Department of Environmental Protection: MC311 Data Review

3/25/2011
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Department of Environmental Protection

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CountyStat Principles

- **Require Data-Driven Performance**
- **Promote Strategic Governance**
- **Increase Government Transparency**
- **Foster a Culture of Accountability**

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Agenda

- **DEP/ MC311 Transition Overview**
- **Review of DEP Related Customer Request Data**
- **Solid Waste Service Requests Review**
- **Highlighting Macro-Level Data Reporting Challenges**
- **Wrap-Up and Follow-Up Items**

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DEP Transition to MC311

- Six positions (one vacant) transferred from DEP to the MC311 Customer Service Center in November of 2009

- MC311 intake of DEP requests started at soft launch on January 12th, 2010

- Siebel fully deployed as replacement of OSCAR legacy system on February 14th, 2011

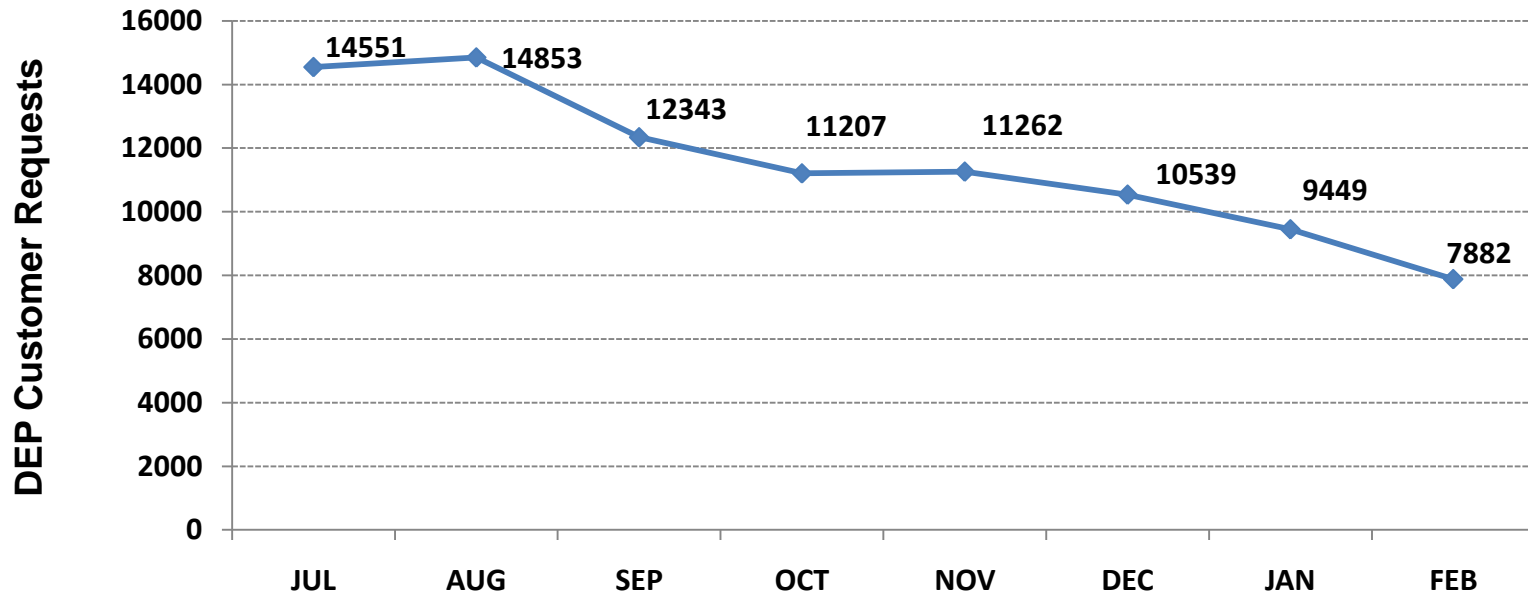# Review of DEP Related Customer Request Data

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CountyStat Overview of Major Findings

- The Department of Environmental Protection (DEP), particularly the Division of Solid Waste, accounts for a large volume of overall customer requests and call volume at the MC311 Customer Service Center (CSC)

- The replacement of the legacy OSCAR system with a fully integrated Siebel system has improved the quality of data from a macro-level view

- There remains areas for improvement in the accuracy and completeness of overall data collection
  - In particular, disparities between departmental data collection and Siebel is a cause for concern as future operational and resource decisions will be based on Siebel data

- In other departments where there is not a fully-integrated Siebel solution, questions remain over the accuracy of data contained in the MC311 Siebel system from a macro-level perspective
  - In particular, future development of departmental performance metrics that measure time to complete service will need to be thoroughly vetted to ensure accuracy
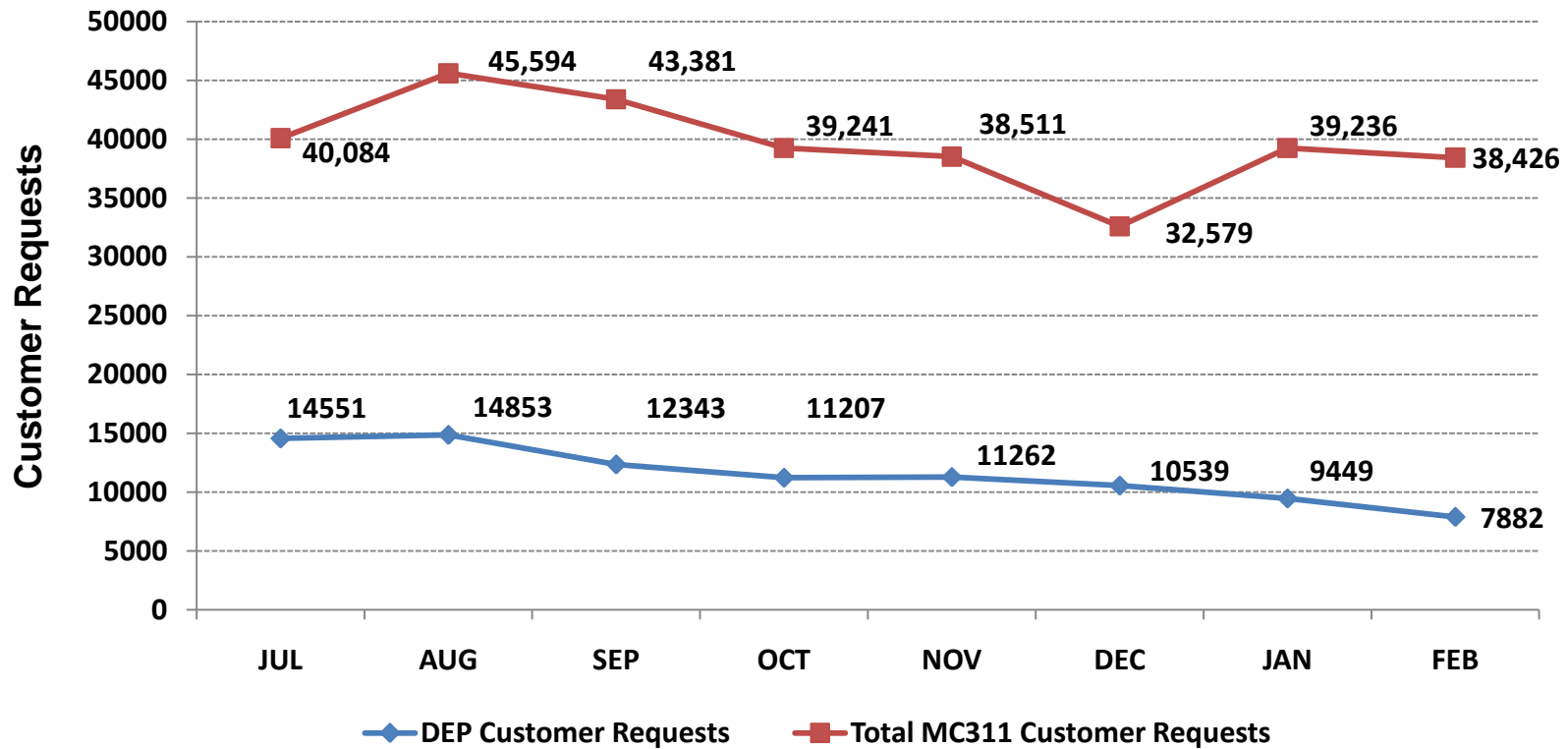
DEP Monthly Customer Request Totals

Customer Request Totals

	July-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec	Dec-Jan	Jan-Feb	July-Feb
Percent Change	2%	- 17%	- 9%	.5%	- 6%	- 10%	- 17%	- 46%

DEP Related Customer Requests as Percentage of Total MC311 Customer Requests

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Average
DEP as Percent of Total	36%	33%	28%	29%	29%	32%	24%	21%	29%

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DEP Monthly Customer Request Totals by Type

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Avg.	Total
Complaint/ Compliment	472	417	287	227	242	238	193	84	270	2,160
General Information	2,725	2,329	2,051	1,960	1,956	1,627	2,093	2,298	2,130	17,039
Referral	2,963	3,107	2,140	2,224	1,864	1,600	1,615	611	2,016	16,124
Service Request - Fulfillment	8,391	9,000	7,865	6,796	7,200	7,074	5,548	4,889	7,095	56,763
Total	14,551	14,853	12,343	11,207	11,262	10,539	9,449	7,882	11,511	92,086

Departmental service request fulfillments account for 61% of all DEP Customer Requests.

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DEP Monthly Customer Request Totals by Type
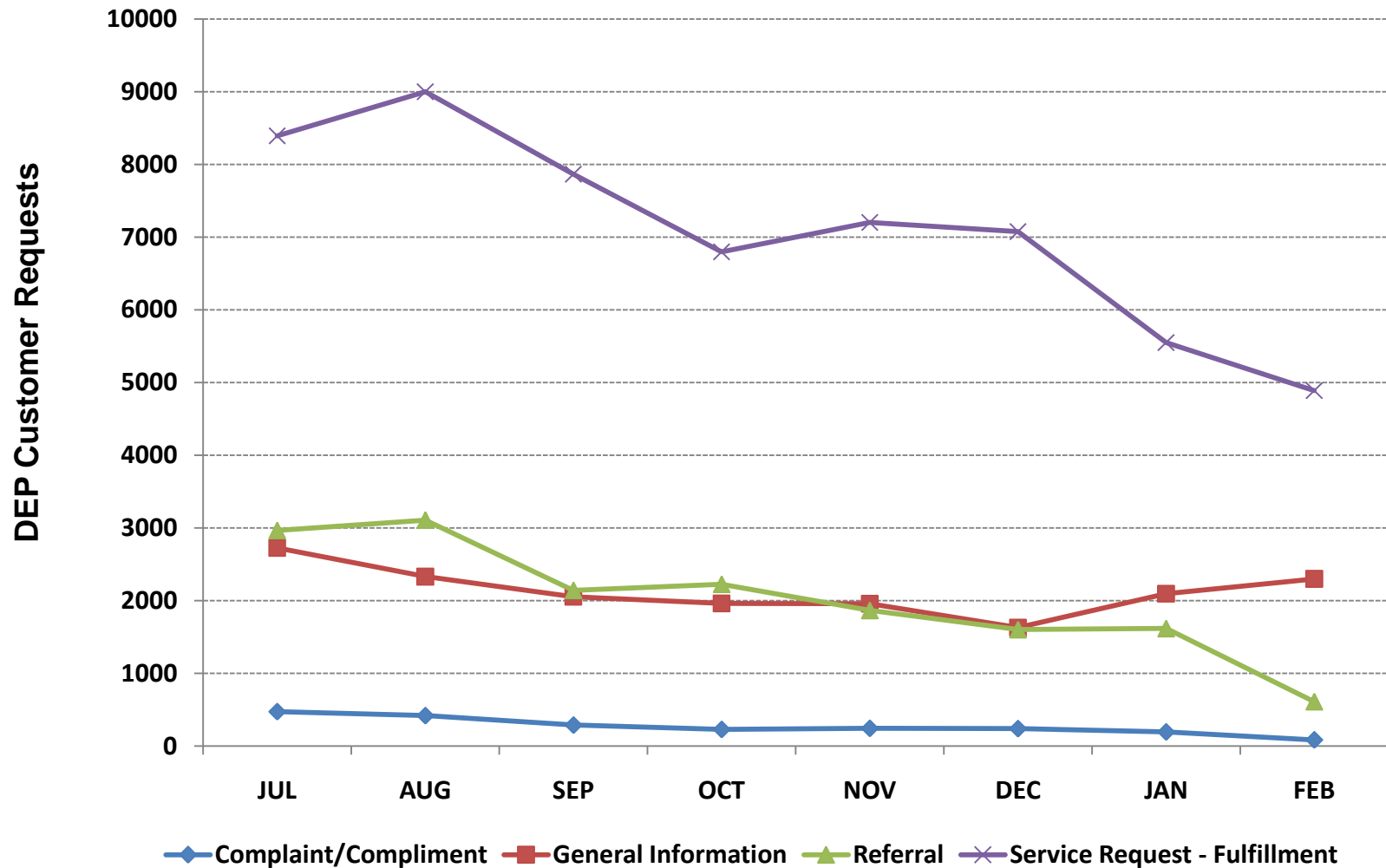
DEP Customer Requests by Intake Method

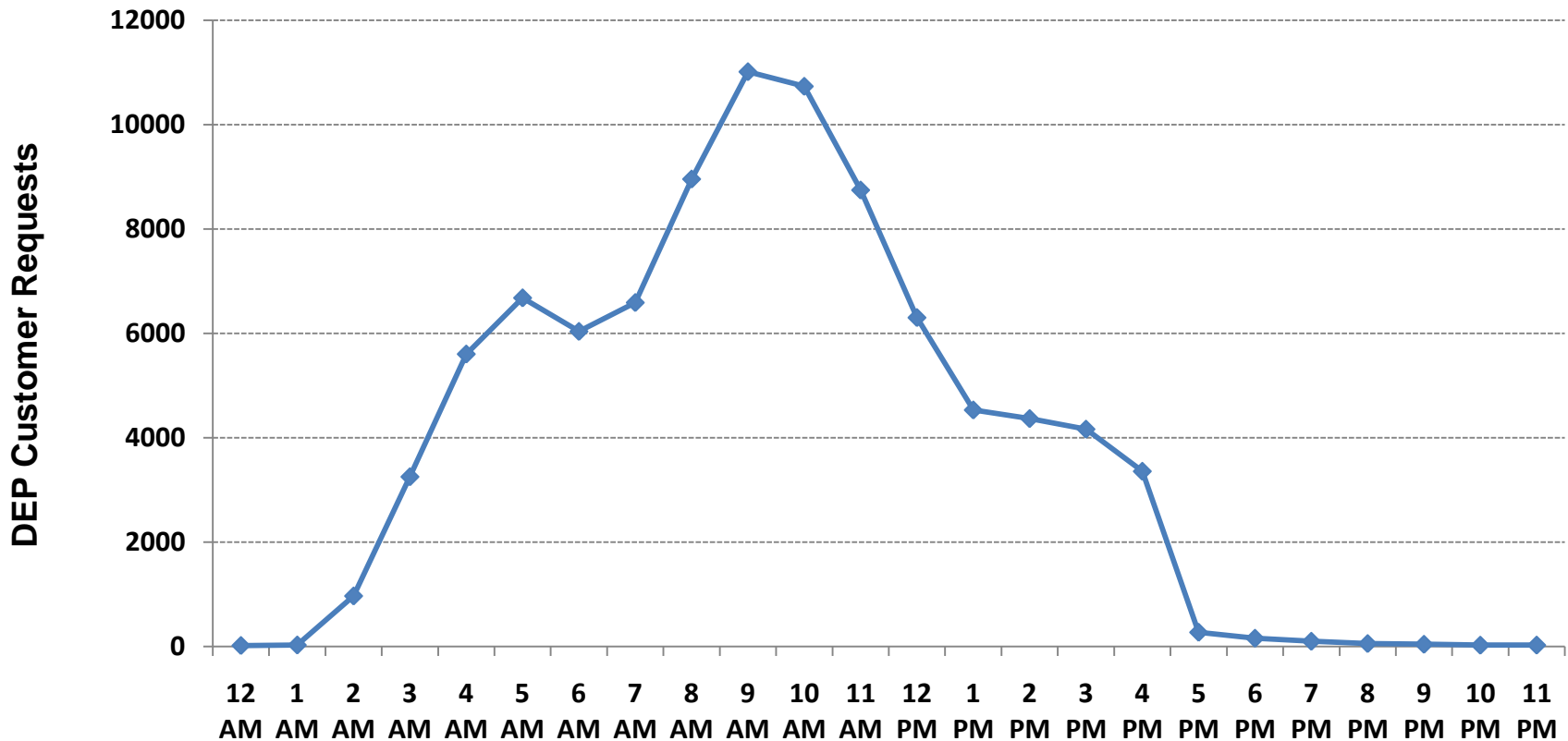|	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Avg.	Total
Email	1			1					1	2
Internal	79	86	72	57	70	37	33	703	142	1,137
Phone	13,953	14,256	11,849	10,826	10,784	10,067	9,033	6,451	10,902	87,219
Web	518	511	422	323	408	435	383	728	466	3,728
Total	14,551	14,853	12,343	11,207	11,262	10,539	9,449	7,882	11,511	92,086

95% of all DEP Customer Requests are received via the phone.
Internal customer requests are increasing *(see Feb. data)* **with the replacement of the legacy OSCAR system, as DEP staff are creating more customer requests.**

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DEP Customer Requests by Intake Method

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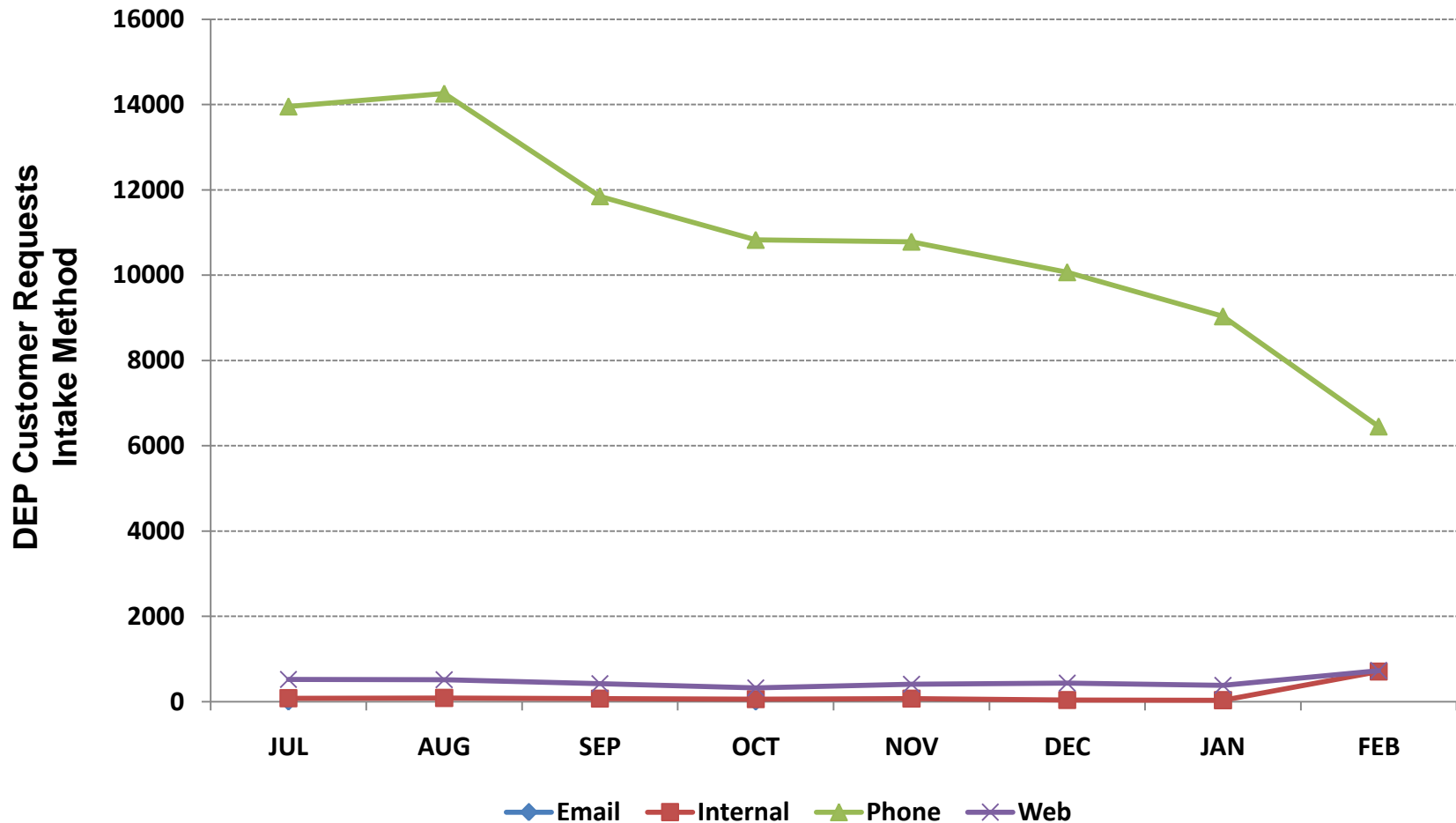
DEP Customer Request Creation by Time of Day

75% of all DEP Customer Requests are opened during MC311's normal business hours of 7AM to 5PM.

DEP Monthly Customer Request Totals by Area Type

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Avg.	Total
Environmental Code Enforcement	144	152	138	153	135	57	86	87	119	952
Environmental Programs	81	66	62	51	35	23	29	41	49	388
General Information	1				1	2	1		1.3	5
Other	20					1			10.5	21
Solid Waste	14,202	14,546	12,064	10,962	11,058	10,435	9,306	7,655	11,279	90,228
Water Sewer	26	28	22	18	15	10	16	19	19	154
Watershed	74	61	56	22	17	7	11	16	33	264
(blank)	3		1	1	1	4		64	12.3	74

98% of all DEP Customer Requests are categorized within the Solid Waste area.

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DEP Solid Waste Monthly Customer Request Totals by Request Type

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Avg.	Total
Complaint/Compliment	467	409	277	220	235	230	188	82	264	2,108
General Information	2552	2174	1912	1847	1878	1589	2024	2161	2017	16,137
Referral	2931	3092	2130	2206	1851	1593	1604	606	2002	16,013
Service Request - Fulfillment	8252	8871	7745	6689	7094	7023	5490	4806	6996	55,970

Complaint/Compliment customer requests have steadily declined. It is not known if this was caused by DEP operational changes or alterations to the knowledge base articles used by MC311

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# DEP Solid Waste Monthly Customer Request Totals by Request Type

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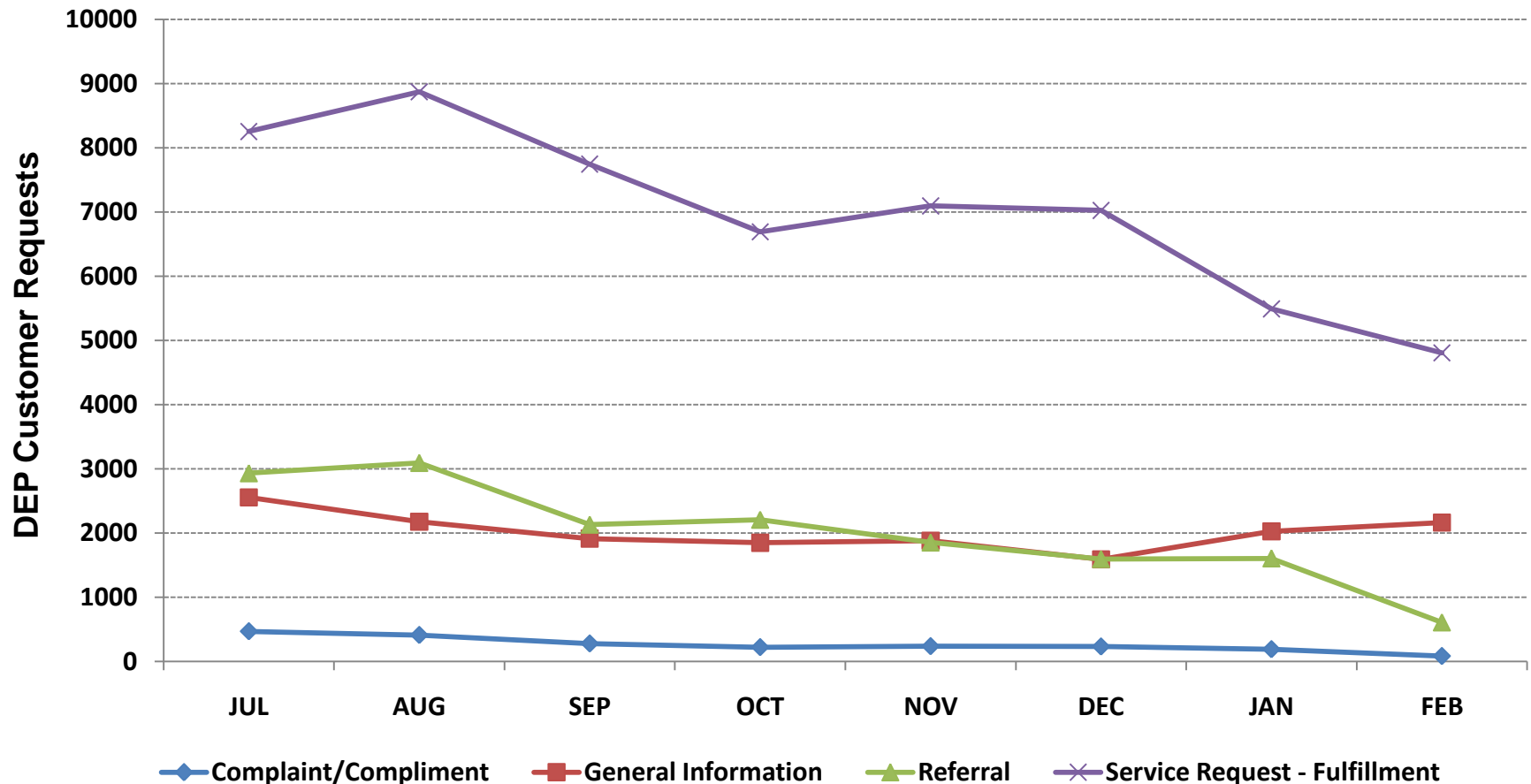
DEP Solid Waste Sub Area Type:
Top Service Request Fulfillment Sub Areas

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Bulk Trash Request	2,395	2,902	2,287	2,001	2,154	1,949	1,444	1,110	16,242
Scrap Metal Request	2,238	2,504	1,950	1,864	1,929	1,493	1,144	926	14,048
Bin Request-New	1,646	1,522	1,274	1,112	1,259	1,847	1,618	1,495	11,773
Info-Solid Waste Programs	691	580	1152	808	872	798	569	250	5,720
Field Check	223	213	191	179	138	125	101	221	1,391
Cart Single Family	190	255	213	158	178	170	112	82	1,358
Cart Townhouse	213	225	194	186	174	173	82	62	1,309
Cart Repair	105	90	95	114	92	126	156	122	900
Cart Missing	84	123	113	88	87	82	67	46	690
Bin Pick-Up	61	59	54	25	41	45	25	160	470
Blue Can-New	53	36	25	6	25	26	35	44	250

Note: This data draws from the legacy system, which might not match exactly with DEP internal figures. With the retiring of the OSCAR system, there should be no discrepancies.

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DEP Solid Waste Sub Area Type: Top 5 Service Request Fulfillment Sub Areas
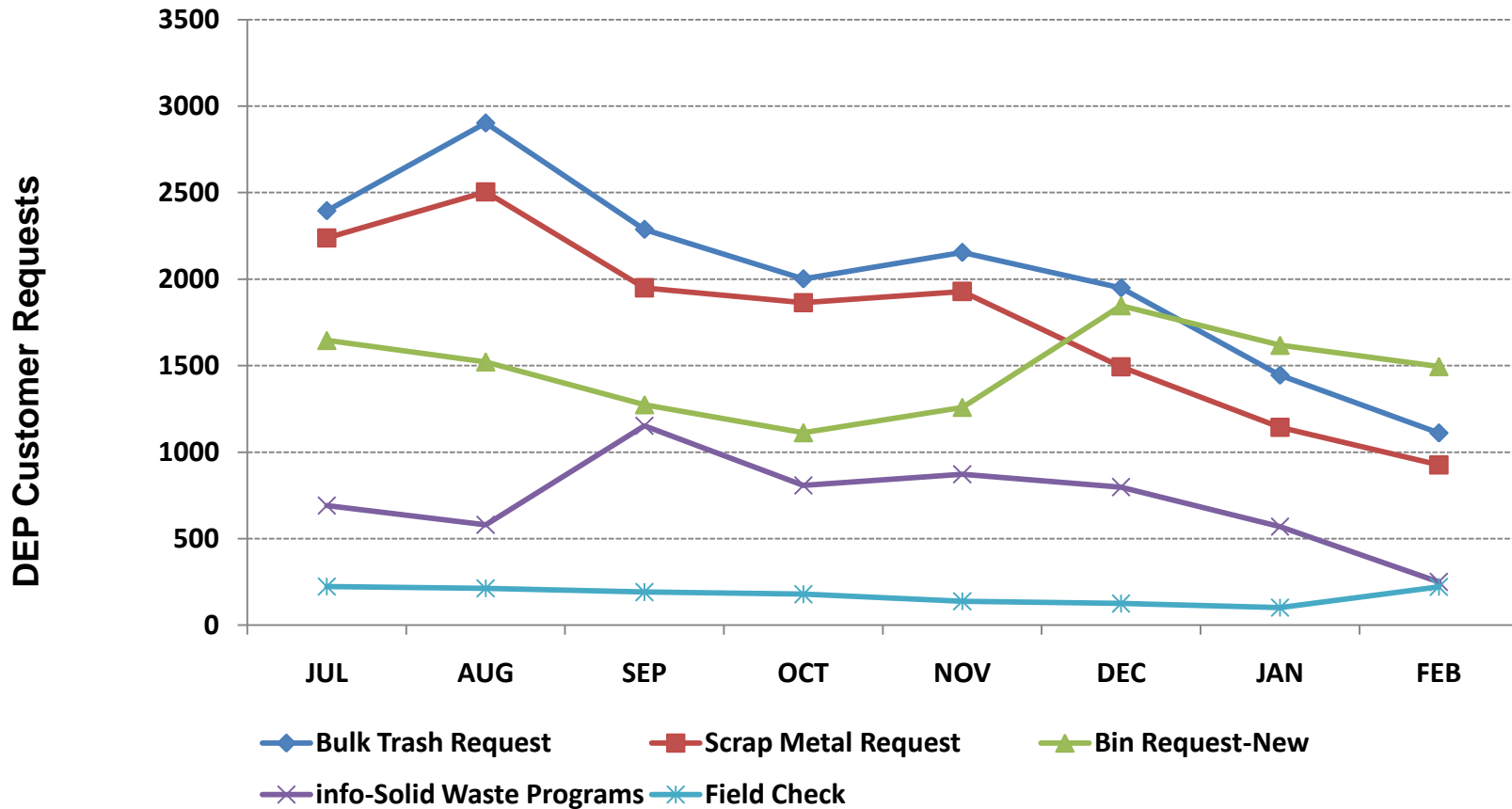
DEP feels that seasonal trends drive changes in bulk trash and scrap pickup requests.

Solid Waste Top 5 Sub Areas: Current and Future Processes

Bulk Trash and Scrap Metal Request

Current Process: MC311 intake via phone; service request received and reviewed for accuracy by DSWS staff. Service requests containing errors are returned to MC311 for correction; correction made and returned to DSWS. Contractor notified and service is scheduled for next collection day.

Tracking System: Siebel

Service Request Closure: Upon verification that collection is complete, Field Inspector closes service request. This is a new task for Inspectors. 13 Service Areas = 500 Service Requests for bulk trash each week.

Future Changes: Will test feasibility of online scheduling of bulk trash

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Bulk Trash Request	2,395	2,902	2,287	2,001	2,154	1,949	1,444	1,110	16,242
Scrap Metal Request	2,238	2,504	1,950	1,864	1,929	1,493	1,144	926	14,048

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Solid Waste Top 5 Sub Areas: Current and Future Processes

Recycling Bin/Cart/Can Request

Current Process: MC311 intake via phone; service request received and reviewed for accuracy by DSWS staff. Service requests containing errors are returned to MC311 for correction; correction made and returned to DSWS. Delivery is scheduled.

Tracking System: Siebel

Service Request Closure: Upon delivery of cart, can or bin, service request is closed by delivery personnel. 450 Service Requests for recycling containers are processed each week.

Future Changes: Look into feasibility of adding GPS mapping feature to produce maps and directions for delivery personnel. Will route deliveries, increase efficiency, and save time and fuel.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Bin Request-New	1,646	1,522	1,274	1,112	1,259	1,847	1,618	1,495	11,773
Cart Single Family	190	255	213	158	178	170	112	82	1,358
Cart Townhouse	213	225	194	186	174	173	82	62	1,309
Blue Can-New	53	36	25	6	25	26	35	44	250

Note: This data draws from the legacy system, which might not match exactly with DEP internal figures. With the retiring of the OSCAR system, there should be no discrepancies.

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Solid Waste Top 5 Sub Areas: Current and Future Processes

Info Solid Waste Programs

Current Process: MC311 intake via phone; service request received and closed by MC311.

Tracking System: Siebel

Service Request Closure: Upon conclusion of phone call at MC311.

Future Changes: Increased training of CSRs

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Info-Solid Waste Programs	691	580	1152	808	872	798	569	250	5,720

Note: This data draws from the legacy system, which might not match exactly with DEP internal figures. With the retiring of the OSCAR system, there should be no discrepancies.

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Solid Waste Top 5 Sub Areas: Current and Future Processes

Field Check/Complaint

Current Process: MC311 intake via phone; service request received and reviewed for accuracy by DSWS staff. Service requests containing errors are returned to MC311 for correction; correction made and returned to DSWS. DSWS dispatches via Nextel or the Field Inspector receives copy of SR, conducts inspection, customer contacted, service provided. Contractor notified and service is scheduled if needed.

Tracking System: Siebel

Service Request Closure: Field Inspector closes SR.

Future Changes:

1. Look into feasibility of adding GPS feature to produce maps and directions for field personnel. Will increase efficiency, and save time and fuel.

2. Hand held printers to produce Notice of Violations, Citations, and notices to customers from SRs. These are currently done by hand.

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
Field Check	223	213	191	179	138	125	101	221	1,391

Note: This data draws from the legacy system, which might not match exactly with DEP internal figures. With the retiring of the OSCAR system, there should be no discrepancies.

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Highlighting Macro-Level Data Reporting Challenges

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Macro-Level Data Reporting Challenges: Overview

- The replacement of the legacy OSCAR system with a fully integrated Siebel system has improved the quality of data from a macro-level view

- In other departments where there is not a fully-integrated Siebel solution, there remains questions over the accuracy of data contained in the MC311 Siebel system from a macro-level perspective
  - In particular, future development of departmental performance metrics that measure time to complete service will need to be thoroughly vetted to ensure accuracy

Two areas that are of great importance to macro-level analysis are geospatial data and time to complete a service request

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Macro-Level Data Reporting Challenges: Time to Close Service Request

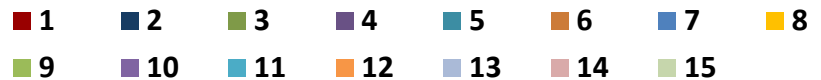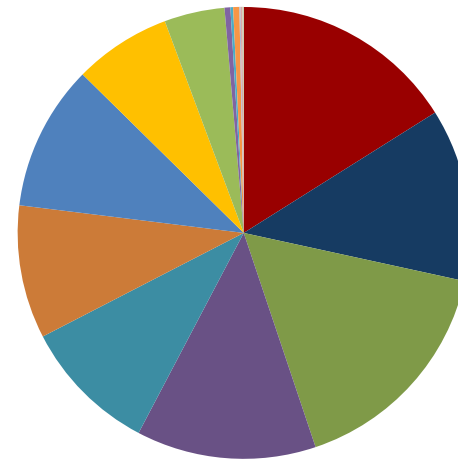According to historical Siebel data, 94% of DEP service requests are closed within one workday.
This is not accurate because before OSCAR replacement, requests were closed when entered into the Siebel system.

Historical Data:
94% Closed in One Day

Legend:
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11 to 29
- 30 to 45
- 45 +
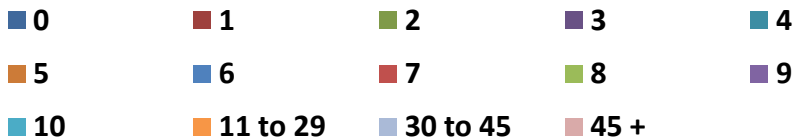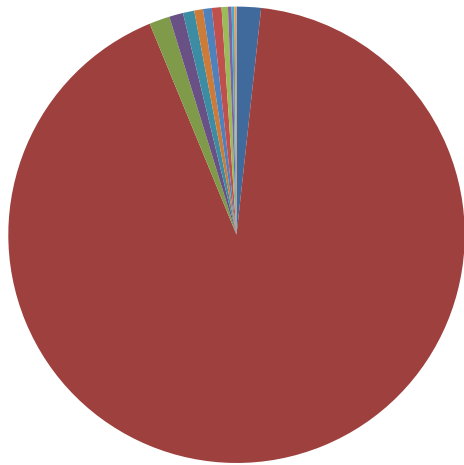
Net Workdays to Close SR

March Data:
16% Closed in One Day

Legend:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Net Workdays to Close SR

Note: These figures are currently calculated manually as the County does not have a data reporting solution in place to provide this information on an ongoing basis

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Macro-Level Data Reporting Challenges: Service Request Coding of Montgomery County Solid Waste Service Areas

- Accurate geospatial data is essential for making high-level policy and resource decisions

- Coding at an aggregate intermediate level as opposed to individual addresses is essential for conducting macro-level analysis

- The percentage of service requests not coded with a solid waste service area in the Siebel systems has improved since full integration in February
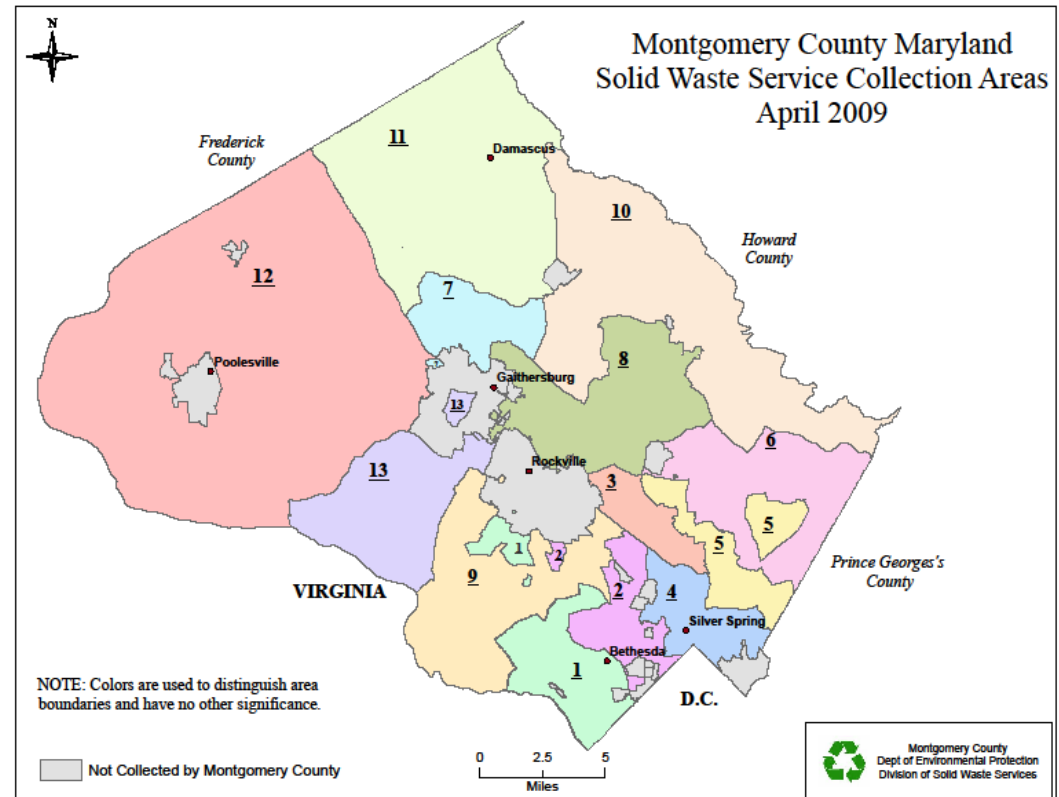
Solid Waste Service Areas

Macro-Level Data Reporting Challenges: Solid Waste Service Requests by Service Areas

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Total
(blank)	1,374	1580	1556	1106	1371	1329	933	392	9,641
5	978	1117	1101	1017	1167	974	718	643	7,715
1	1,099	1141	955	835	889	841	709	702	7,171
4	970	1137	843	784	720	629	557	562	6,202
3	861	922	750	722	709	671	581	550	5,766
2	661	772	650	625	563	562	408	446	4,687
6	461	503	417	344	375	403	314	295	3,112
8	385	381	328	289	267	381	320	298	2,649
11	366	295	219	221	213	275	219	227	2,035
12	291	289	229	234	248	288	208	185	1,972
7	314	241	270	171	203	245	186	181	1,811
9	207	232	207	196	189	212	156	168	1,567
13	173	161	134	89	129	142	114	95	1,037
10	112	100	86	56	51	71	67	62	605

Prior to Siebel OSCAR replacement, 18% of DEP customer requests for solid waste related service fulfillment are not coded with a Solid Waste Service Area. Since replacement only 3% are not coded

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Wrap-Up and Follow-Up Items

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