading.	Intangible Benefit												
Abiluity to utilize API (Mulitiple APIs) to additional system integrations	Intangible Benefit												

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Cost Avoidance Subtotal:							
Intangible Benefit:							
Establish a barcoding method for vehicle and asset tracking to reduce manual tracking efforts							
Customer Portal: Establish electronic vehicle maintence request to improve efficiencies and reduce paper consumption							
Establish electronic vehicle rental request to improve effiiciencies and reduce paper consumption							
Interactive Shop Calender: Better scheduling of repairs and staff availability.							
Ability to import electric vehicle kWh consumption.							
Ability to set PM plan for time/Mileage/kWp used							
Asset Management: Life cycle Management, Acquisition Planning, Asset Meter Reading.							
Abiluity to utilize API (Mulitiple APIs) to additional system integrations							
Savings Total:							

DJ2142GM

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Y1	Y2	Y3	Y4	Y5	Y6
								Affects Project ROI?					
IT Hours - New Development	Development Svcs		HR	1,598	165	263,670		x					
IT Hours - System Maintenance	Development Svcs		ANN	20	165	3,300	1.015		x	x	x	x	x
IT Hours - Customer Support	Development Svcs		ANN	40	165	6,600	1.015	x	x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs		ANN	10	165	1,650	1.015	x	x	x	x	x	x
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs		EA	1	48,400	48,400			x				
Rugged Laptop & Accessories	Hardware	Special Vendor	EA	1	3,150	3,150			x				
Rugged Laptop Support	Hardware	Special Vendor	EA	1	330	330			x				
Printer	Hardware	Special Vendor	EA	1	1,690	1,690			x				
Media for the Printer	Hardware	Special Vendor	EA	1	155	155	1.015		x		x		x
Printer Support (3 year option)	Hardware	Special Vendor	EA	1	1,075	1,075			x				
Scanner (Cordless Option)	Hardware	Special Vendor	EA	2	929	1,858			x				
Scanner Support (Cordless option - 3 years)	Hardware	Special Vendor	EA	2	182	364			x				
PC System - Acquisition	Hardware				639	0							
PC System - Maintenance	Hardware				3,352	0							
Laptop - Acquisition	Hardware				922	0							
Laptop - Maintenance	Hardware				3,352	0							
Tablet Notebook - Acquisition	Hardware				1,069	0							
Tablet Notebook - Maintenance	Hardware				3,352	0							
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software		ANN	1	24,731	24,731		x	x	x	x	x	x
Package Software - Maintenance	Software		ANN	1	36,707	36,707	1.015	x	x	x	x	x	x
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0							
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure				42,280	0							
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure				9,293	0	1.030						

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				16,985	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				12,724	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				8,463	0							
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				4,261	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				4,429	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				3,317	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				2,205	0							
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				1,112	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,769	0							

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?					
								Y1	Y2	Y3	Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				754	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				14,170	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,835	0							
SSL Certificate	Infrastructure				910	0							
Internet Access	Infrastructure				190	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		446	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = $2,735	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $3,057	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $8,715	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,758	Infrastructure		ANN			0							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $24,137	Infrastructure		ANN			0							

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	263,670.00					
IT Hours - System Maintenance	Development Svcs		3,349.50	3,399.74	3,450.74	3,502.50	3,555.04
IT Hours - Customer Support	Development Svcs	6,600.00	6,699.00	6,799.49	6,901.48	7,005.00	7,110.07
IT Hours - Planned Maintenance	Development Svcs	1,650.00	1,674.75	1,699.87	1,725.37	1,751.25	1,777.52
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs		48,400.00				
Rugged Laptop & Accessories	Hardware		3,149.62				
Rugged Laptop Support	Hardware		330.00				
Printer	Hardware		1,690.00				
Media for the Printer	Hardware		156.82		161.56		166.44
Printer Support (3 year option)	Hardware		1,075.00				
Scanner (Cordless Option)	Hardware		1,858.00				
Scanner Support (Cordless option - 3 years)	Hardware		364.00				
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Laptop - Acquisition	Hardware						
Laptop - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software	24,731.00	24,731.00	24,731.00	24,731.00	24,731.00	24,731.00
Package Software - Maintenance	Software	36,706.51	37,257.11	37,815.96	38,383.20	38,958.95	39,543.34
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure						
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure						

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure						
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
SSL Certificate	Infrastructure						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = $2,735	Infrastructure						
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $3,057	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $8,715	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,758	Infrastructure						
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $24,137	Infrastructure						

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	263,670						263,670
IT Hours - System Maintenance		3,350	3,400	3,451	3,502	3,555	17,258
IT Hours - Customer Support	6,600	6,699	6,799	6,901	7,005	7,110	41,115
IT Hours - Planned Maintenance	1,650	1,675	1,700	1,725	1,751	1,778	10,279
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services		48,400					48,400
Development Services Subtotal:	*271,920*	*60,123*	*11,899*	*12,078*	*12,259*	*12,443*	*380,721*
Hardware:							
Rugged Laptop & Accessories		3,150					3,150
Rugged Laptop Support		330					330
Printer		1,690					1,690
Media for the Printer		157		162		166	485
Printer Support (3 year option)		1,075					1,075
Scanner (Cordless Option)		1,858					1,858
Scanner Support (Cordless option - 3 years)		364					364
Hardware Subtotal:		*8,623*		*162*		*166*	*8,951*
Software:							
Package Software - Acquisition	24,731	24,731	24,731	24,731	24,731	24,731	148,386
Package Software - Maintenance	36,707	37,257	37,816	38,383	38,959	39,543	228,665
Software Subtotal:	*61,438*	*61,988*	*62,547*	*63,114*	*63,690*	*64,274*	*377,051*
Infrastructure:							
Infrastructure Subtotal							
Training:							
User Training (Vendor Provided) - Implementation	15,950						15,950
User Training (Vendor Provided) - On-going		813	825	837	850	863	4,188
Training Subtotal:	*15,950*	*813*	*825*	*837*	*850*	*863*	*20,138*
Other:							
Other Subtotal:							
Costs Total:	*349,308*	*131,548*	*75,271*	*76,191*	*76,799*	*77,746*	*786,862*

Oakland County -- Vehicle Operations Garage System Migration

Return on Investment Analysis

Assumptions

Date	Assumption Description
22-Apr-22	Assumes migrations from on-premises Faster application to web, Cloud-based version
22-Apr-22	Assumes migration of data from existing system to new system
25-Apr-22	Assumes vendor will be conducting user training
29-Jun-22	Assumes the hardware presented in the quote from the vendor will cover the operational need to support this system.
05-Jul-22	Assumes media for printer will need to be purchased every other year