Mayor Muriel Bowser

City Administrator Rashad M. Young

CapSTAT

EMS Reform

FEMS • OUC • MPD • DOH • DHCF

Office of Performance Management

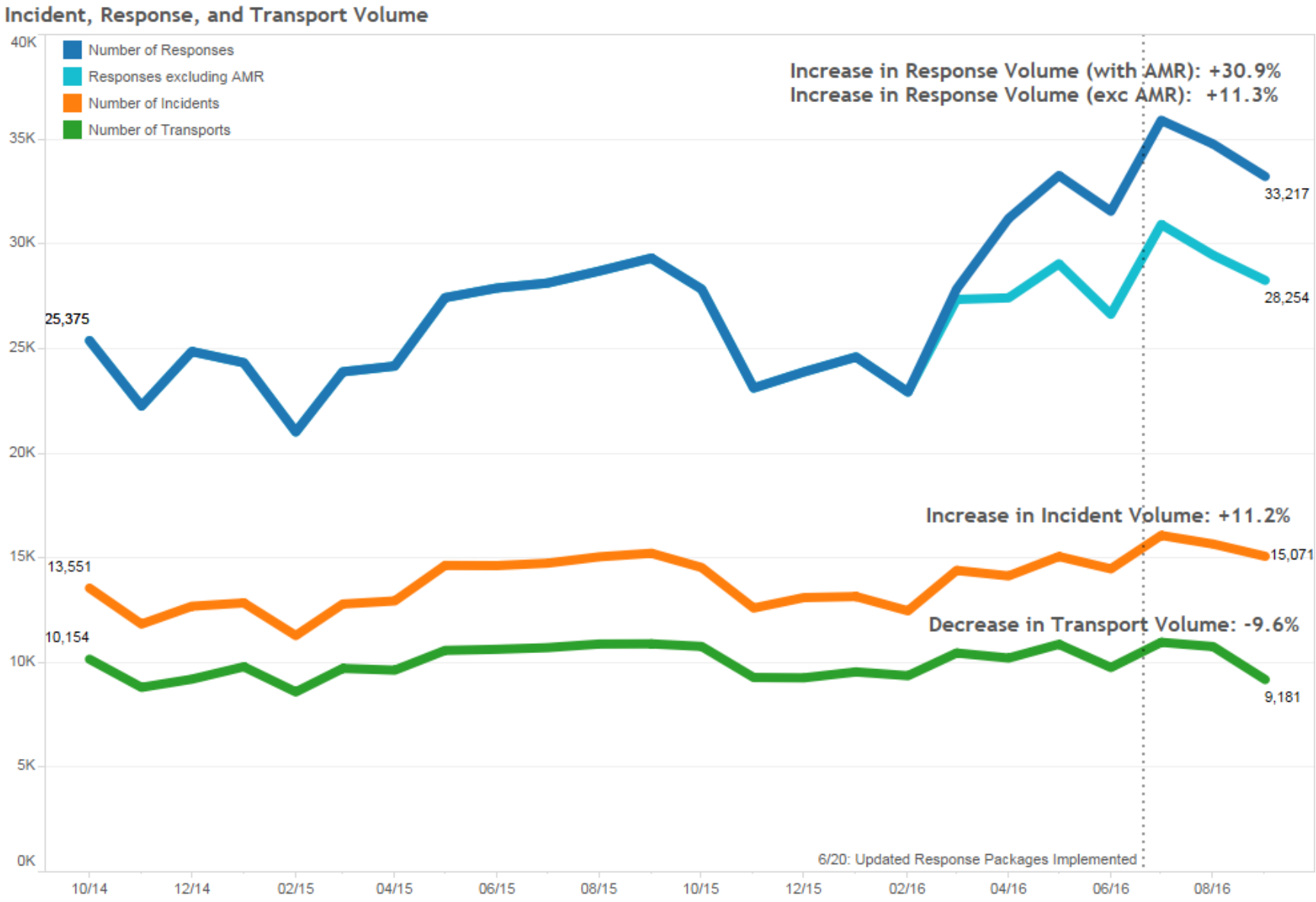
October 4, 2016

Agenda

1. Overview of EMS Reform
2. Strategies
    1. Improve dispatch performance and emergency medical services call-taking times
    2. Reduce Demand for EMS by Individuals with non-Emergency Medical Needs
    3. Enhance provider quality through research, training and continuous improvement
    4. Build and maintain a sustainable emergency medical services fleet
    5. Increase district resident and visitor knowledge about life saving EMS techniques
3. Recommendations wrap up

EMS Incident Volume, Response Volume, Transport Volume

Note: DC has the 8th highest call volume in the country, but is the 24th largest city in the US.



Call Priorities

E is most critical call
D and C calls are generally high priority
A and B are lower priority
O is lowest priority

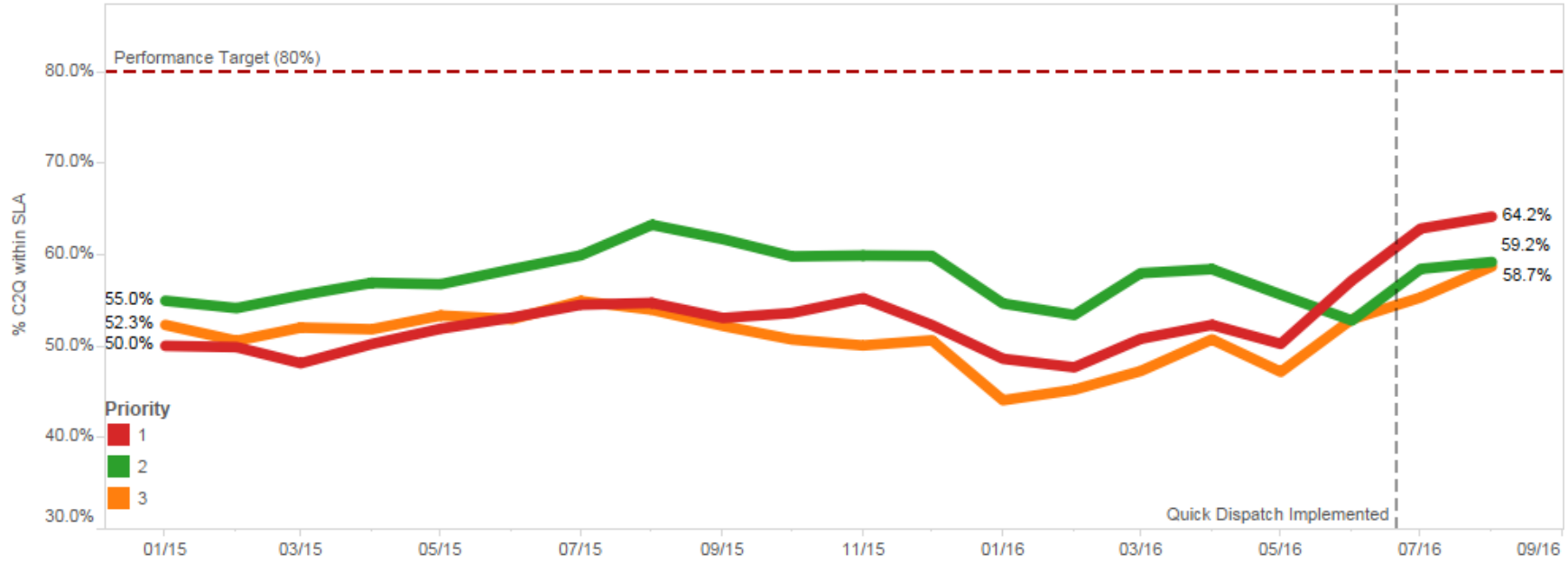
E	D	C	B	A	O
0.94%	28.06%	22.46%	24.17%	23.41%	0.96%

Improve dispatch performance and emergency medical services call-taking times

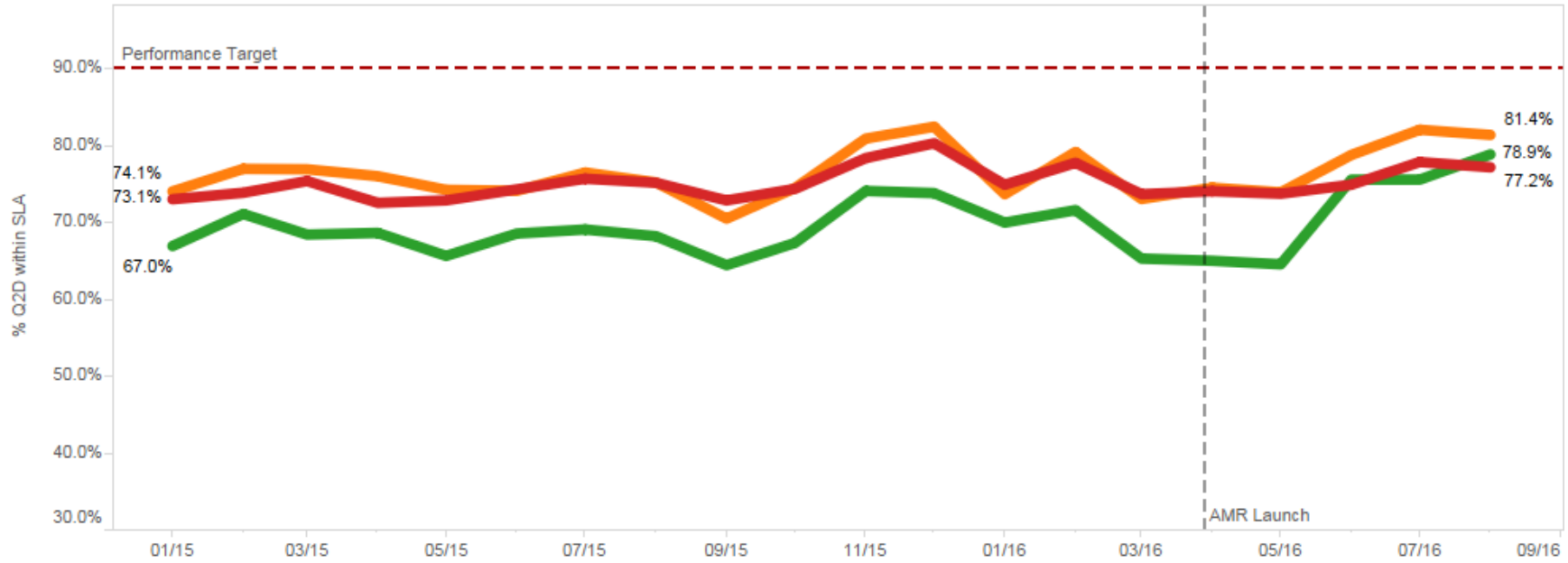
Call to Dispatch Times Breakdown

January 1, 2015 – September 26, 2016

C2Q Over Time (90 Seconds)



Q2D Over Time (60 Seconds)

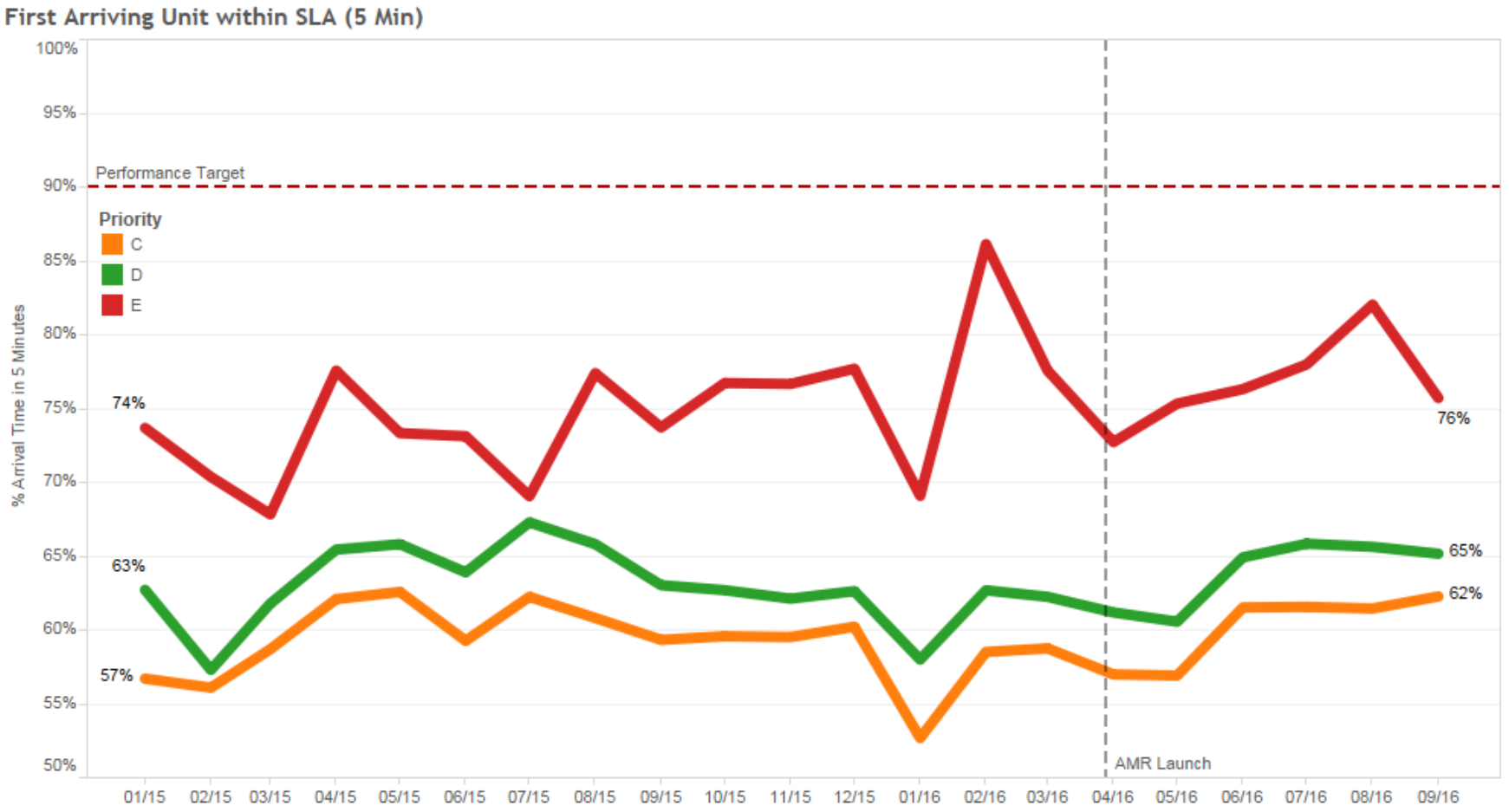


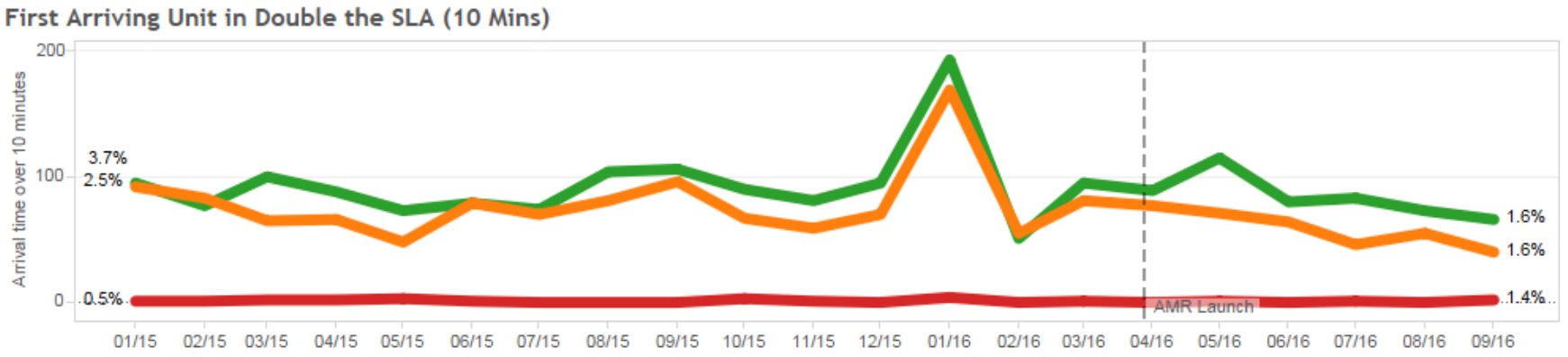
First Arriving Unit within SLA

January 1, 2015 – September 26, 2016

Echo calls are most severe

Delta and Charlie are both critical calls





First Arriving Paramedic within SLA

January 1, 2015 – September 26, 2016

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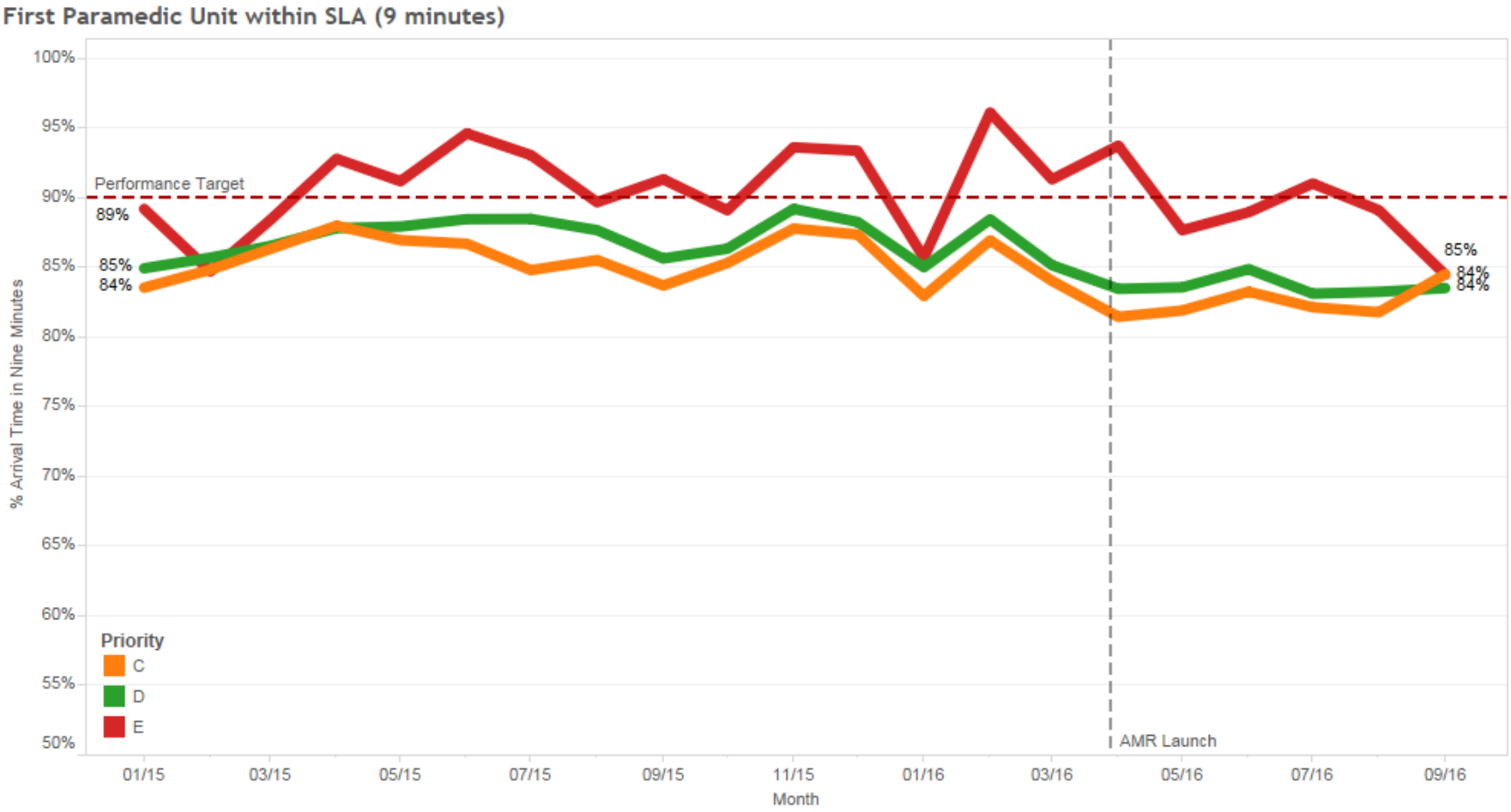
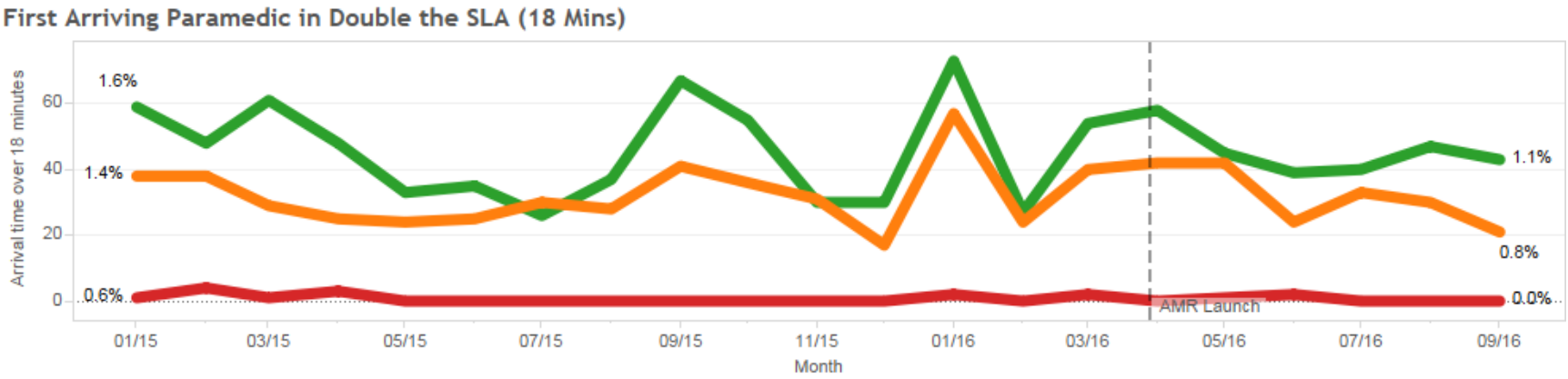
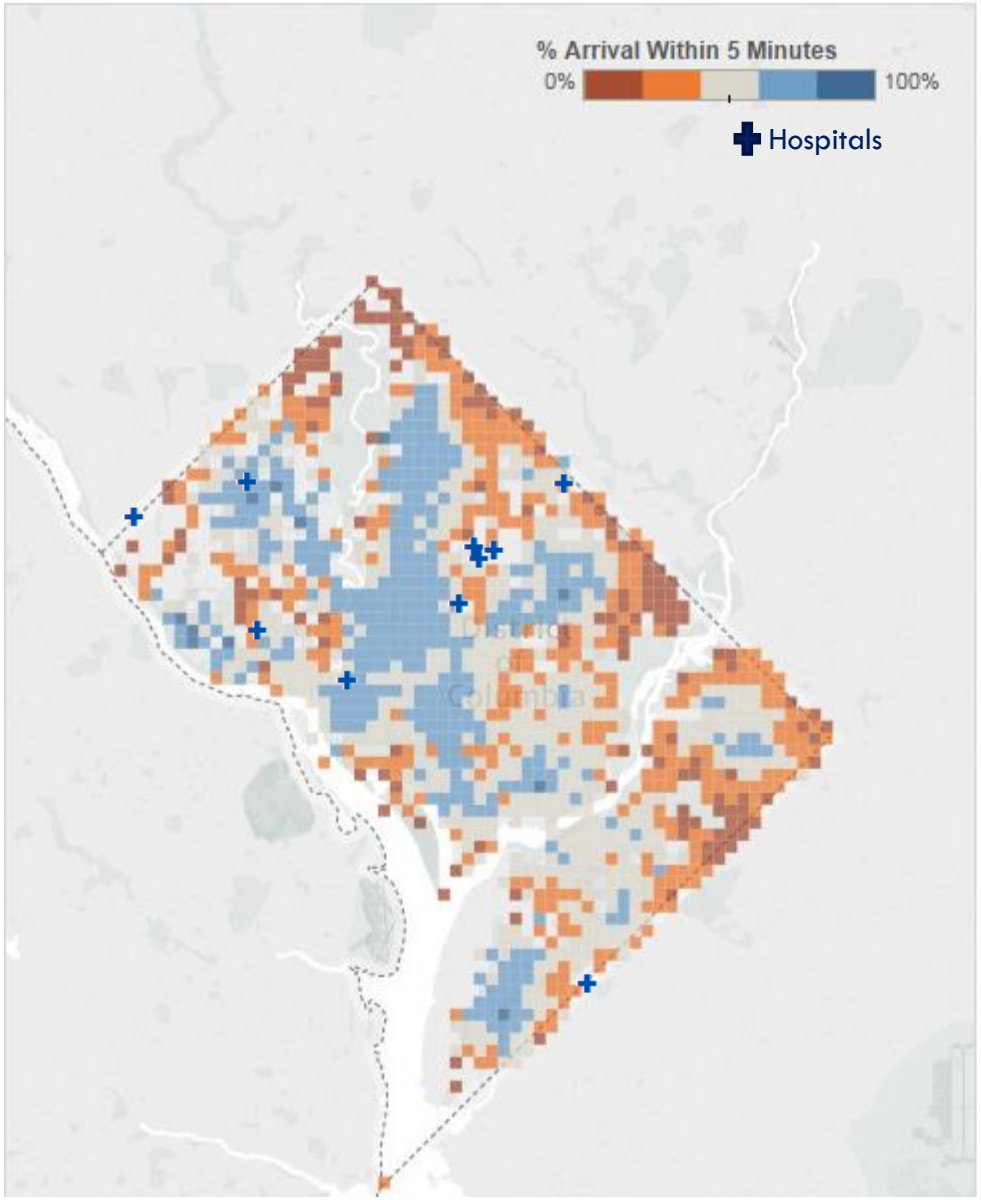
Delta and Charlie are both critical calls



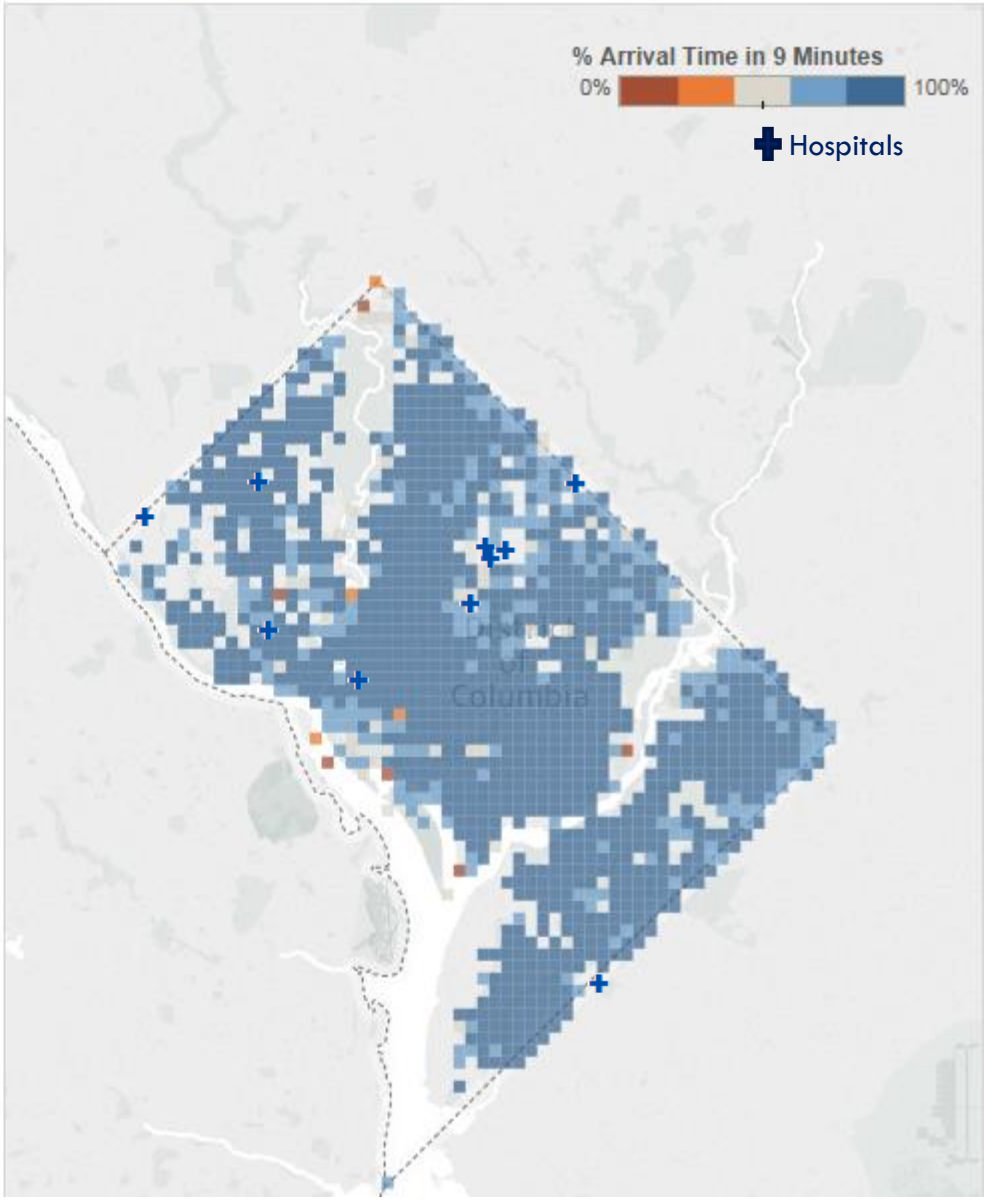


Percent of Time Units Arrive within SLA

First Arriving Unit 10/1/2014-8/13/2016

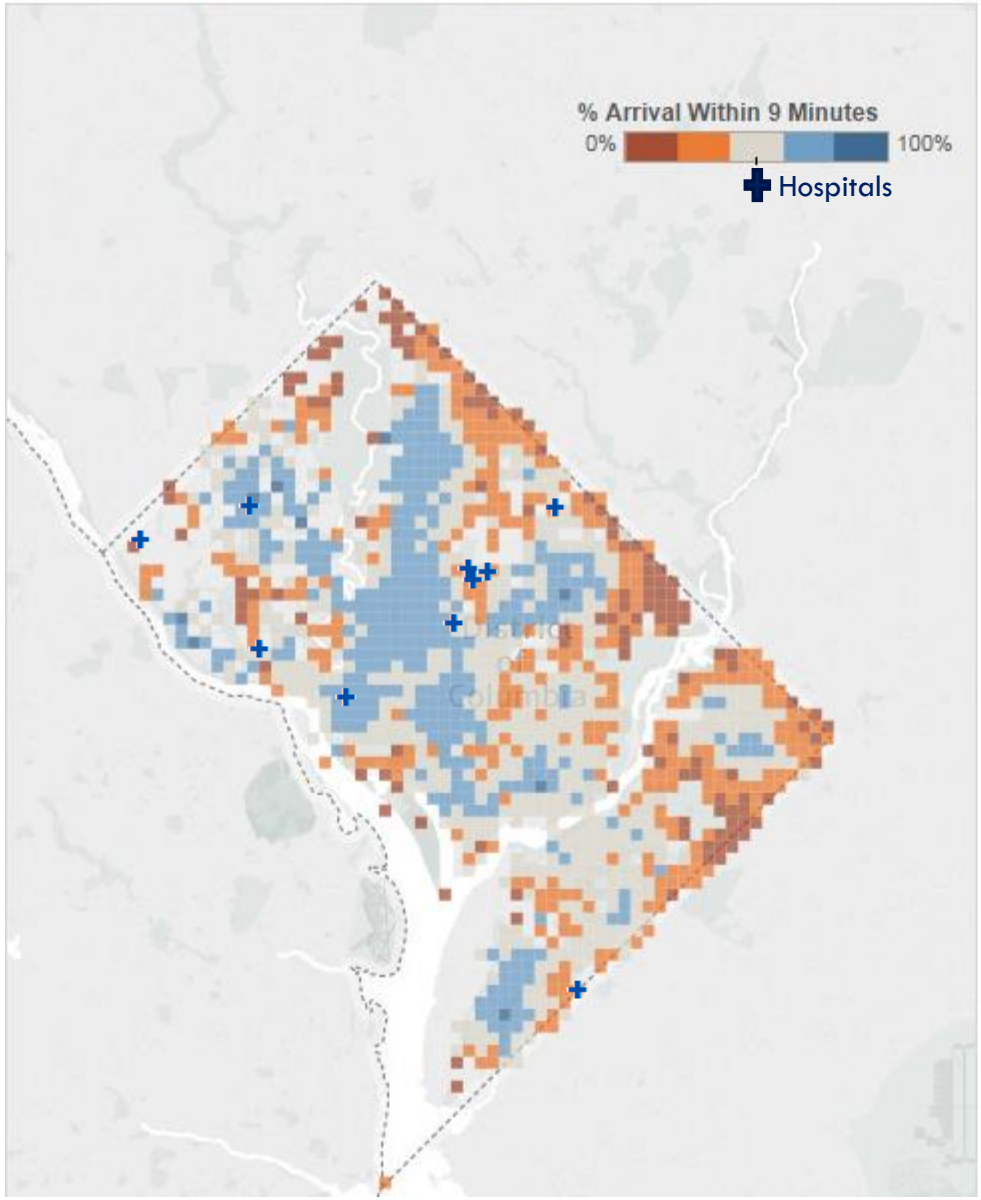


First Arriving Paramedic 10/1/2014-8/31/2016

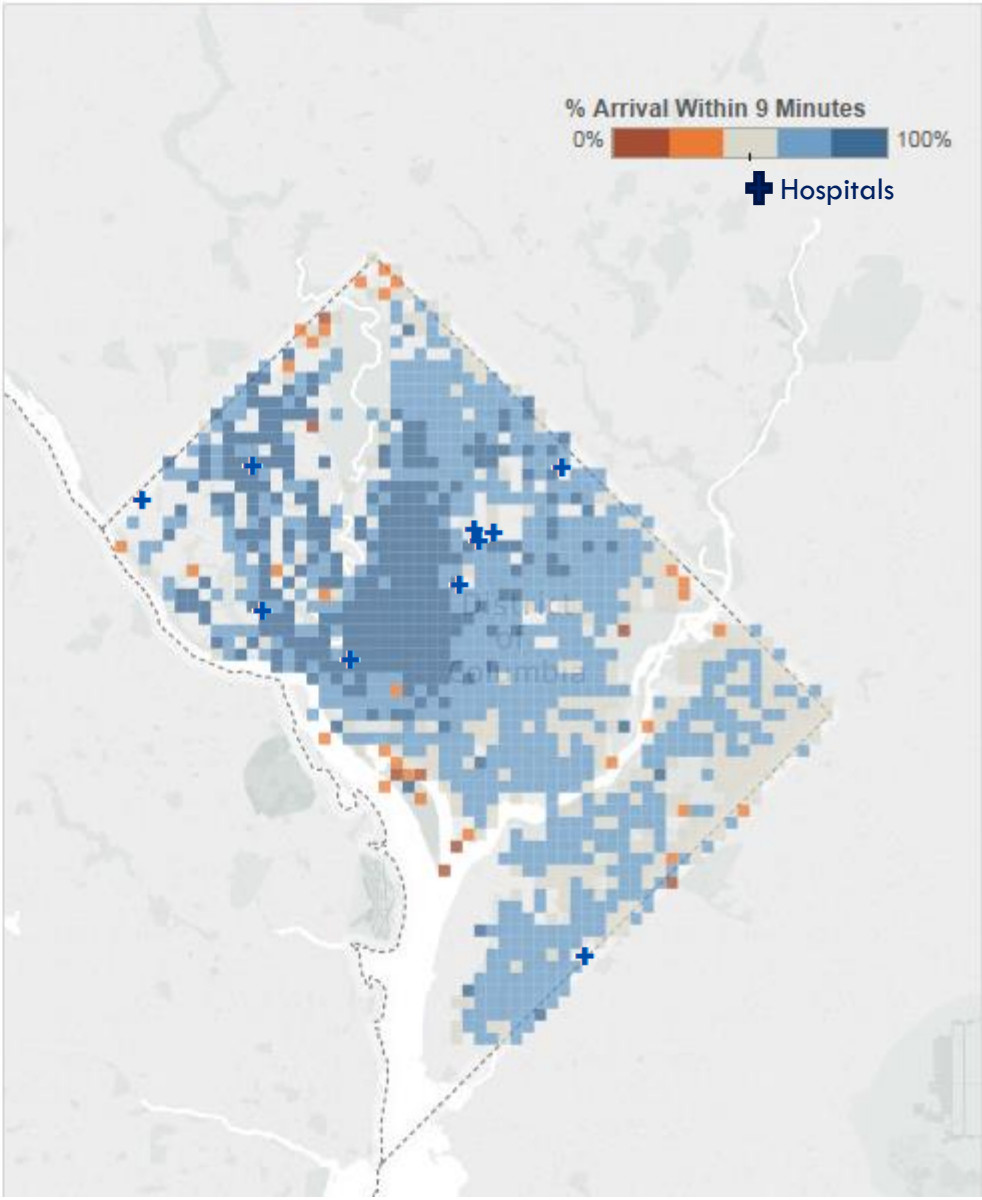


Percent of Time the First Arriving Transport Unit Arrives within SLA – Pre and Post AMR

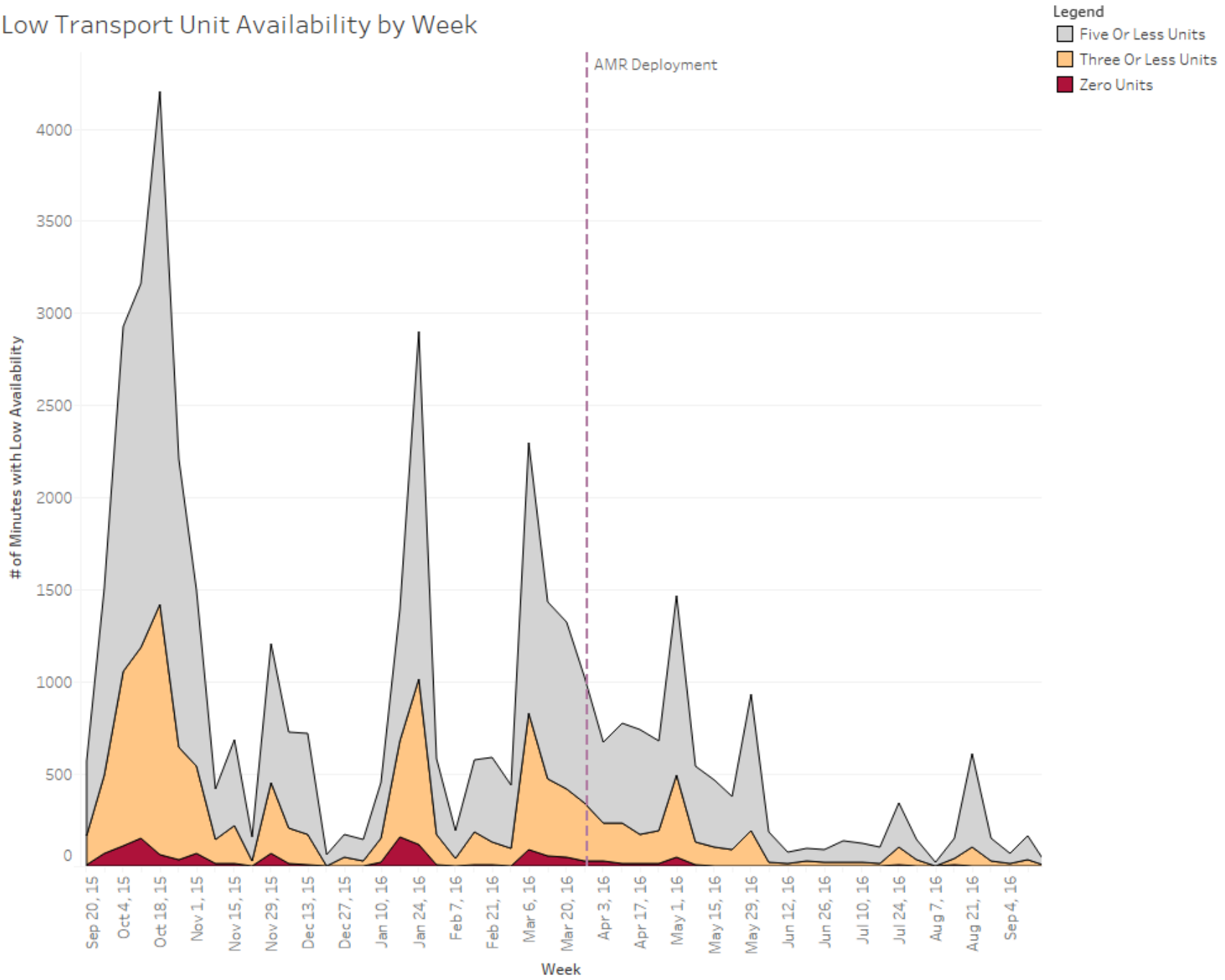
First Arriving Transport Unit map (April 1- August 31, 2015)



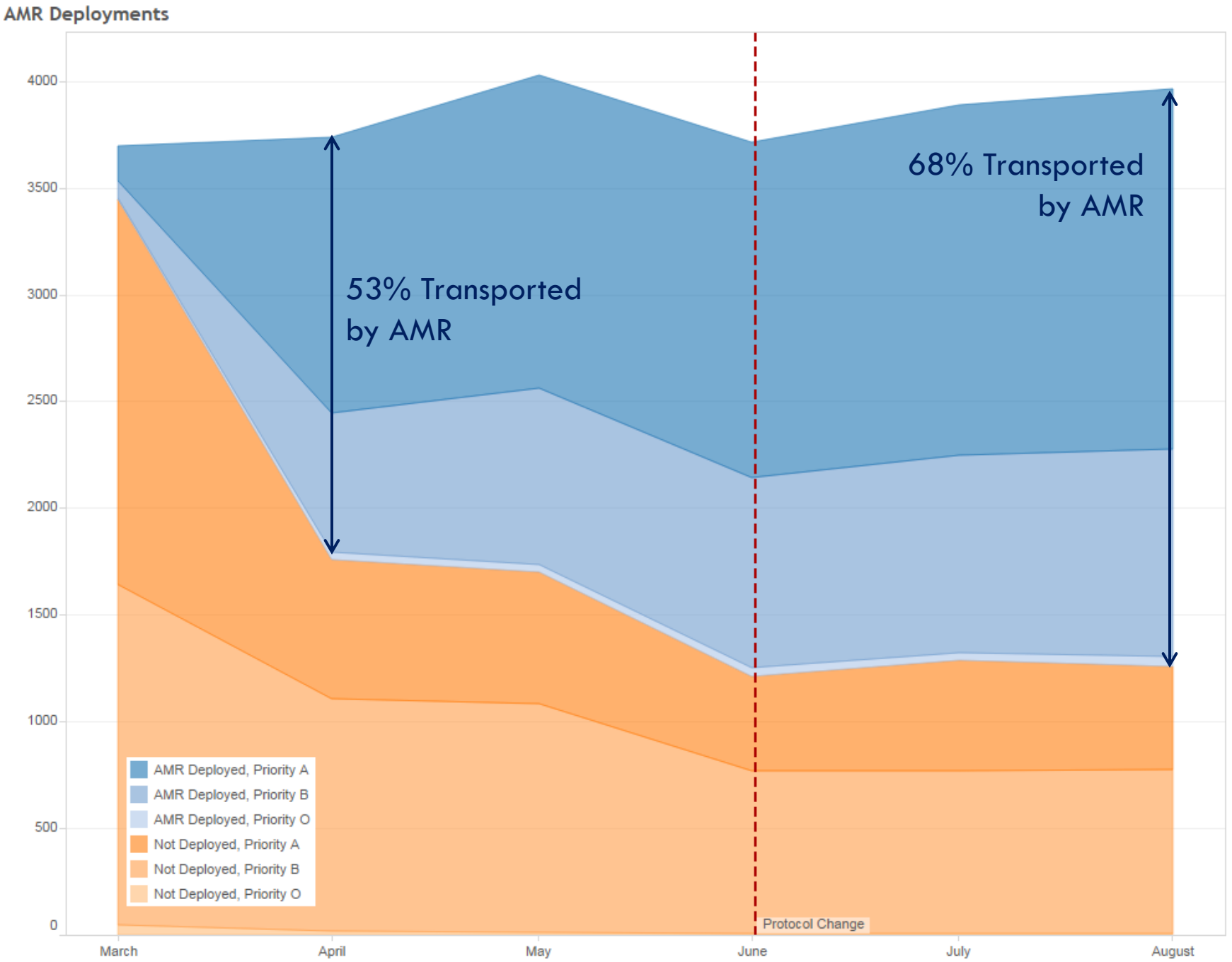
First Arriving Transport Unit (April 1- August 31, 2016)



Unit Availability

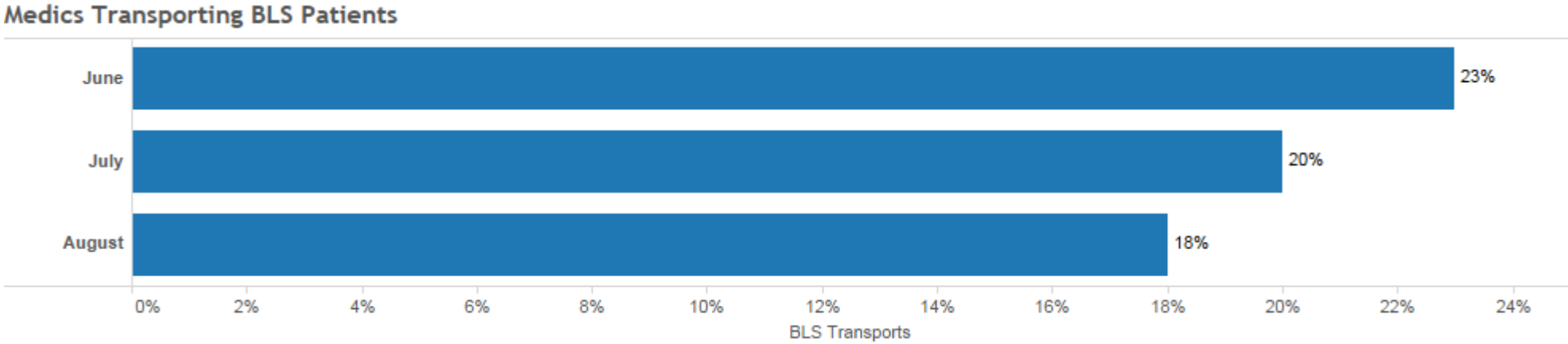


AMR Transports



Preserving ALS Resources for ALS Patients

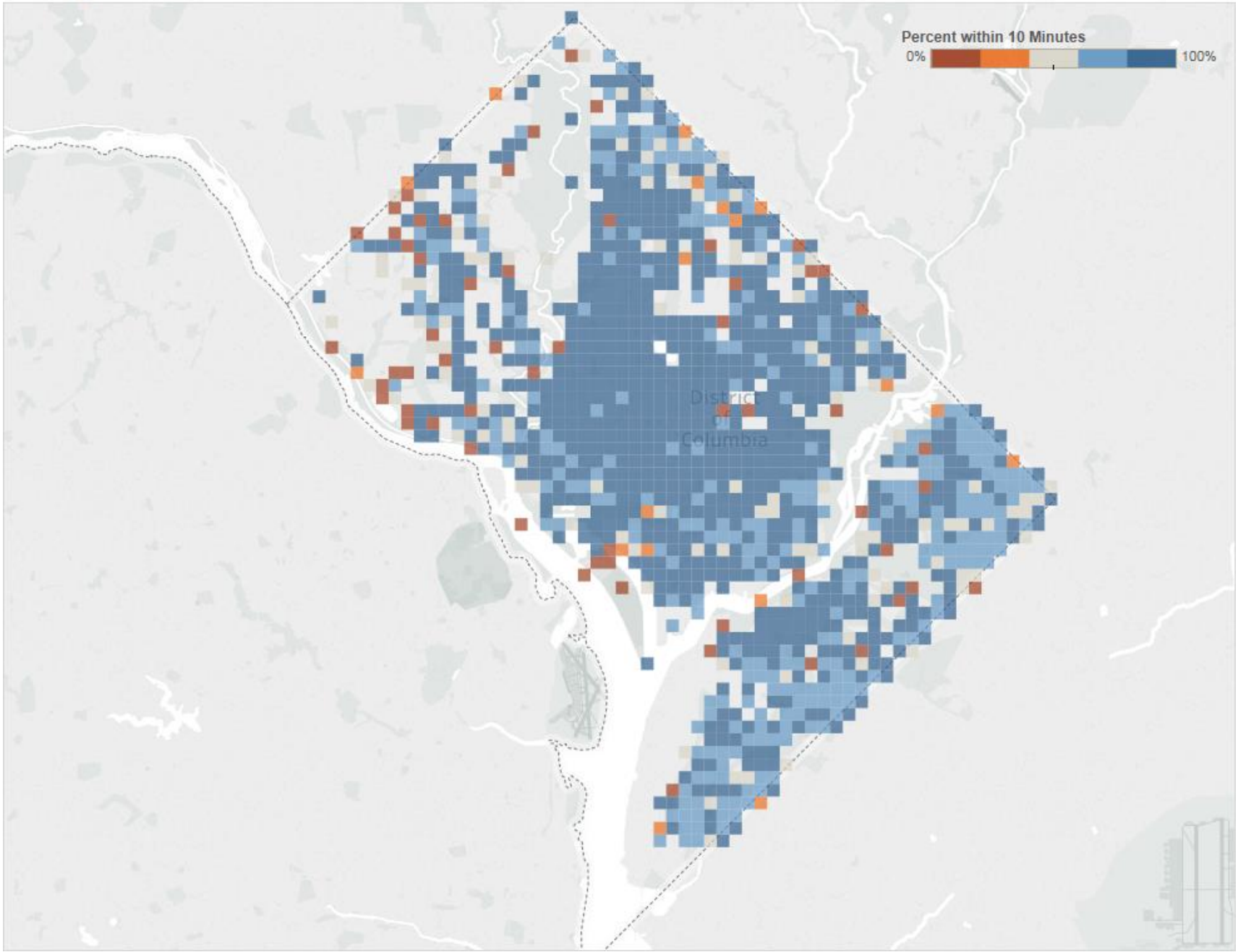
FEMS did an analysis of billing data to see when **medic units are transporting patients but not providing any ALS interventions**



EMS needs to work internally and with OUC to ensure that ALS resources are being utilized appropriately for ALS patients.

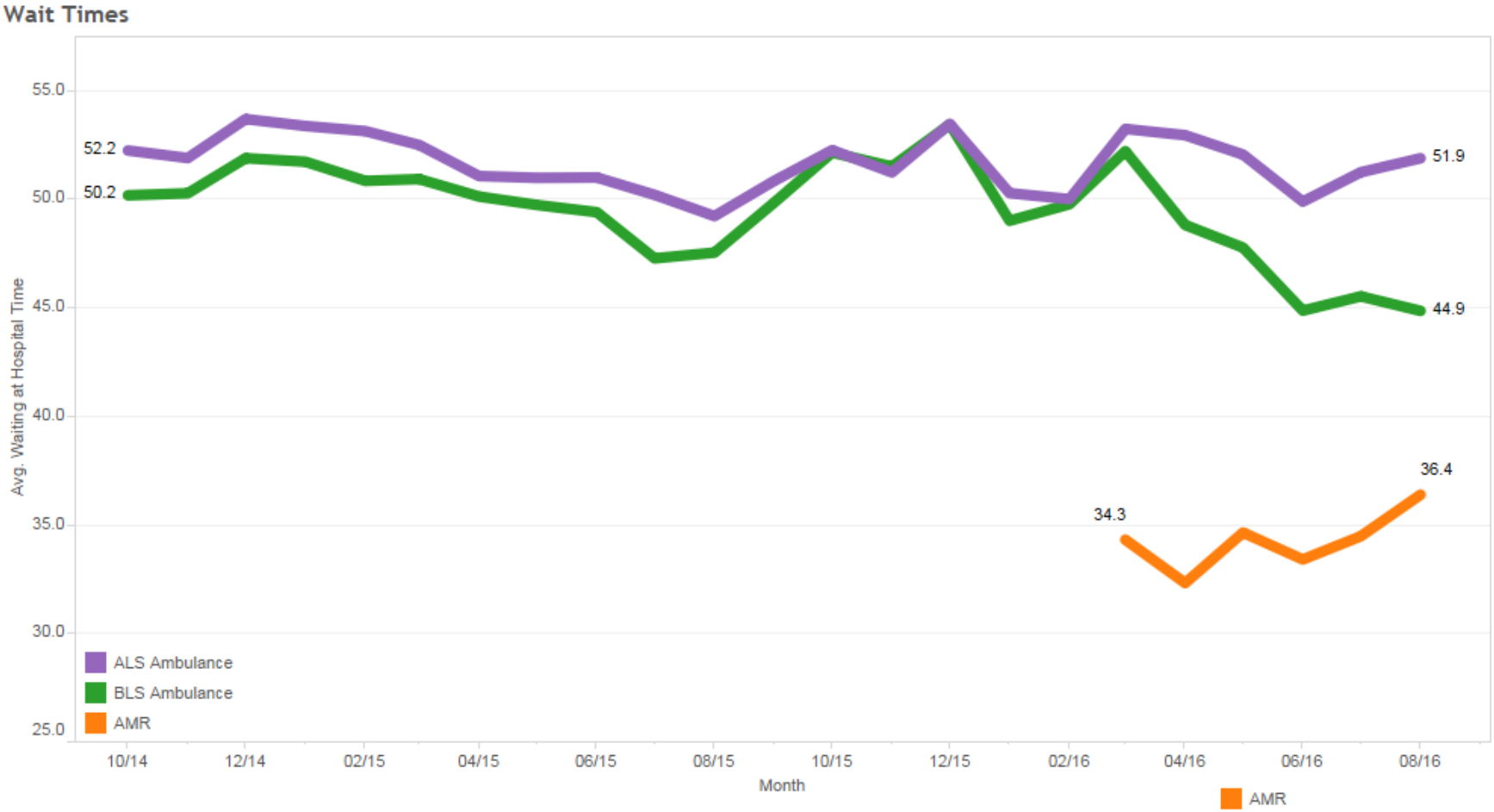
Percent of time AMR Units arrive within SLA (by SMD)

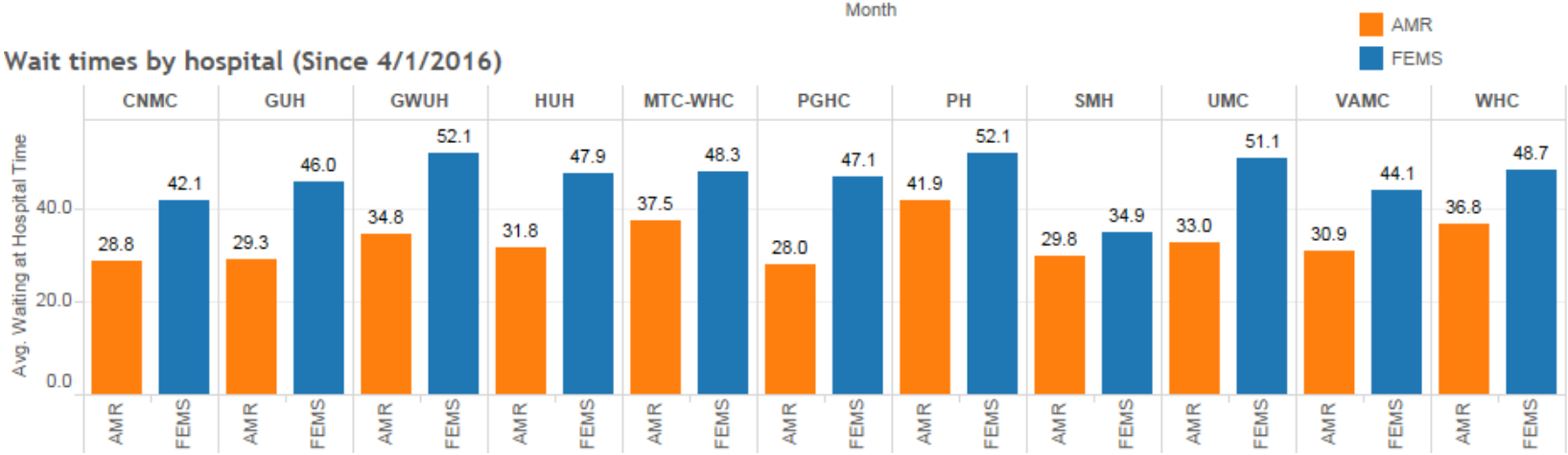
AMR Response Times within 10 Minutes Map



Hospital Drop Times

Average excludes records where the wait time was less than 0 minutes or greater than 2 hours, as it was assumed to be a data error. Approximately 1,500 records weren't included.





Challenges and Recommendations

Challenges

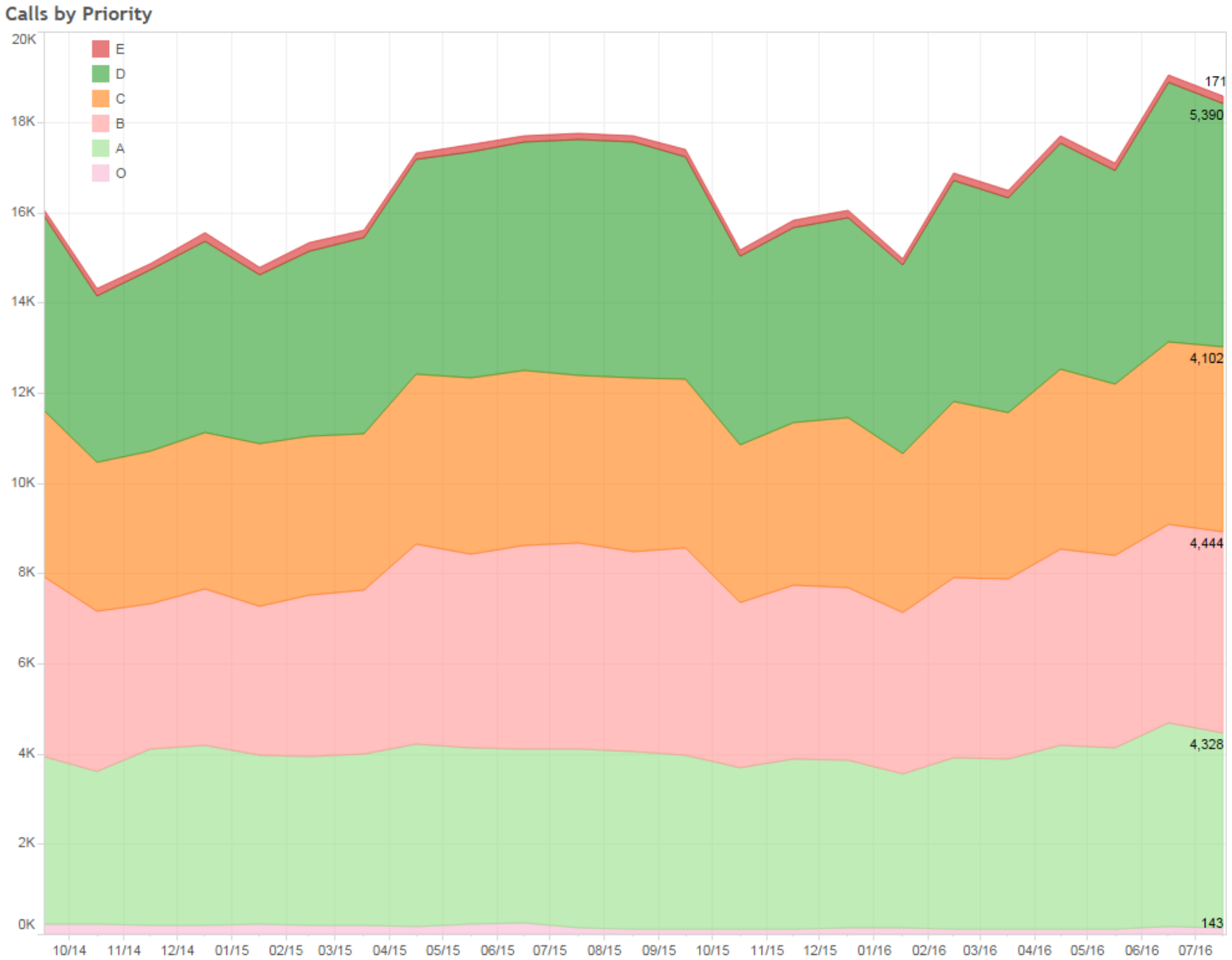
- Meeting SLAs for Call Queuing and Dispatch
- AMR has had a positive impact on transport unit arrival times, but still not meeting SLAs for first arriving unit, first arriving transport unit, and first arriving paramedic
- ALS providers are providing service to too many BLS patients, taxing resources
- Incident and response volume continue to rise
- FEMS drop time at hospitals remains consistently high
- AMR performance based contract was developed based on a lower number of anticipated calls

Recommendations

Completed	Future
Call taker working group is meeting regularly to streamline the process of recording a 911 call and sending it to dispatch	Continue work with call takers and dispatchers working group to ensure calls are dispatched quickly and accurately
OUC and FEMS worked on the response packages for lower priority calls, and adjusted in mid June	1. Keep working through dispatch packages so the right resources are sent to the right calls, with a focus on "Charlie" packages 2. Do an analysis to determine why ALS providers may be transporting BLS patients; develop strategies to reduce BLS workload of ALS providers
FEMS is tracking AMR arrival times, but not currently penalizing AMR for not meeting the performance measures.	Develop ways to enforce performance based contract during times of increased call volume in updated contract
	FEMS and OCA to monitor and report on progress toward meeting SLAs for first unit on scene (90% in 5 minutes); and SLAs for first arriving paramedic and first arriving transport unit (90% within 9 minutes)
	Hire additional paramedics to be able to improve response times
	FEMS to work with emergency medical providers to understand why hospital drop times are high and develop strategies to lower drop times

Reduce Demand for EMS by Individuals with non-Emergency Medical Needs

Breakdown of Call Priorities



52% of calls are priority level: Charlie, Delta, Echo

48% of calls are priority level: Alpha, Bravo, Omega

Integrated Healthcare Collaborative (IHC)

An effort to reduce demand among these low acuity 911 callers who comprise **48%** of all EMS calls to:

- Reduce overtaxed EMS call volume
- Reduce ED overcrowding
- Get the callers to more appropriate medical care
- Save millions in unnecessary emergency health care spending.

Subcommittees

- Nurse Triage Line
- Alternate Transport
- Connection to Care
- Communication & Marketing
- Policy

Goal to review recommendations and prioritize next steps

Nurse Triage Line (housed at OUC)

Goal: 911 dispatchers screen and connect lower acuity patients to nurse triage line for evaluation

- Nurses evaluate patients, connecting them to appropriate care.

Next Steps:

- Determine best operational infrastructure/home for program
- Identify budget, funding and timeline for program: development, pilot and fully operational phases

Alternate Transport

Goal: Alternative non-EMS transportation for low acuity patients

- Currently, infrastructure exists for patients through 4 major insurance carriers but is under-utilized and does not provide same-day transport

Next Steps:

- Leverage existing services to relieve pressure on EMS and educate patient population about existing services
- Consider development of transport service system that covers gaps in existing system (same day, 24 hr)

Connection to Care

Goal:

(1) connect low acuity patients diverted by the nurse triage line to appropriate level of care

(2) compile a working list of primary care sites

- Estimated that there could be ~200 patients diverted to the clinic system daily.
- The committee determined that 18 sites have the capacity to handle these referred patients.

Communications and Marketing

Goal: Develop educational campaign on alternatives to 911 and Emergency Department use:

- Phase I will cover:
  - where to go for care
  - emergency vs. urgent care
  - importance of a primary care physician and continuity of care
- Phase II will promote:
  - transportation alternatives
  - comprehensive primary care sites
  - nurse triage line

Need to examine existing District government communications resources to fund this effort

Policy Subcommittee

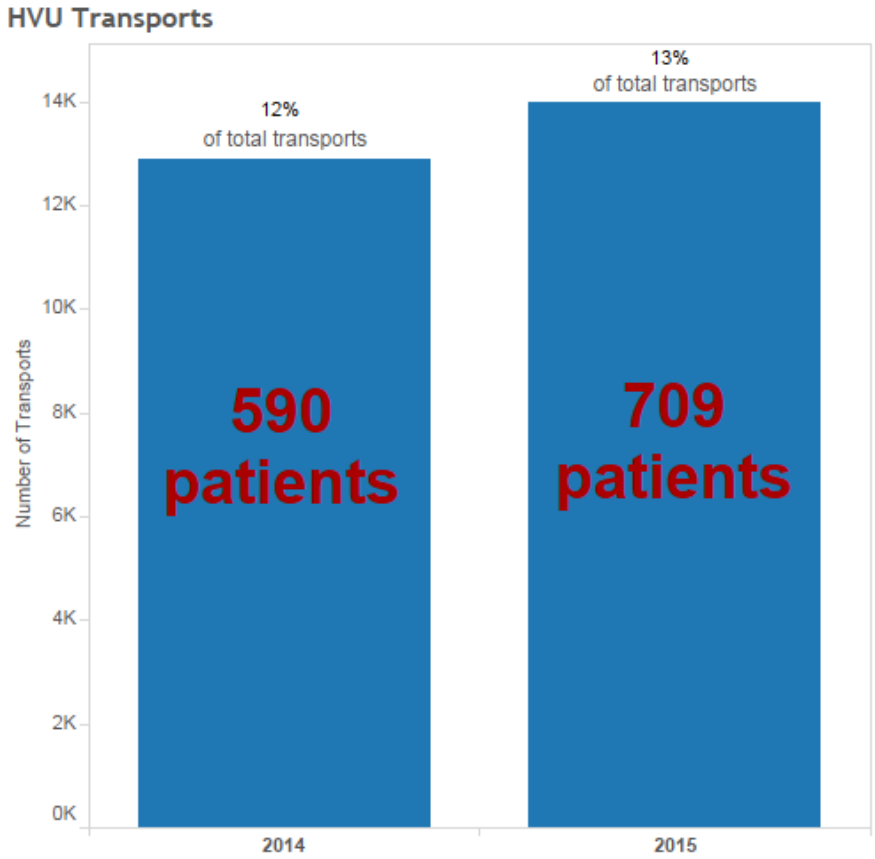
Goal: examine current policies that enable or inhibit goals of IHC

Recommendations:

- Revise the DC Fire and EMS Patient Bill of Rights to remove language that guarantees transport to patients, regardless of medical need.
- Develop a method of reimbursement for assessment and/or treatment for EMS in the field.
- Require Managed Care Organizations to accommodate request from members to access same day care from providers who are not their primary care provider of record. This is currently a barrier to being cared for by a provider other than the PCP.
- The DOH should clarify the definition of urgent care in the Certificate of Need process.

High Volume Utilizers (HVU)

HVU's are patients transported 10 or more times in one year



Majority over 50
60% male
62% experience severe mental illness
67% are Medicaid beneficiaries

The HVU's with Medicaid Managed Care were referred to the MCO's for case management in 2016.

Challenges and Recommendations

Challenges

- Low acuity calls comprise 48% of current EMS call volume; these patients are better served with care in a comprehensive primary care setting.
- High volume utilizers of EMS are 12.6% of calls and have complex medical needs.
- FEMS needs support prioritizing and implementing the recommendations from the IHC

Recommendations

Completed	Future
Integrated Healthcare Collaborative developed a set of recommendations to reduce low acuity 911 calls and transports	Work with FEMS to identify the top supported IHC recommendations, budget and implementation timelines
AMR deployed to handle lower acuity patient transports.	Revisit strategy for High Volume Utilizers to check in on progress after 6 months of DHCF performance based contract is in place

Build and maintain a sustainable emergency medical services fleet

Fleet purchase schedule

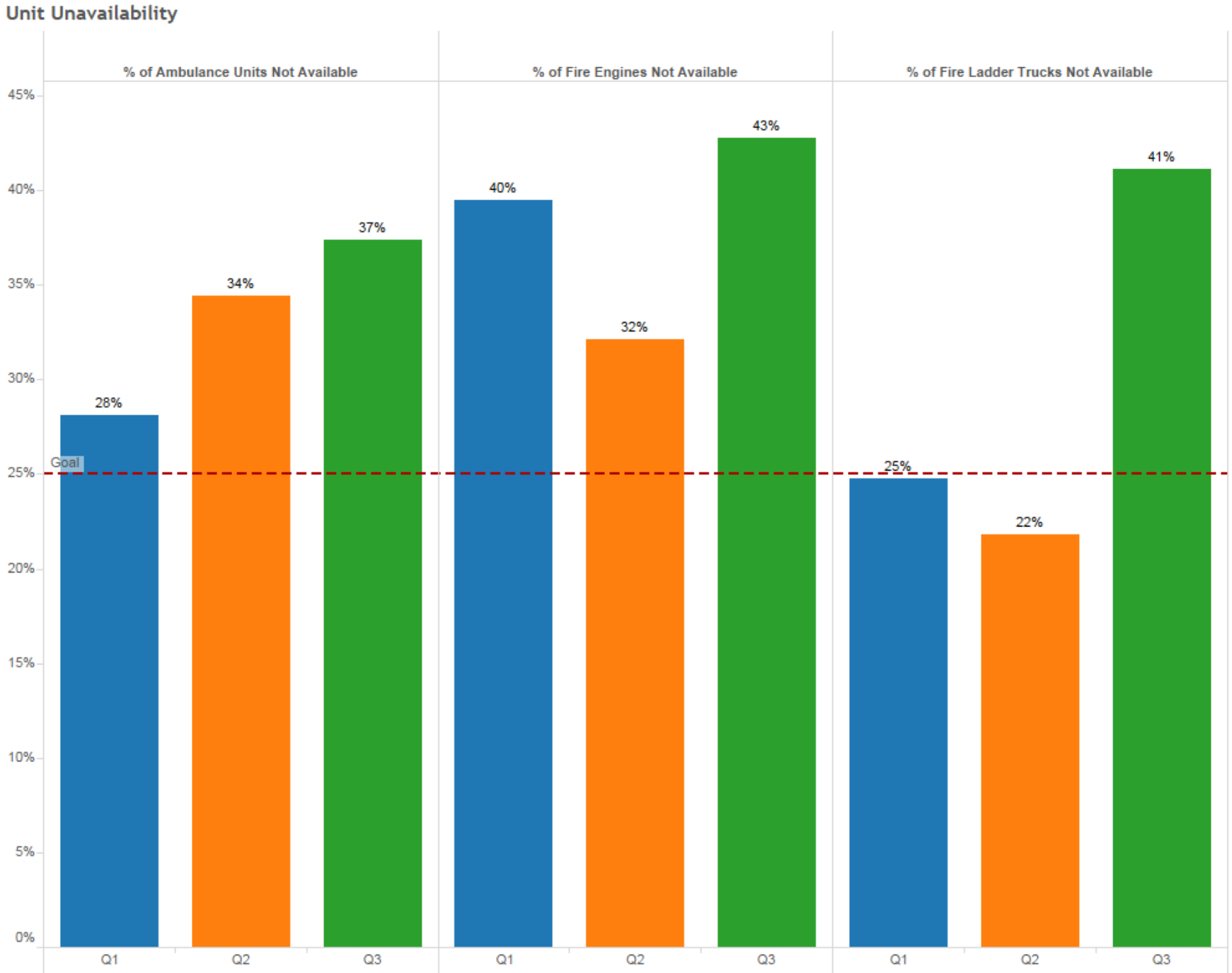
In FY16, FEMS put on the streets new or refurbished

- 6 ladder trucks
- 16 ambulances
- 6 supervisor vehicles.

In FY17, FEMS has budgeted $15M for 31 new vehicles

- 6 engines (regular fire trucks)
- 3 trucks (ladder trucks)
- 1 rescue squad
- 16 ambulances
- 5 command vehicles (SUVs)

Maintenance on FEMS Vehicles

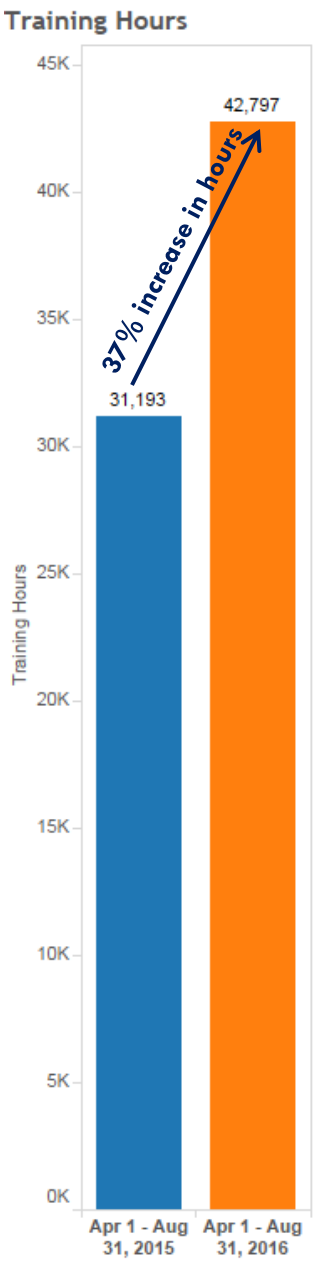


Challenges and Recommendations

Challenges	
FEMS would like to increase the frequency of preventative maintenance	
Recommendations	
Completed	**Future**
	Build up fire apparatus and a reserve of engines and fire trucks
	Develop strategy to increase frequency of preventative maintenance at lower volume times

Enhance provider quality through research, training and continuous improvement

EMS Training pre and post AMR



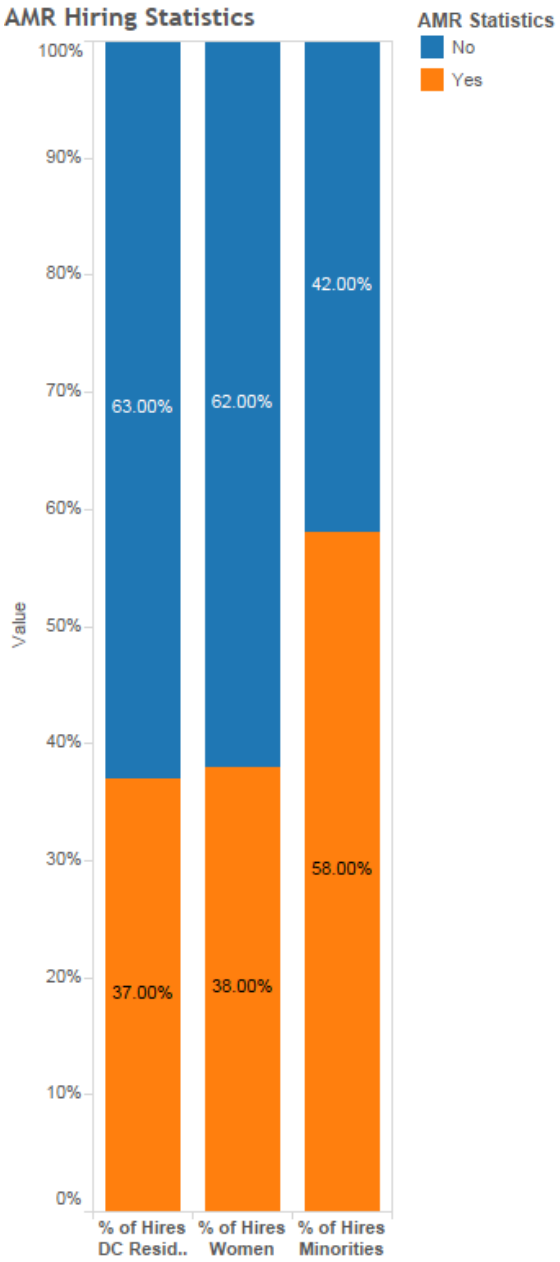
Training goals: ALS Providers:

- Training Academy
- Partnerships with institutions, i.e. Howard (Enhanced Trauma training conducted in Sept) and Childrens' (peds triage and asthma in planning stages)
- Battalion level delivered by EMS supervisor
- Company level – focused on case review and high quality CPR

Training Goals: BLS providers:

- Training academy (March 2016 to present):
  - Trauma and excited delirium
  - Cardiac and Respiratory refreshers
- Battalion level delivered by EMS supervisor
- Company level - focused on case review and high quality CPR

AMR: Hiring and Training



Hired 280 new employees since February 2016

- 95 Employment Separations (voluntary and involuntary)

AMR working with DOES to receive licensing to train EMTs in the District

- Plan to train District residents as EMTs free of charge, with an 18 month contract to work with AMR

AMR has had some hiring challenges due their temporary contract, and inability to promise long term positions

Challenges and Recommendations

Challenges

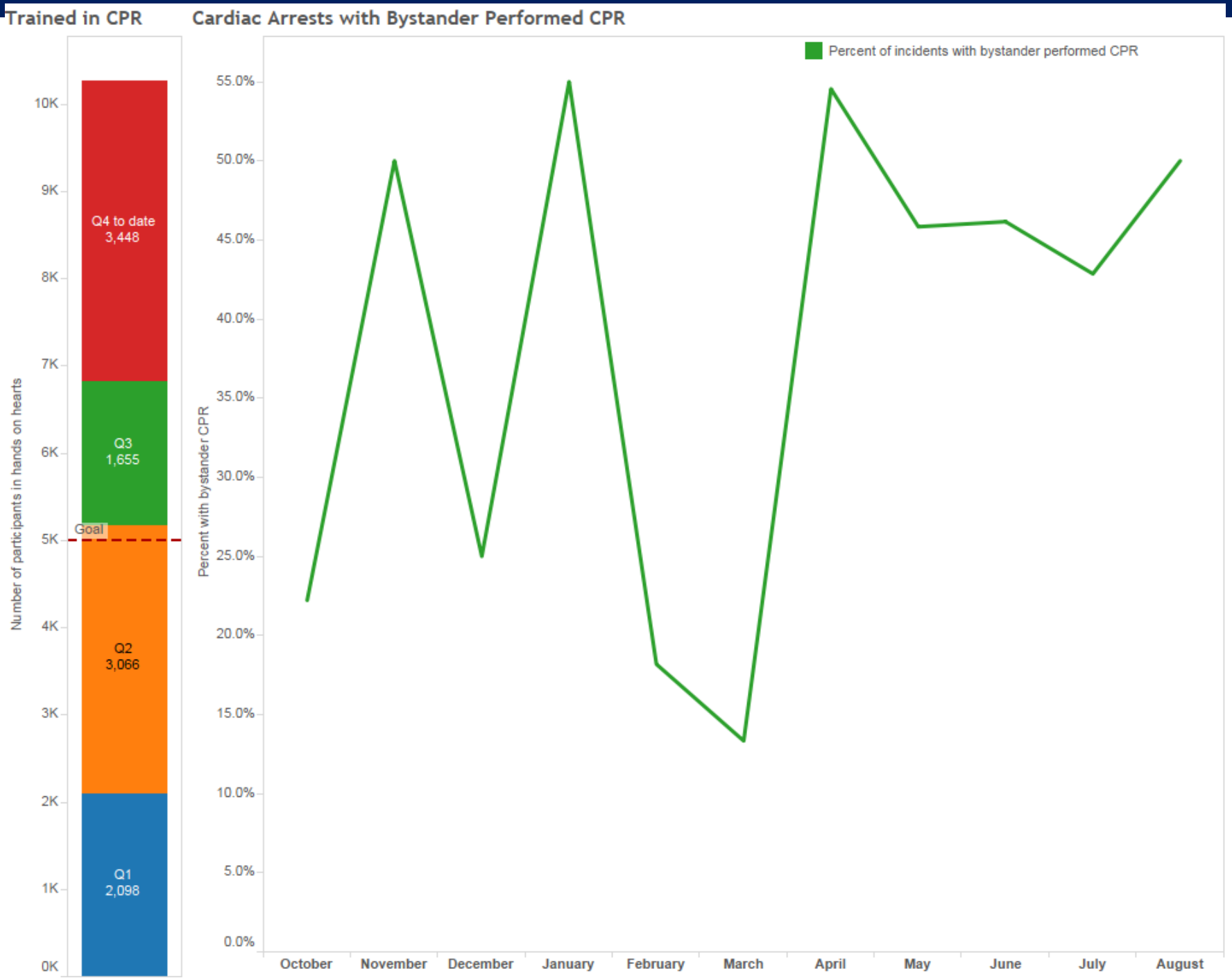
- Emergency responders would benefit from an updated and integrated training program
- AMR has challenges hiring EMTs due the temporary contract
- AMR has only 37% District residents on staff

Recommendations

Completed	Future
FEMS has increased training hours since April	New deputy training academy Chief to conduct a comprehensive review of the training schedule for FEMS providers; provide timeline from development of updated and integrated training program.
	Finalize longer term contract with AMR (or other alternate emergency services provider) to allow for long term planning and hiring
	AMR is working with DOES to become licensed to train EMTs. Once that is complete, AMR will train District residents to be EMTs, at no charge.
	Integrate lessons learned from hospital discharge data on patient outcomes into future EMS training.

Increase district resident and visitor knowledge about life saving EMS techniques

Resident Training in CPR and Bystander Performed CPR



Challenges and Recommendations

Challenges
Change public discussion about EMS to focus on patient care and outcomes instead of just response times

Recommendations	
Completed	**Future**
	FEMS will work with the hospitals to access patient outcome data to analyze the impact of programs on patient health and develop recommendations
	FEMS to monitor and analyze the impact of programs on improving cardiac arrest survival rates

STAT Recommendations

Recommendations
Continue work with call takers and dispatchers working group to ensure calls are dispatched quickly and accurately
Keep working through dispatch packages so the right resources are sent to the right calls, with a focus on “Charlie” packages
Do an analysis to determine why ALS providers may be transporting BLS patients; develop strategies to reduce BLS workload of ALS providers
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Hire additional paramedics to be able to improve response times
FEMS to work with emergency medical providers to understand why hospital drop times are high and develop strategies to lower drop times
Work with FEMS to identify the top supported IHC recommendations, budget and implementation timelines
Revisit strategy for High Volume Utilizers to check in on progress after 6 months of DHCF performance based contract is in place
Build up fire apparatus and a reserve of engines and fire trucks
Develop strategy to increase frequency of preventative maintenance at lower volume times
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FEMS to monitor and analyze the impact of programs on improving cardiac arrest survival rates

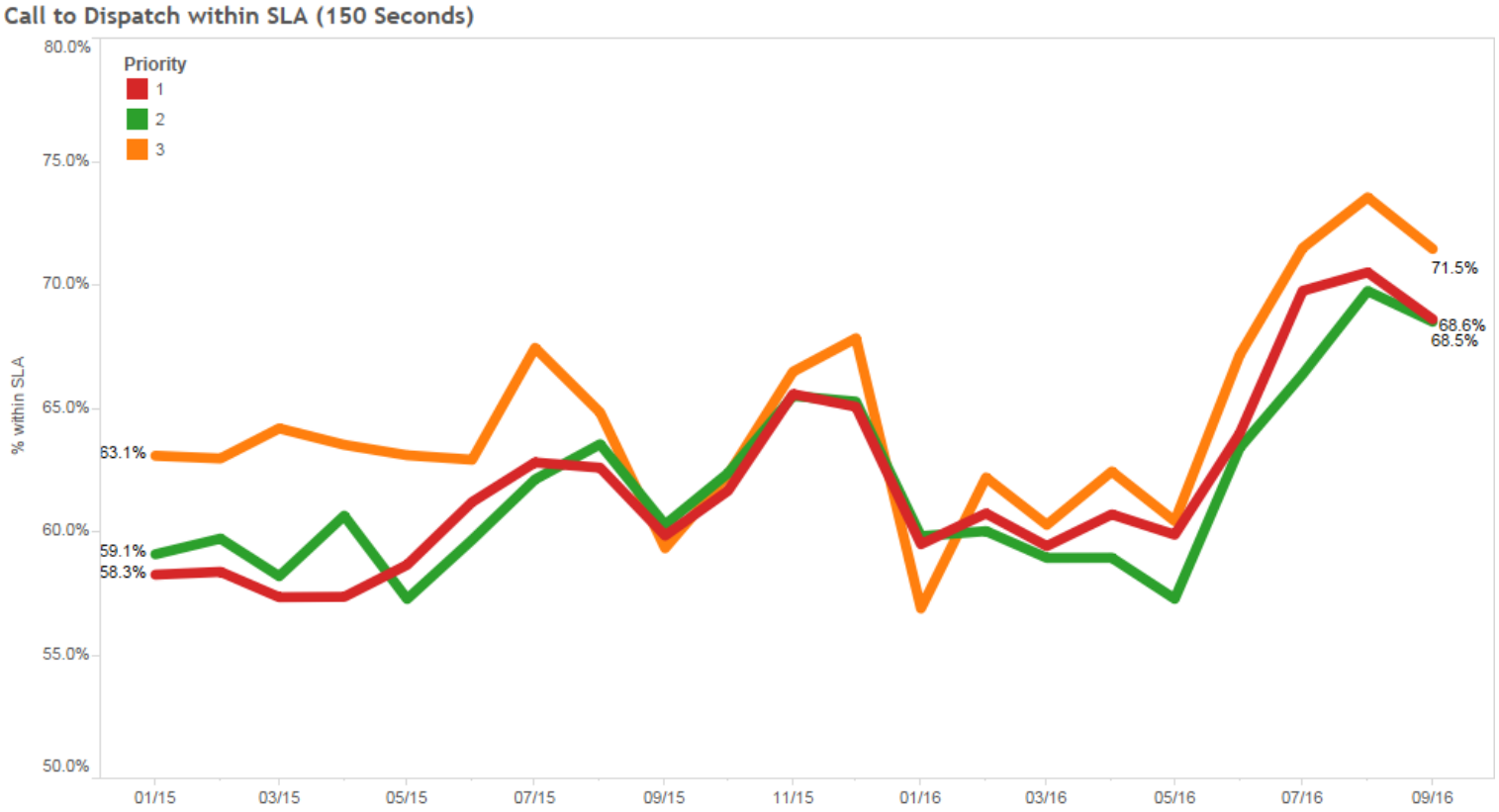
Appendix

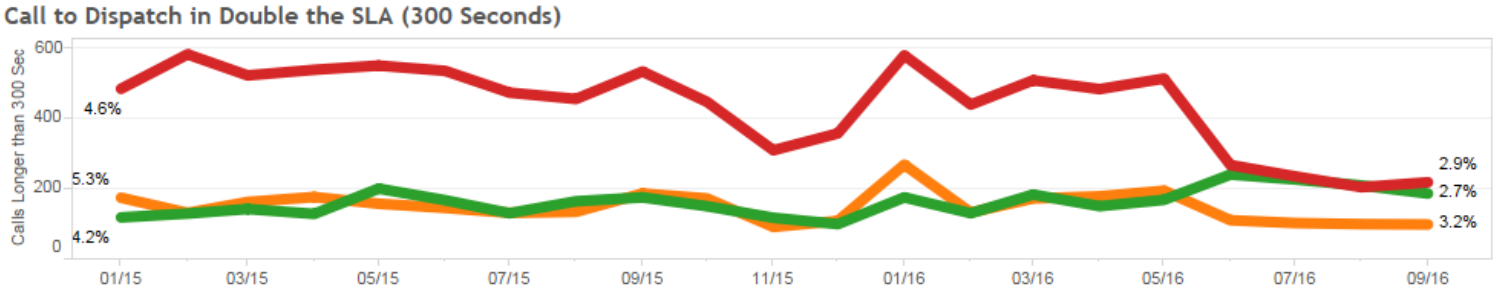
Call to Dispatch Times

January 1, 2015 – September 26, 2016

OUC implemented rapid dispatch to reduce call taking times.

OUC is working with the Call Takers Working Group to streamline aspects of call taking that can reduce call and dispatch times





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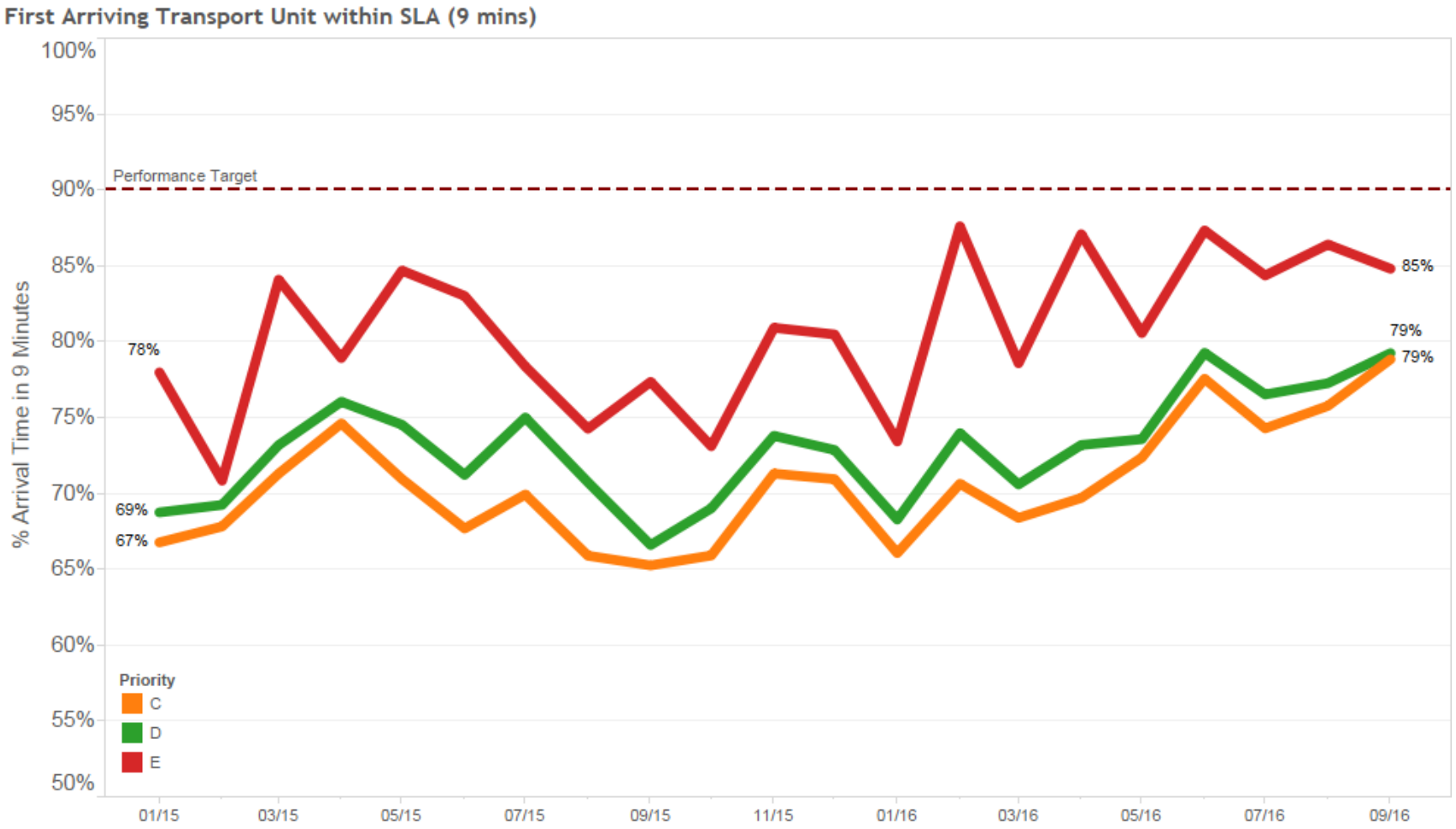

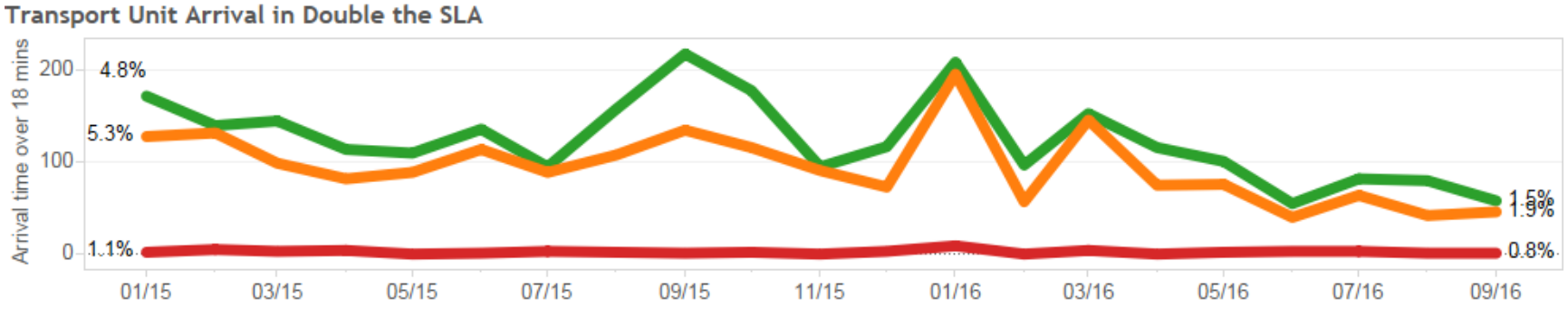

AMR Dispatch to Arrival Times