



Performance Measures and Health Index of ITS Assets

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ITS Comprehensive Maintenance Contract

- Pay for performance
 - Covers all ITS equipment, with few exemptions
- Repairs on exempt assets and non-PFP assets are completed through optional and emergency services
 - Exempt assets – sign structures, poles, fiber
 - GDOT can request emergency services on any asset as deemed necessary
- Emergency repairs are incentivized
 - Incentive Pay based on response timeframe

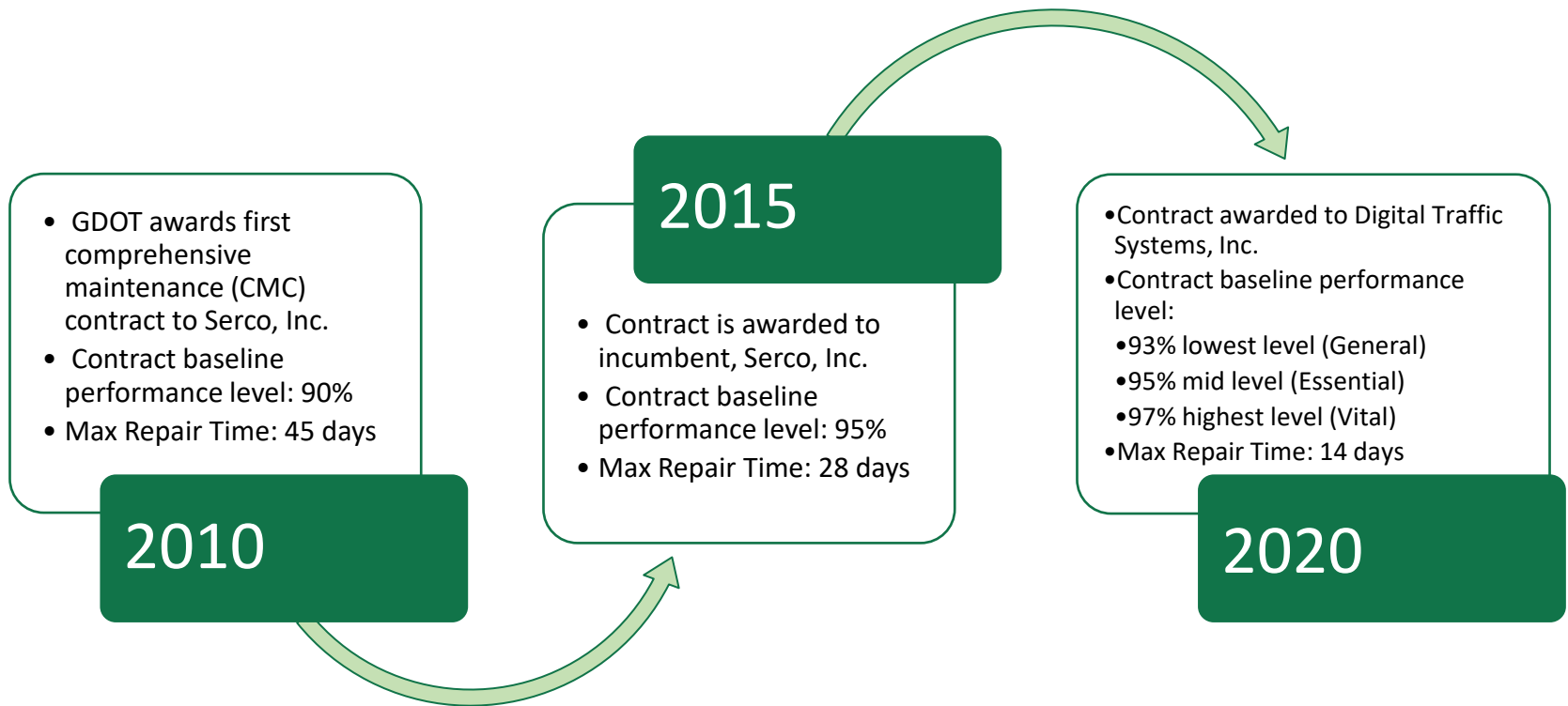


Procurement

- Approved Special Experimental Project No 14 – Innovative Contracting
 - Best value construction contract
- Split state into regions for competitive pricing
- Initial ITS Replacement and fiber installation effort
- Subsequent performance based pricing



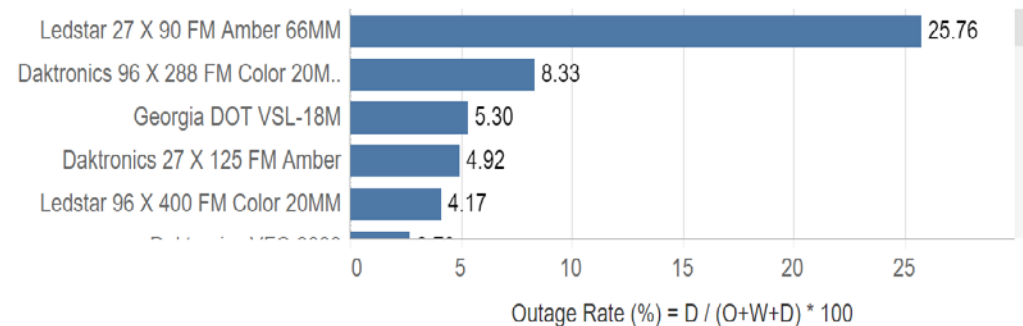
Comprehensive Maintenance Contract Timeline



ITS Asset Management System (IAMS)

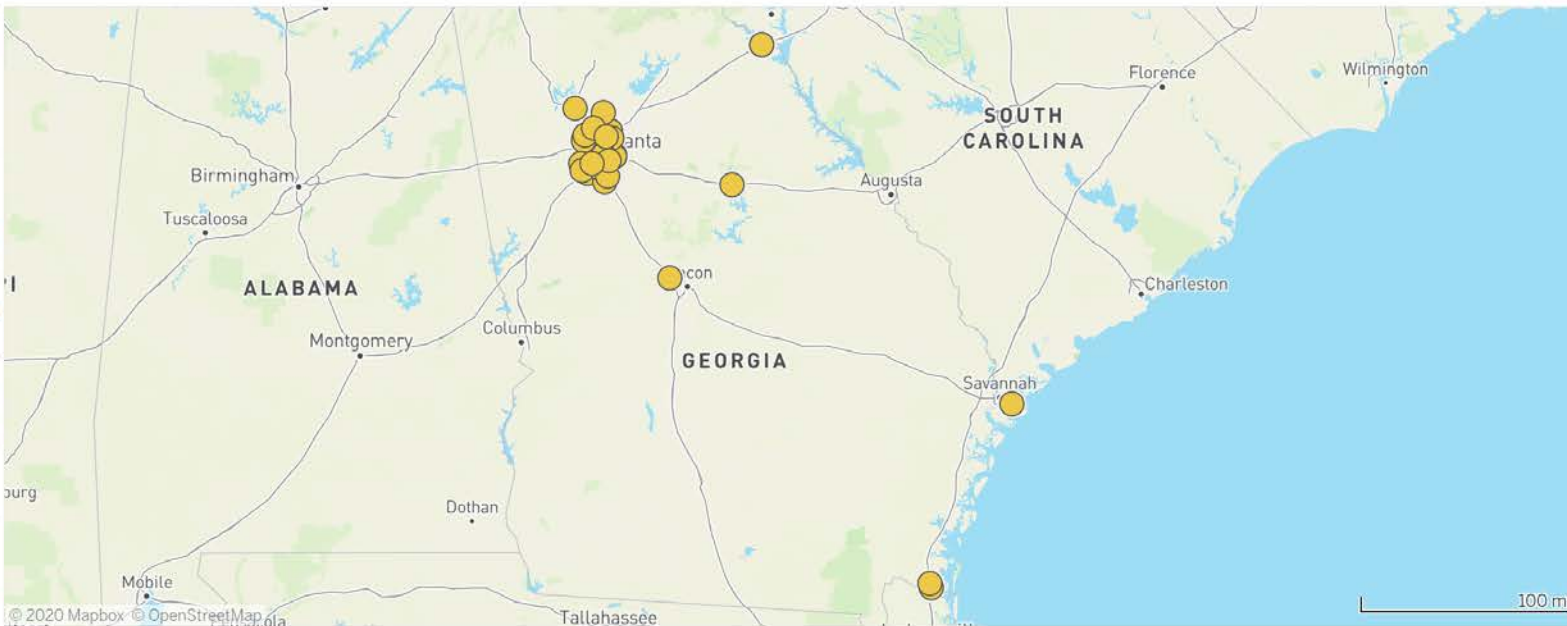
- Allows GDOT to monitor device availability in real time
- Ticketing system for TMC staff
- Data Analytics
 - Mean Time between failure by manufacturer
 - Warranty tracking
 - Device age
 - Data exports by corridor
- Contract payment tracking per device

Highest Outage Rate by Manufacturer and Model



Current Status of ITS Devices

Device Location and Asset Status Indicator: Down



Device Name
(All) ▼

Select Asset Status
Down ▼

Class
(All) ▼

Priority
(All) ▼

Work Order Category
(All) ▼

Asset Status Display
Selected Asset Status ▼

Map Color Legend
 Selected Asset Status

Current Status and Work Orders

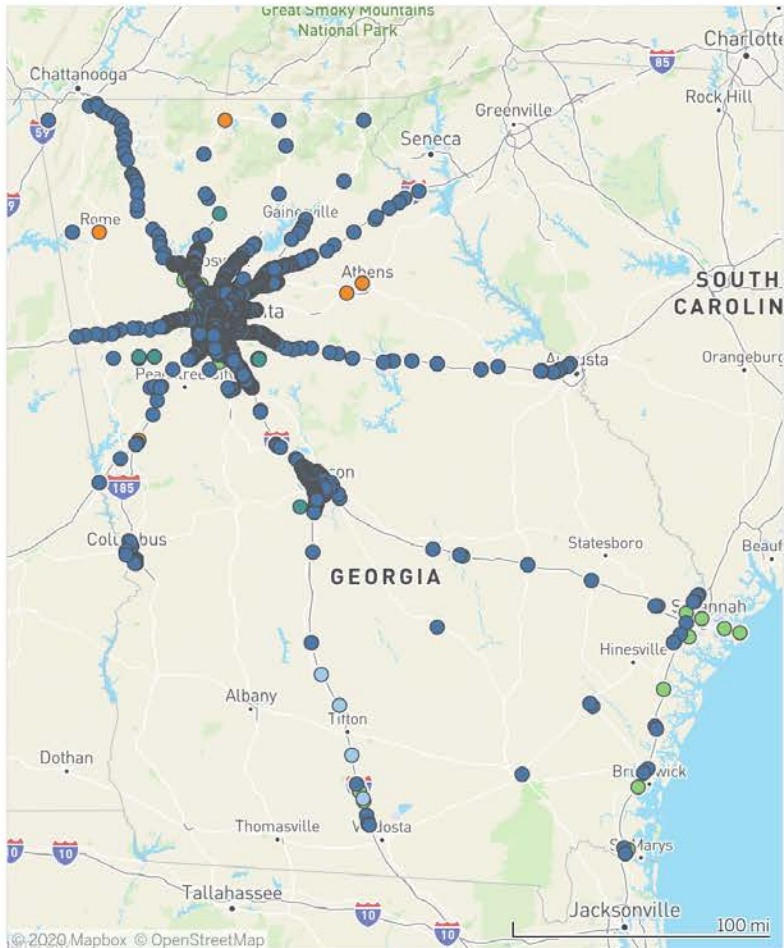
Asset Name	Asset Status	Class	Type	Priority	Workorder No	Workorder Ca..	Released	Workorder Failure	Workorder Status	Age (Days)
BIBB-AID-N2C28	Down	VDD	AID	General	A4-00357	Corrective	2020-08-28	Failed Communications	In-Progress	11.00
GDOT-CAM-043	Down	CCTV	CCTV	General	A1-03743	Corrective	2020-07-28	CCTV No Video	Released	42.00
GDOT-CAM-I-85-177	Down	CCTV	CCTV	General	A2-00098	Corrective	2020-08-09	Failed Communications	Released	30.00
GDOT-CMS-060	Down	MS	DMS	General	A1-04763	Corrective	2020-09-01	Failed Communications	Released	7.00
GDOT-CMS-804	Down	MS	DMS ACS	Vital	A1-04852	Corrective	2020-09-07	MS Blank	Released	1.00
GDOT-CMS-805	Down	MS	DMS ACS	Vital	A1-04853	Corrective	2020-09-07	MS Blank	Released	1.00
GDOT-CMS-902	Down	MS	DMS	General	A3-00120	Corrective	2020-09-02	MS Blank	Released	6.00
GDOT-ESS-I-20-126.00	Down	ESS	ESS	General	A3-00119	Corrective	2020-09-02	Failed Communications	Released	6.00

Number of Devices Down
33

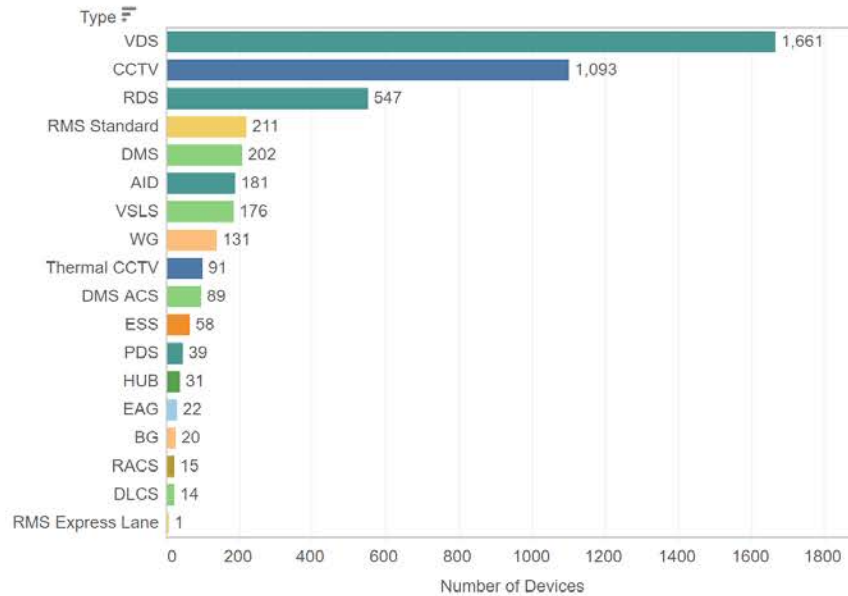
Number of Records in Table
33

ITS Device Viewer by Route

Device Selection, Location and Road View



Current Number of ITS Devices



ITS Device Attributes

Device Name	Type	Manufacturer	Model	Route	Mile Marker
AMS-CAM-113	CCTV	Axis	Q6045-E MkII	SR 3	3.30
AMS-CAM-901	CCTV	Cohu	4224-1000	SR 20	
AMS-CAM-902	CCTV	Cohu	4224-1000	SR 20	
AMS-CAM-903	CCTV	Axis	Q6055-E	SR 20	
AMS-CAM-904	CCTV	Axis	Q6055-E	SR 20	
BIBB-AID-N1C01	AID	Axis	Q1615	I-475	0.38
BIBB-AID-N1C02	AID	Axis	Q1615	I-475	0.06
BIBB-AID-N1C03	AID	Axis	Q1615	I-475	

Class
(All) ▾

Type
(All) ▾

Route
(All) ▾

Managed Lane
(All) ▾

Priority
(All) ▾

Device Name
(All) ▾

Manufacturer
(All) ▾

Model
(All) ▾

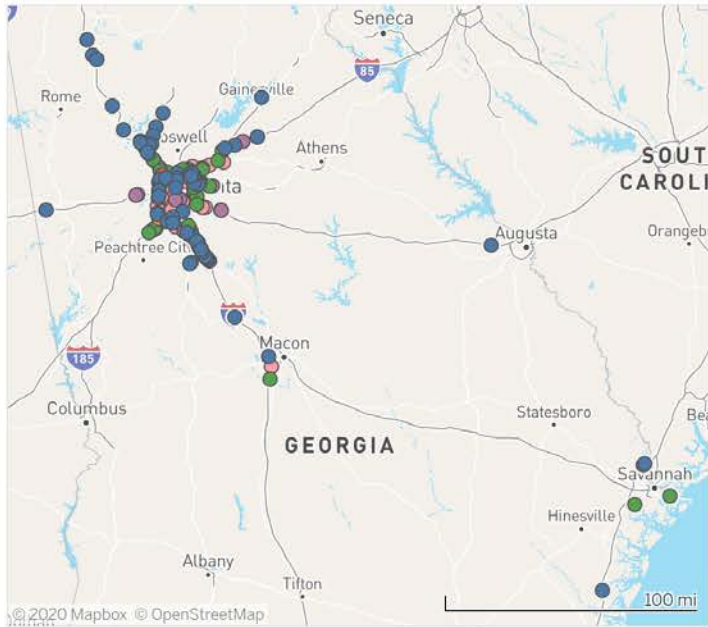
- Class Legend
- CCTV
 - EAG
 - ESS
 - GLSS
 - HUB
 - MS
 - RACS
 - RMS
 - VDD

Total Devices
4,582



Corrective Work Order Analysis

Device Location and Road View



Number of Work Orders for Maintenance Category: Cause



Workorder Released Date
 1/1/2020 9/7/2020

Maintenance Report Category

Maintenance Report Result

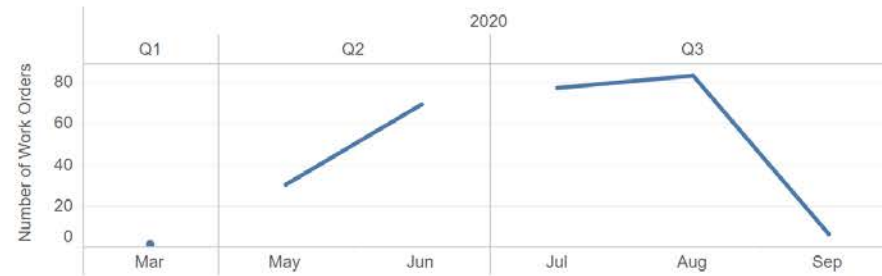
Class

Workorder Status

Device Name

- Class
- CCTV
 - ESS
 - GLSS
 - MS
 - RMS
 - VDD

Number of Work Orders by Time Period



Corrective Work Orders

Workorder No	Released	Device Name	Class	Workorder Failure	Workorder Cause	Workorder Action	Workorder Status	Age (Days)
A1-04798	2020-09-03	GDOT-ESS-I-285-001.10	ESS	Failed Communications	Communication	None	Closed	0.9
A1-04774	2020-09-02	GDOT-CAM-428	CCTV	Failed Communications	Communication	Reset Camera	Closed	0.2
A1-04773	2020-09-02	GDOT-CAM-814	CCTV	Failed Communications	Communication	None	Closed	0.2
A1-04765	2020-09-01	GDOT-CMS-709	MS	MS Blank	Communication	Replace Board	Closed	0.1
A1-04760	2020-09-01	GDOT-CMS-855	MS	MS Blank	Communication	Replace Board	Closed	0.0
A1-04745	2020-09-01	GDOT-CMS-882	MS	MS Blank	Communication	None	Closed	0.4
A1-04737	2020-08-31	GDOT-CAM-767	CCTV	Failed Communications	Communication	None	Closed	0.1
A1-04736	2020-08-31	GDOT-CAM-763	CCTV	Failed Communications	Communication	None	Closed	0.1

Corrective Workorders Displayed
266

Total Corrective Workorders to Date
2,808

Pros

- Improved system reliability
 - Typically above 99% of devices are operational at all times
- Ability to identify device non-performance
 - Data for use in maintaining GDOT's Qualified Product List
- Significantly reduced repair times
 - Longest allowable repair time across all classes and classifications is 14 days, down from 45 days in the 2010 contract

Cons

- Expensive to maintain highly available system
- Complicated contract
- Requires daily project oversight

Questions?