

**CLARK COUNTY EMS DISTRICT #2
STAFF REPORT**

DEPARTMENT: Clark Regional Emergency Services Agency – EMS Program

DATE: June 9, 2015

REQUEST: Approve the 2014 EMS District #2 Annual Report

BACKGROUND: Based on the EMS Interlocal Cooperation Agreement, EMS District #2 (District) shall present to participating jurisdictions an annual report addressing the ambulance contractor's: economic performance (accounting of user fees and subsidies, if any); 2) clinical capability; and 3) response time reliability.

The accounting of user-fees charged is based on the ambulance contract's Annual Financial Report that is conducted by an independent auditing firm. The evaluation of the systems clinical and response time performance is based on ambulance contract's monthly operations and response time reports.

COMMUNITY OUTREACH: On April 23, 2015, the EMS Administrative Board recommended the District approve the 2014 Clark County EMS District #2 Annual Report. The EMS Administrative Board is composed of citizen volunteers with expertise in health care, business, finance and law, who are appointed by the Board of County Commissioners to oversee the administration of the ambulance contract.

BUDGET AND POLICY IMPLICATIONS

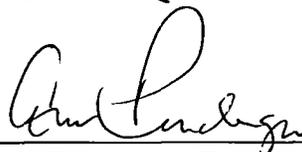
[None]

FISCAL IMPACTS

Yes (see attached form)

No

ACTION REQUESTED: Approve the 2014 Clark County EMS District #2 Annual Report.



Anna Pendergrass, Director
Clark Regional Emergency Services Agency

Approved 

EMS DISTRICT #2 BOARD

June 9, 2015
SR 114-15

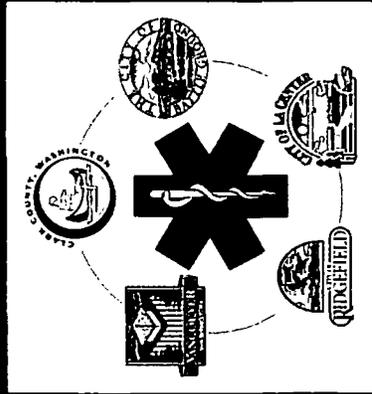
Attachments: 2014 Annual Report Staff Presentation
2014 Annual Report



* 7 3 7 0 4 4 *

2014 Annual Report

EMS District #2: "Patient Focused - Value Demonstrated - Outcome Driven"



EMS District #2 Board
June 9, 2015

Doug Smith-Lee, Projects & Grants Manager CRESA

Report Outline



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Purpose

History of Progress

Designed for High Performance

- ✓ Response Time Reliability
- ✓ Clinical Excellence
- ✓ Economic Efficiency
- ✓ Community Outreach & Support

Challenges and Opportunities

Purpose

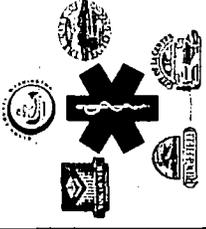
EMS Interlocal Cooperation Agreement requires the District and MPD provide an annual report on the ambulance contractor's:

1. Response Time Reliability
2. Clinical Capability
3. Economic Performance
4. Problems and Improvements



History of Progress

- ✦ 1st in the Region to Prioritize EMS Response
- ✦ 4th 9-1-1 Center to be IAED Accredited
- ✦ Response Standards & Performance Cited as Best Practice by NAEMSP
- ✦ EMS Data Network for Clinical, Response Time & Vehicle Location Data used for Web Based & Excel Performance Reports
- ✦ Over \$3 Million in Community Health & Safety and Enhancing First Response



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History of Progress

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2013

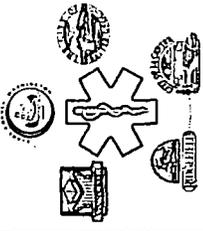
Smart Phone CPR Application

Contract Fines

\$25K

0117,400

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Designed for High Performance

The 5 Hallmarks of High Performance EMS

1. Holds the service accountable— clinical excellence, response time reliability, economic efficiency & customer satisfaction.
2. Independent Oversight— Ongoing oversight by independent subject matter experts and outside audits.
3. Accounts for All Costs— True transparency and benchmarking.
4. System Features that Create Economic Efficiency – Large multi-jurisdictional service area, exclusive market and all-ALS.
5. Benchmarking and/or Competitive Procurement

Krumperman K., et al., *EMS Structured for Quality: best practices in designing, managing and contracting for emergency ambulance service*, 2008



Designed for High Performance

“EMS System Design Decisions”

Structured Process (public policy)

vs.

Political Process (emotional /special interest lobbying)

- ✓ Clinical Sophistication
- ✓ Response Time Reliability
- ✓ Economic Efficiency
- ✓ Customer Satisfaction



Designed for High Performance

32 Decisions Divided Into Six Categories:

- A. Service Area
- B. Regulatory and Oversight Structure
- C. Medical Oversight Responsibilities
- D. Control Center Operations
- E. First Response
- F. Ambulance Service

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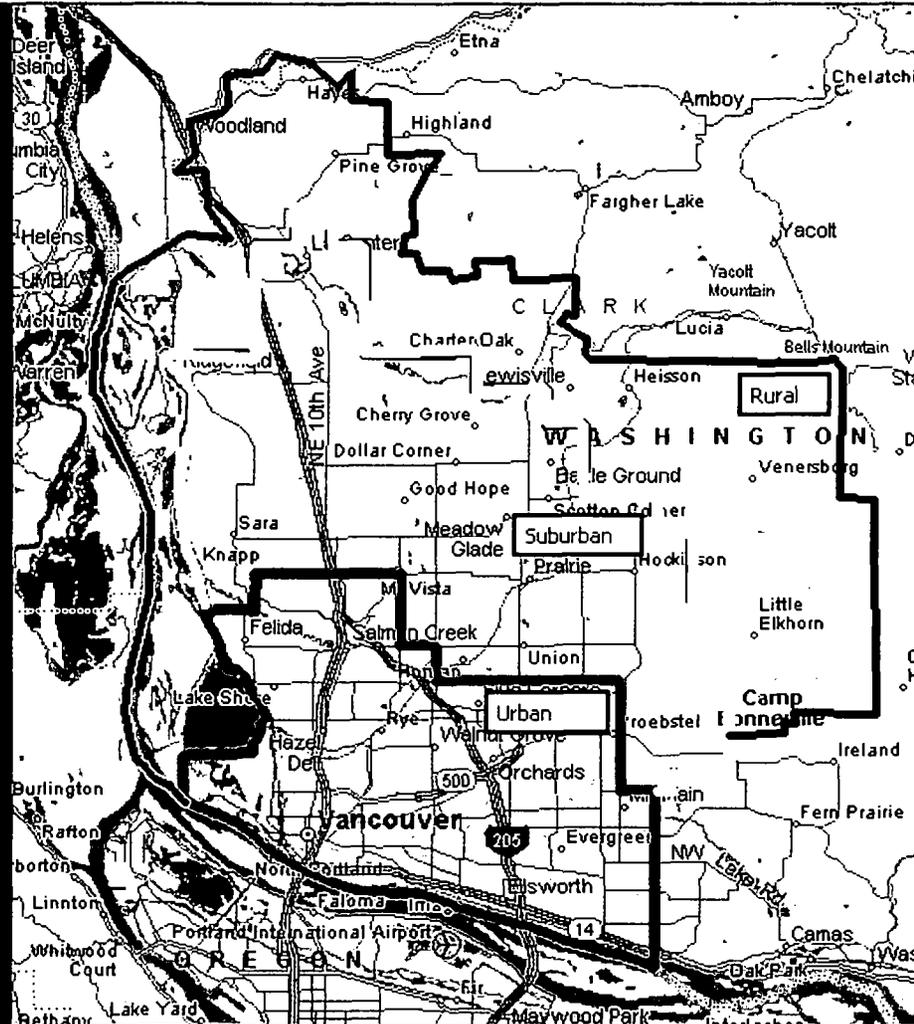


Designed for High Performance

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Response Time
Reliability

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Designed for High Performance

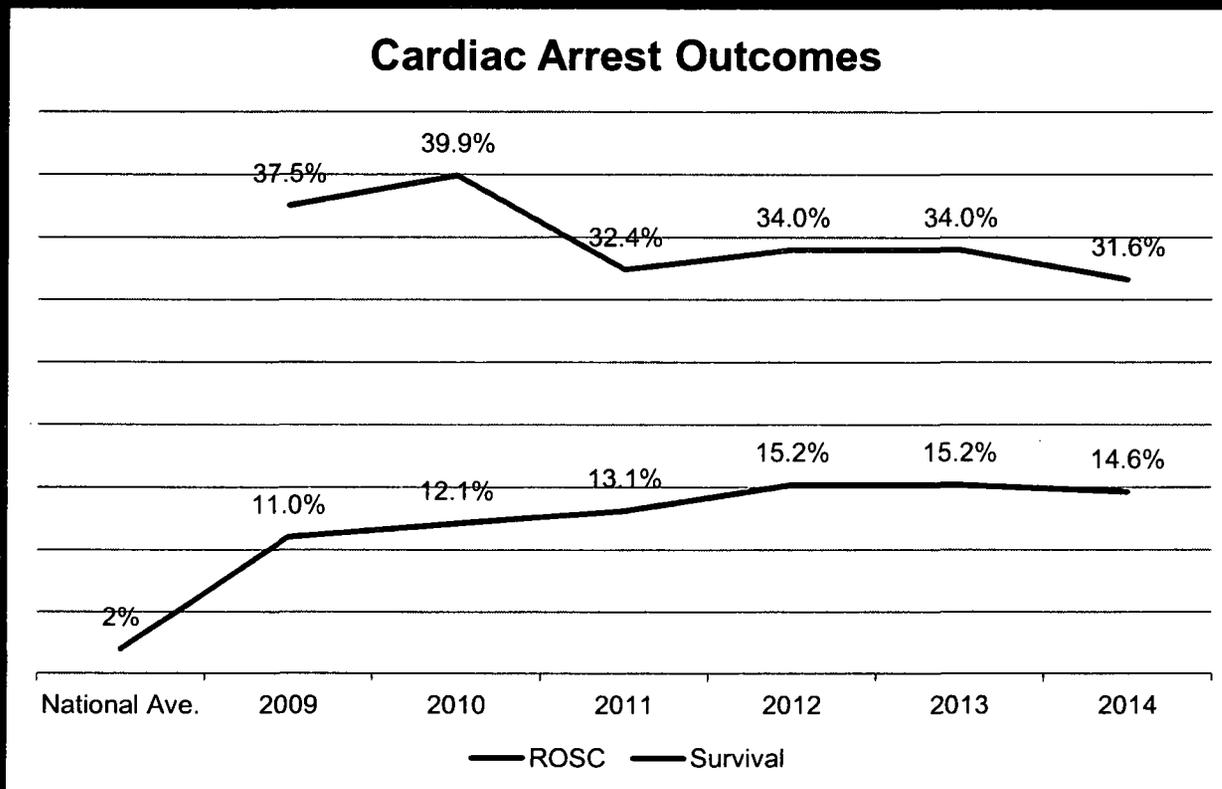
Response Time Reliability

Zone	Hot	Cold	Scheduled	Unscheduled
Urban	96.3% / 7m59s	91.3% / 11m59s	92.1% / 10m	97.6% / 60m
Suburban	93.2% / 11m59s	93.3% / 17m59s	90.2% / 10m	100% / 60m
Rural	97.1% / 19m59s	97.7% / 29m59s	100% / 15m	100% / 90m



Designed for High Performance

Clinical Excellence – Cardiac Arrest



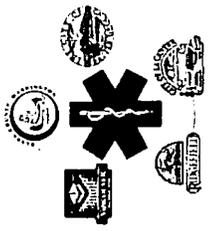


Designed for High Performance

Clinical Excellence – Myocardial Infarction

	National Standard	PHSW	Field STEMI (+) EKG in ED	Field STEMI (-) EKG in ED
Hospital Arrival to Perfusion	90 Mins.	56 Mins.	82%	18%

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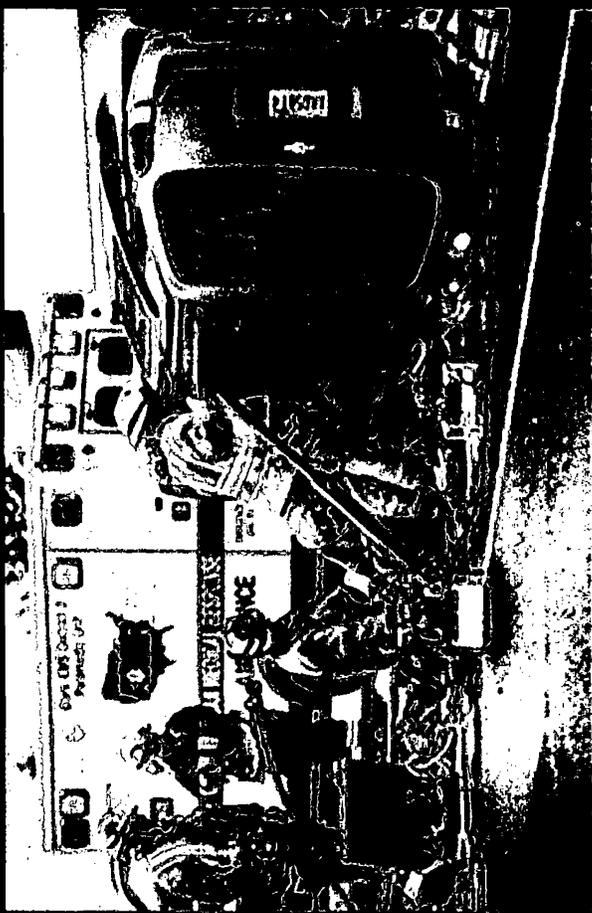


Designed for High Performance

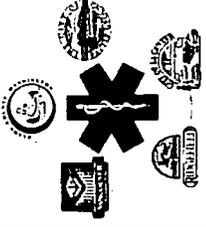
Clinical Excellence – Trauma Scene Times

- ⚡ Goal – 10 mins.
- ⚡ Outcome = 10 Mins @ 20.5%^{***}

*** Note—The ability to drill down on this data was eliminated, with the loss of the EMS Data Analyst due to the transition of ambulance contract administration to the City of Vancouver. Previous years' performance has been at, or above 90%.



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Designed for High Performance

Economic Efficiency (10/01/13 – 12/31/14)

	<u>Goal</u>	<u>Outcome</u>
A.P.C.	(\$861.87)	\$859.57
M.P.C.	(\$1,159.54)	\$1,145.25
M.M.C.	(\$12.50)	\$12.50



Designed for High Performance

Economic Efficiency

Rate Summary 2014

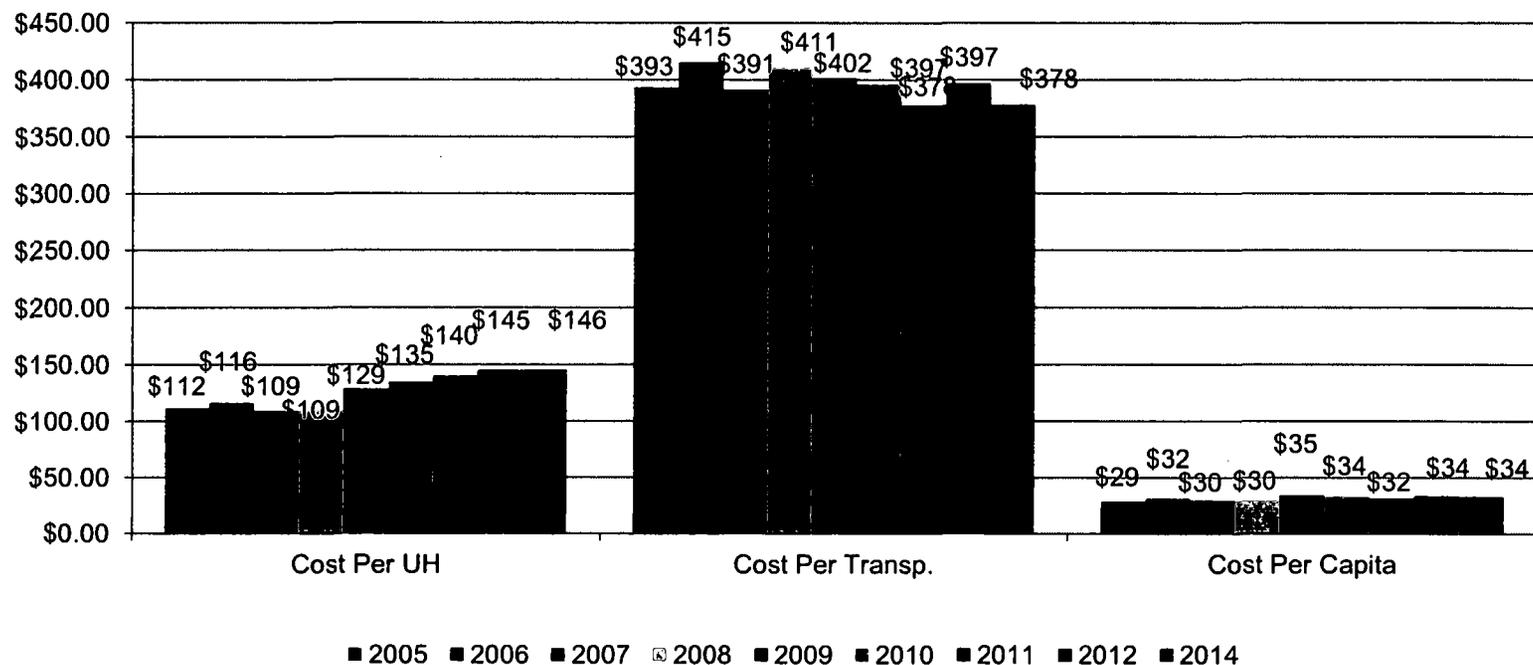
County/City	Agency	ALS Emer Base	BLS Emer Base	Mileage
Clark	AMR	\$ 959.75	\$ 959.75	\$ 12.50
	Camas Out-of-District	\$ 1,110.00	\$ 1,110.00	\$ 18.20
	NCEMS Out-of-District	\$ 1,100.00	\$ 950.00	\$ 15.00
Cowlitz	AMR	\$ 1,556.68	\$ 957.15	\$ 24.15
Multnomah	AMR	\$ 1,008.92	\$ 1,008.92	\$ 23.17
Clackamas	AMR	\$ 997.00	\$ 997.00	\$ 21.33
Washington	Metro West	\$ 719.53	\$ 504.07	\$ 12.33
Mean (Metro Area)		\$ 1,064.55	\$ 926.70	\$ 18.10
Percent of Mean	Clark AMR	-10%	4%	-31%



Designed for High Performance

Economic Efficiency

Costs By Unit Hour, Transport, and Capita



Designed for High Performance

Community Outreach & Support

2014 Outcome:

Public CPR Training -

✓ 7 courses per yr. and 1,380 persons

Public Access of Defibrillation -

✓ 40 AEDs

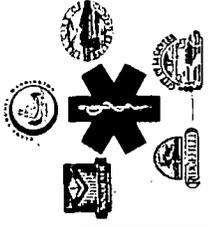
Child Safety Seat Inspections -

✓ 12 clinics per yr.

First Responder ALS Medical Supplies -

✓ Purchase or exchange at \$38,598 (VFD withdrew May '13).

✓ ALS First Response Agreements \$182,133





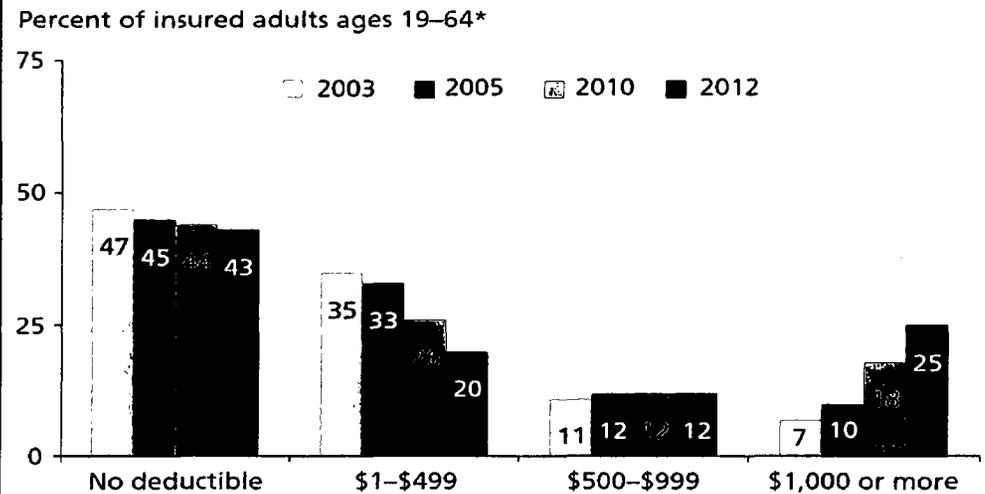
Challenges & Opportunities

	2010 millions	2011 millions	2012 millions	2012 percent of population
Uninsured	49.2	47.9	47.3	17.7%
Insured but underinsured*	29.9	30.6	31.7	11.8%
Total, uninsured or insured but underinsured	<u>79.1</u>	<u>78.5</u>	<u>79.0</u>	<u>29.5%</u>

Source: The Commonwealth Fund

* Underinsured means 10% of household income on medical expenses, or 5% if 200% FPL

Exhibit 4. Since 2003, the Proportion of Adults with High Deductibles Has More Than Tripled



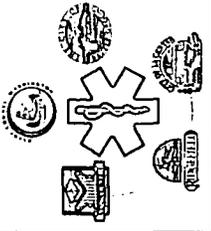


Challenges & Opportunities

- ✦ 79 million Americans have no health insurance or are underinsured (2012 Biennial Health Insurance Survey, Commonwealth Fund.)
- ✦ \$46 billion is spent on uncompensated hospital care in 2012 (*Uncompensated Hospital Care Cost Fact Sheet*. American Hosp. Assoc. Jan. 2014)

Emergency rooms here are routinely overcrowded. "When I came in this morning, there were people waiting from yesterday," says Kellie Manger, a triage nurse at Ben Taub, on a recent weekday.

About half of the people going to emergency rooms here just need primary care, a percentage that's similar elsewhere. "We see lots of patients here who haven't seen a doctor in years," says Katherine King-Casas, an emergency room physician at Ben Taub.



Challenges & Opportunities

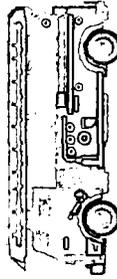
Access



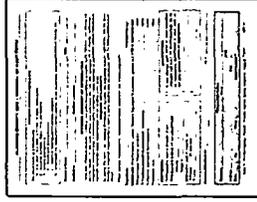
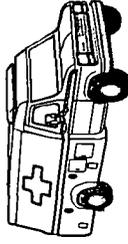
Dispatch



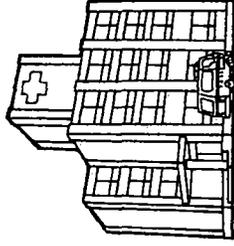
EMS Assessment & Rx



Transport to ED
Refusal



Hospital ED



Challenges & Opportunities



New Medicare Fee Schedule (Phased in 2002 – 2010)

- † 2007 GAO 6% below average ambulance cost
- † % of Bills = 2000 (17%) to 2013 (37%)
- † Metro estimates a 102% increase in 65+age group from 2000 to 2020.



Challenges & Opportunities



2010 Patient Protection & Affordable Care Act:

- ✓ Medicaid eligibility is expanded (133% Pov. Lvl.)
Note - Washington Health Care Authority estimates a 40% increase
- ✓ Restructuring of Medicare reimbursement from "fee-for-service" to "bundled payments"

Medicaid Reimbursement

- ✓ \$0.18 cents on the dollar





Challenges & Opportunities

✦ Is an ambulance ride to the emergency department the best way to care for every 9-1-1 caller?

- ✓ Unmet social – psychiatric needs.
- ✓ They believe they are having an emergency.
- ✓ It's what we've taught them to do.
- ✓ Because their doctors tell them to.
- ✓ It's the only option.



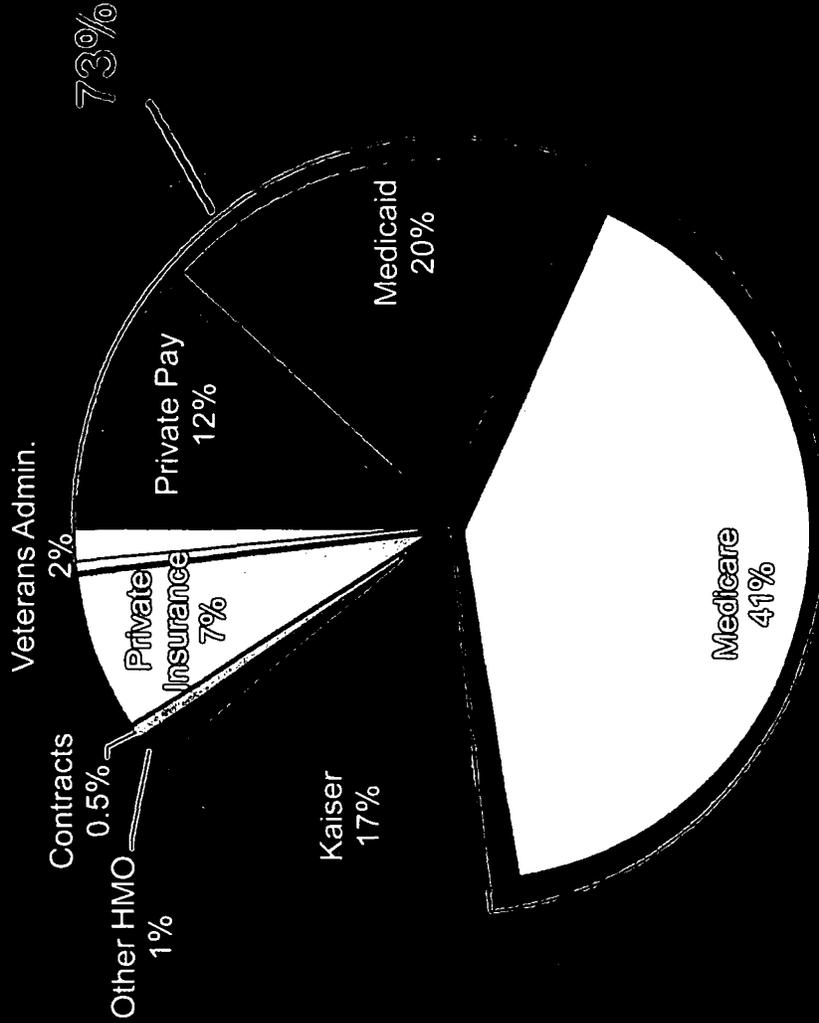
EMS funding incentivized to use the **highest cost transport** to **highest cost care setting**

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Challenges & Opportunities



2014 Percent of Bills



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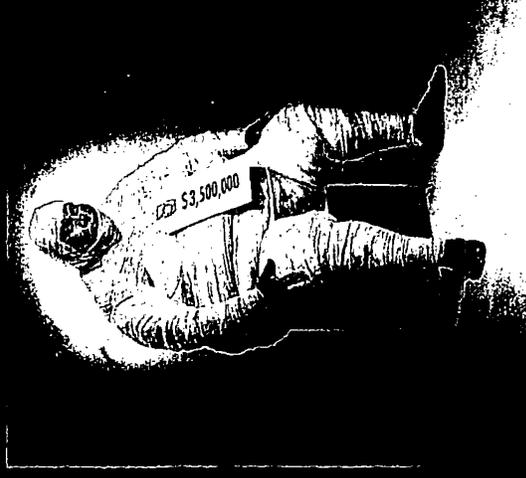
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Challenges & Opportunities

Low Acuity Patients

- ✓ 10% – 12% 9-1-1 calls could quality for Alternate Care Services
- ✓ Frequent Users (example – Clark)
- ✓ 12 patients used EMS >50 calls/3 yrs.
- ✓ 1,393 total responses (464/yr.)

- ✓ At-Risk Patients (example – MedStar)
- ✓ CFH - 23 patients w/ 60% < ED transports & 47% reduction in hospital admits



5% of patients account for 50% of health care costs - S. Cohen, et.al., "The Concentration and Persistence in the Level of Health Expenditures over Time: Estimates for the U.S. Population, 2008-2009"





Challenges & Opportunities

Low Acuity Patients (example - Clark)

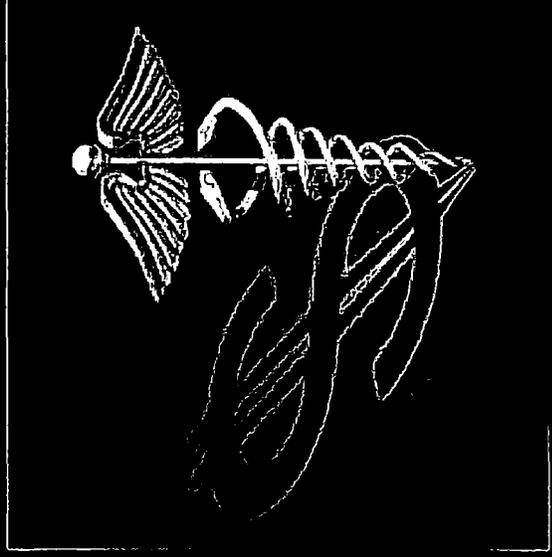
- ✓ 32% Medicare ✓ 18% Kaiser
- ✓ 25% Private ✓ 12% Medicaid

Frequent Users (example - Clark)

- ✓ 80% Medicaid ✓ 7% Kaiser
- ✓ 13% Medicare

At-Risk Patients

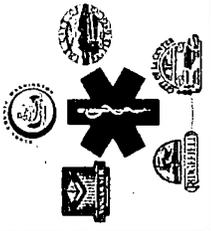
- ✓ CHF - 25% 30 day readmission rate (52% didn't see doctor from discharge to readmission)



Bernheim, et.al., "1212 Measures Maintenance Technical Report: acute myocardial infarction, heart failure and pneumonia 30-day risk-standardized readmission measures." CMS 2012 Apr 16. 55p.

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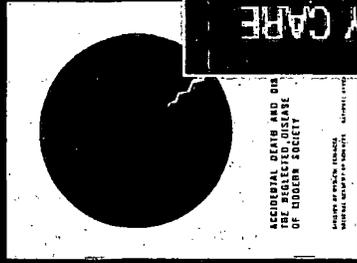
Challenges & Opportunities



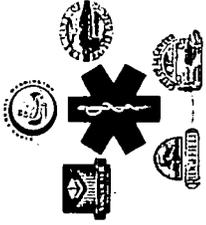
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“ . . . dispatchers, EMS personnel, medical providers and public health officials will be fully interconnected in a united effort to ensure that each patient receives the most appropriate care, at the most optimal location, with a minimum delay.”

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National Academy of Sciences, Institute of Medicine.
Emergency Medical Services: At the Crossroads; The
National Academies Press 2007 **28** 5.



Challenges & Opportunities

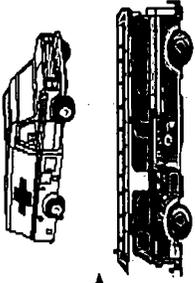
Access



Dispatch & Dispatch Life Support



EMS Assessment and Rx



EMS - Low Acuity Triage



911 - Nurse Triage

Community Healthcare Program

(Low Acuity Patients)

Refusal Transport to ED



Mobile Integrated Healthcare Practice

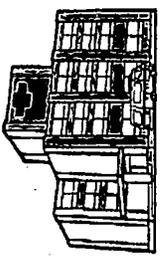
Medical Consult

Clinic Appt,

Rx & Release

(Frequent Users & At-Risk Patients)

Hospital ED



EMS Community Health Care Coalition – 911 Secondary Triage



- ✦ Estimated Cost per Call + Clinic Appt. = \$309
*(Clark County Only @ \$121 + \$187) ****
- ✦ Traditional EMS Transport & ED Costs = \$1,039
- ✦ Estimated cost savings \$730 per patient

*** Assumes 10% omega qualified 9-1-1 patients per acuity data with a 9% return rate with one position staffed from 09:00 – 20:00 hrs.



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EMS – Low Acuity Triage



✦ Estimated Cost per Call + Clinic Appt. = \$584
(Clark County only)

✦ Traditional EMS Response and Transport to
ED = \$1,039



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Mobile Integrated Healthcare Practice (Community Paramedics)



Estimated Cost per Call = \$170*** (Clark County only)

Traditional EMS Response and Hosp. Admit = \$10,601

*** Assumes average of 23 patients seen 2 x per week for 1 year



Community Health Program

Preliminary Results

Program to Date (Two Years): 1/1/13 – 12/31/14

1. Improved access to quality care

- 28,011 calls to Nurse Health Line (9/13 – 12/14)
- 3,045 home visits (6/13 – 12/14)
- 786 alternative ambulance transports (1/13 – 12/14)

2. Improved patient quality of life & satisfaction

3. Total est. program savings: \$5.5 million

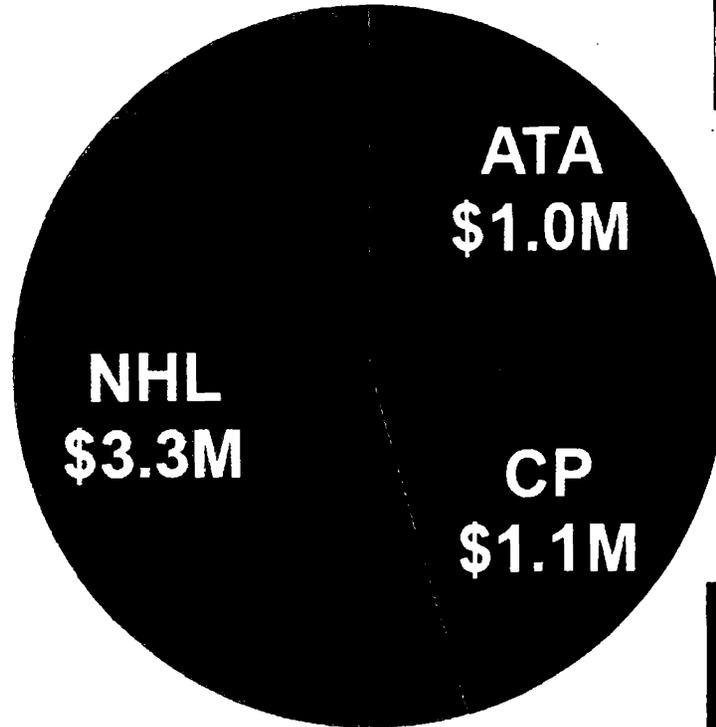
- 3,483 ED Visits Avoided
- 674 Ambulance Transports Avoided
- 59 Hospital Readmissions Avoided



Note: Estimated program savings calculated based upon average payments.

Estimated Savings

Program to Date (12/12 – 12/14)





Challenges & Opportunities

Medicare Readmission Penalties by Hospital

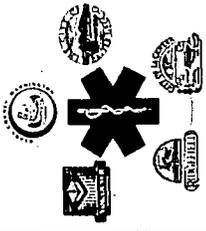
Kaiser Health News

Name	ID	City	State	Zip	County	FY 2013 Readmission Penalty	FY 2014 Readmission Penalty	FY 2015 Readmission Penalty
Peacehealth Southwest Medical Center	500050	Vancouver	WA	98668	Clark	0.28%	0.36%	0.83%
Legacy Salmon Creek Medical Center	500150	Vancouver	WA	98686	Clark	0.55%	0.27%	0.51%
Legacy Good Samaritan Medical Center	380017	Portland	OR	97210	Multnomah	0.03%	0.10%	0.35%
Legacy Emanuel Medical Center	380007	Portland	OR	97227	Multnomah	0.10%	0.19%	0.19%
OHSU Hospital and Clinics	380009	Portland	OR	97239	Multnomah	0.21%	0.15%	0.18%
Legacy Meridian Park Medical Center	380089	Tualatin	OR	97062	Washington	0.28%	0.39%	0.03%
Legacy Mount Hood Medical Center	380025	Gresham	OR	97030	Multnomah	0.13%	0.05%	0.02%
Kaiser Sunnyside Medical Center	380091	Clackamas	OR	97015	Clackamas	0.00%	0.00%	0.00%
Providence Milwaukie Hospital	380082	Milwaukie	OR	97222	Clackamas	0.00%	0.00%	0.00%
Providence Portland Medical Center	380061	Portland	OR	97213	Multnomah	0.00%	0.00%	0.00%
Providence St Vincent Medical Center	380004	Portland	OR	97225	Washington	0.00%	0.00%	0.00%
Providence Willamette Falls Medical Center	380038	Oregon City	OR	97045	Clackamas	0.00%	0.17%	0.00%
Tuality Community Hospital	380021	Hillsboro	OR	97123	Washington	0.00%	0.00%	0.00%

Conclusion

22 Years Proven Track Record as High Performance EMS System

- ✓ Clinical Excellence;
- ✓ Response Time Reliability
- ✓ Economic Efficiency
- ✓ Community Outreach and Support



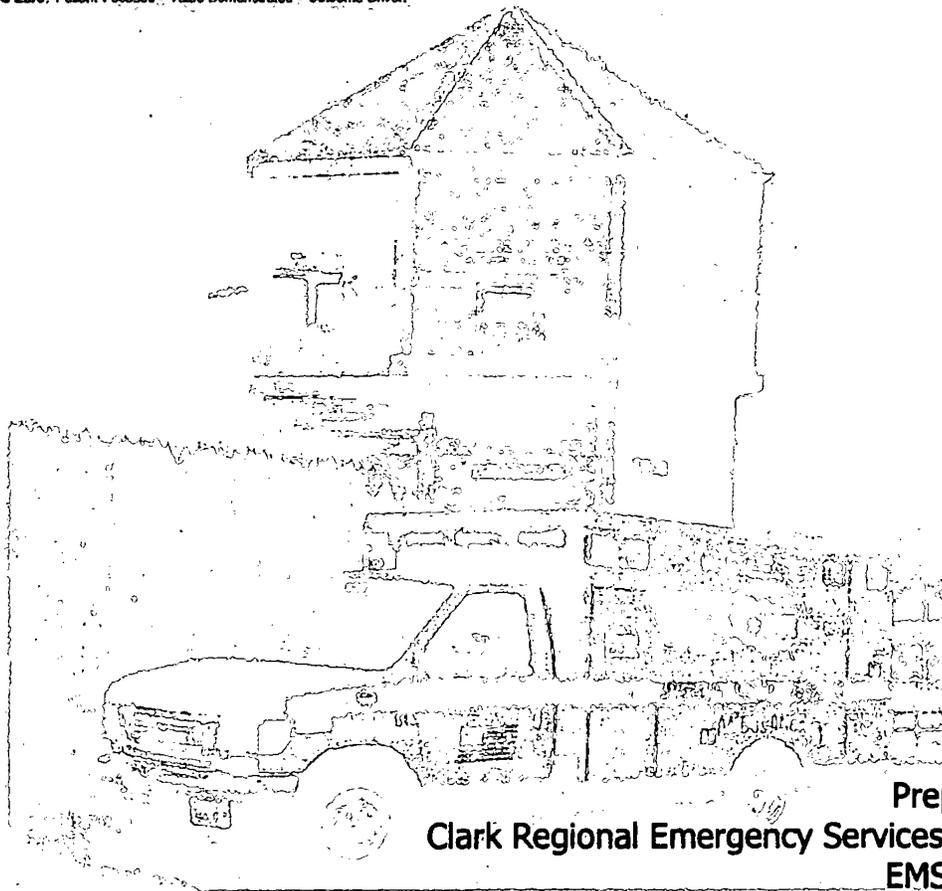
2014 Annual Report

Serving Clark County and the Cities of Battleground, LaCenter, Ridgefield and Vancouver Since 1992



EMS District #2

Performance Based EMS; Patient Focused - Value Demonstrated - Outcome Driven



Prepared By:
Clark Regional Emergency Services Agency's
EMS Program

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 Economic Efficiency..... 11

 Community Outreach and Support 12

Challenges and Opportunities 13

Conclusion..... 16

List of Exhibits:

- A - Contract Response Time Reports.** Shows monthly and cumulative year-to-date response time compliance.
- B – Ambulance Response Time Zones for Contracted Service Area**
- C - Annual Financial Report.** Independently reviewed report documenting the gross revenues and total number of patients transported.

PROVIDE QUALITY
OUT-OF-HOSPITAL
CARE THAT IS
PATIENT FOCUED,
VALUE
DEMONSTRATED
AND OUTCOME
DRIVEN



FROM OUR CHAIR AND MEDICAL PROGRAM DIRECTOR



Mike Plymale, Chair EMS Administrative Board



Dr. Lynn Wittwer, Medical Program Director

This marks the 22nd year of EMS District #2's partnership with Clark County and the Cities of Battle Ground, LaCenter, Ridgefield and Vancouver. Since 1992, this collaboration has helped create one of the leading high performance EMS systems in the United States.

The EMS Administrative Board is the District's advisory body composed of citizen volunteers with expertise in business, finance, law, health care administration and insurance. This Board was created to oversee the design and administration the District's paramedic ambulance service contract that is consistent with best practices in the industry.

The Clark County Medical Program Director is appointed by State Department of Health and is under contract with the county for oversight of training, certification and patient care provided by all EMS personnel, including the District's paramedics and Emergency Medical Technicians (EMTs) and Emergency Medical Dispatchers (EMDs)

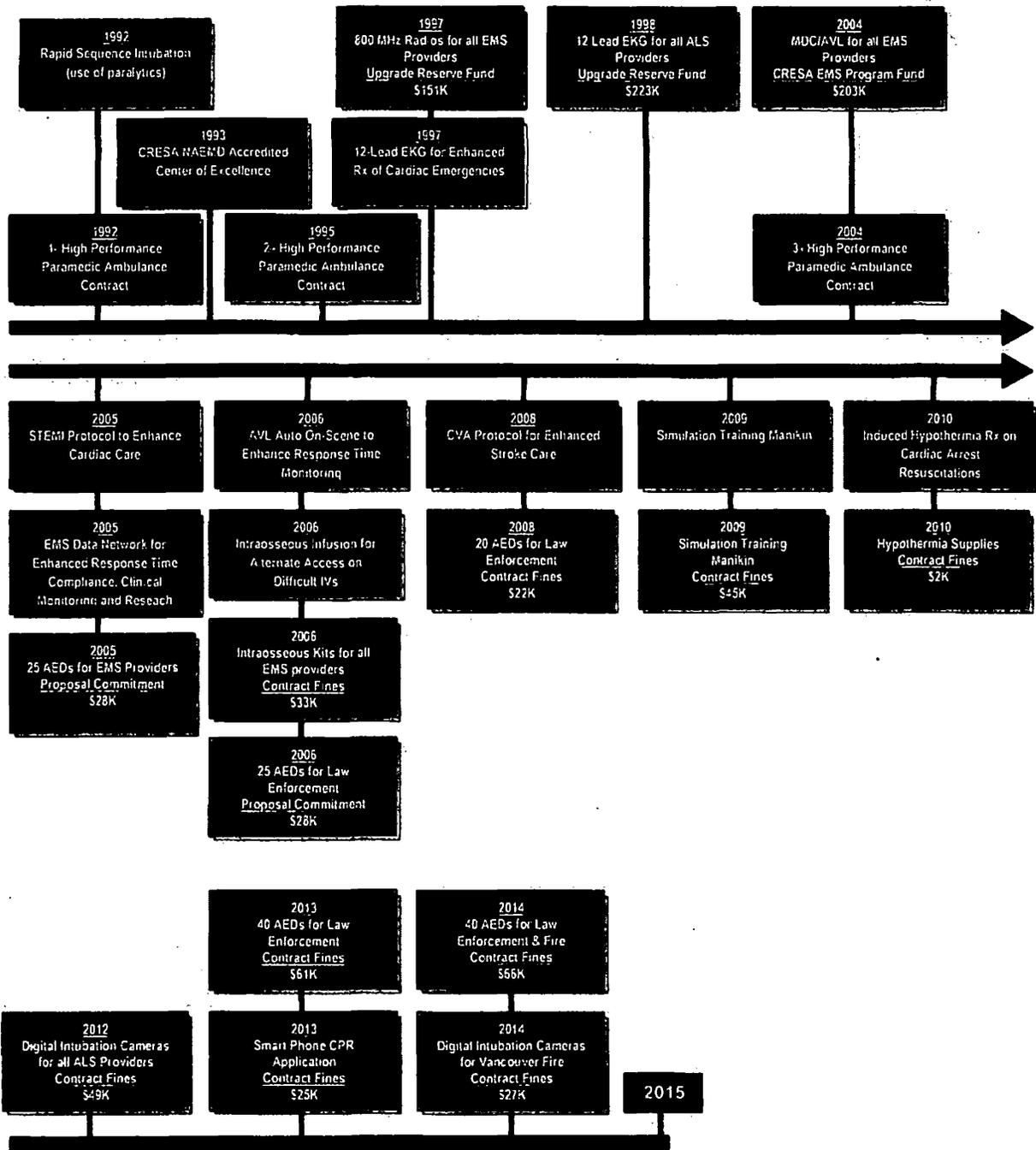
With ambulance contract administration and EMS regulatory oversight moving to the City of Vancouver in 2015, this will be the final annual report provided by CRESA's EMS Program. Remarkable improvements to ambulance service performance and the EMS system are evident throughout these past 22 years. Some of the key achievements as a result of the District's performance based ambulance contract include:

- ✓ CRESA being the first in the region to prioritize medical calls and becoming the 4th Accredited Center of Excellence in the world by the International Academy of Emergency Dispatch.
- ✓ Some of the best response time standards and reliability in the nation whose design has been cited as a best practice in the National Association of EMS Physician's Medical Director's Handbook.
- ✓ Leading innovations in patient care and high cardiac arrest survival rates.
- ✓ The ambulance contractor making significant contributions to the community in over \$3 million in fire first responder enhancements.
- ✓ The only ambulance contract in the metro area that ensures both 9-1-1 emergency and non-emergency patients receive the same standard of care.
- ✓ Ambulance rates historically below the average in the metro area.

On behalf of everyone in the District, we have been fortunate to have had such outstanding performance, community partnerships and citizens who've entrusted us to deliver quality service for the past 22 years.

A HISTORY OF PROGRESS

Since implementation of the high performance paramedic ambulance contract in 1992, the District has implemented a number of innovations along with funding to assist all EMS providers in the community. The following timeline illustrates significant milestones and contributions in the delivery of EMS over the past 22 years:



DESIGNED FOR HIGH PERFORMANCE

The historic performance of this ambulance contract has not been based on chance, or luck. Rather, the key to the District's high performance over the past 22 years is due to the 32 *EMS System Design Policy Decisions* that are approved by Clark County and the Cities of Battle Ground, Ridgefield, LaCenter and Vancouver. These Policy Decisions are designed to meet the *Five Hallmarks of High Performance Ambulance Service*¹ that include:

1. **Holds the service accountable** to clinical excellence, response time reliability, economic efficiency and customer satisfaction;
2. **Has an independent oversight entity** that provides ongoing performance monitoring and independent outside audits;
3. **Accounts for all service costs** for true benchmarking and transparency;
4. **Establishes system features that create economic efficiency** and maximize economies of scale²; and
5. **Ensures long-term high performance through benchmarking and/or competitive procurement.**

The 2014 Annual Report will show how these EMS System Design Policy Decisions have continued the high performance ambulance contract with AMR for the October 2013 – September 2014 contract year. Based on the EMS Interlocal Agreement, the District and Medical Program Director are to provide Clark County and the Cities of Battleground, LaCenter, Ridgefield and Vancouver an annual report on:

1. The ambulance contactor's response time and clinical performance;
2. The ambulance contractor's economic performance; and
3. Any problems and improvements encountered; as well as any anticipated problems and improvements for the next contract year.

¹ Krumperman K, et.al., *EMS Structured for Quality: Best Practices in Designing, Managing and Contracting for Emergency Ambulance Service*, American Ambulance Association; 2008. p 11, 12.

² System features that create economic efficiency: Exclusive market rights (9-1-1 and non-emergency), All-ALS and large multi-jurisdictional contract services area.



RESPONSE TIME RELIABILITY

The District's response time standards are some of the best in the nation and are cited as a best practice and used as the example in the *National Association of EMS Physicians Medical Director's Handbook*. Under the current contract that began in 2004, the ambulance contractor has provided high compliance to these standards.

Goal: 90%

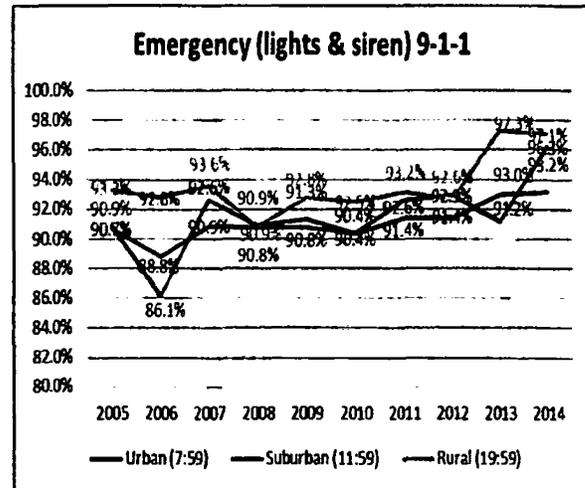
Standards:

	Urban	Suburban	Rural
1 st ALS	7:59	11:59	19:59
Ambulance	9:59	13:59	21:50

2014 Performance:

Urban **96.3%;**
 Suburban **93.2%;**
 Rural **97.1%**

Goal Outcome: Met



Goal: 90%

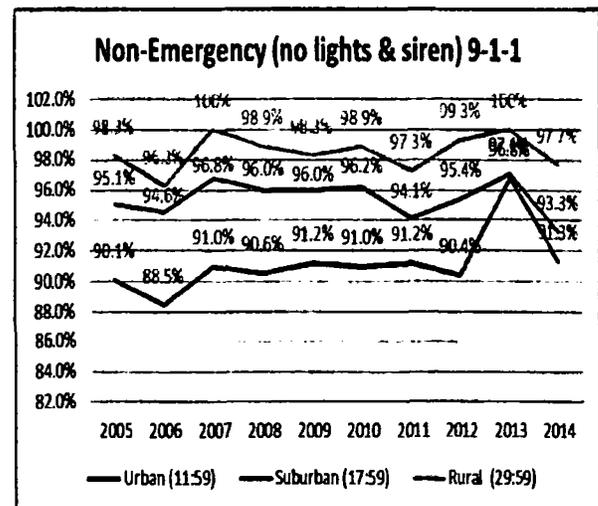
Standards:

	Urban	Suburban	Rural
1 st ALS	11:59	17:59	29:59
Ambulance	13:59	19:59	31:50

2014 Performance:

Urban **91.3%;**
 Suburban **93.0%;**
 Rural **97.7%**

Goal Outcome: Met



CLINICAL EXCELLENCE

Advanced Medical Priority Dispatch System (AMPDS)

AMPDS provides a safe and effective method to: determine the severity of the patient; assist in determining the correct EMS response to send; and provide life-saving instructions over the phone. To ensure each patient receives the correct help when calling 9-1-1, CRESA maintains accreditation by the International Academy of Emergency Dispatch. This accreditation is critically important not only to the patient receiving the care, but also EMS providers as they look at ways to efficiently send appropriate response.

Goal: 90%

2014 Performance: 98.9%

	Case Entry	Key Questions	PAIs	PDIs	Chief Complaint	Code	Score
IAED Standard	95	90	95	90	95	90	90
CRESA	97.86	97.26	99.11	93.16	98.89	99.82	98.93

Starting in July 2014, the NAED changed its protocol compliance process from scoring standards (i.e., 90% protocol compliance) to performance standards (i.e., Critical protocol deviation). This change was done to reduce the emphasis on scores in favor of a system that can better pinpoint and prioritize specific areas of improvement.

	ACE	CRESA	
		Number of Cases	Percent
High Compliance		580	91%
Compliant		26	4%
Partial Compliance	10%	27	4%
Low Compliance	10%	0	0%
Non-Compliant	10%	5	1%
Totals		108	100%

Percentage of Deviation Accepted	Critical Deviation		Major Deviation		Moderate Deviation		Minor Deviation	
	ACE	CRESA	ACE	CRESA	ACE	CRESA	ACE	CRESA
Case Entry	2%	0%	3%	0.47%	3%	0.31%	3%	0.06%
Chief Complaint	5%	0%	3%	0.94%	4%	0.12%	5%	0.23%
Key Questions	3%	0%	3%	0.04%	5%	0.06%	5%	0.02%
Dispatch Life Support	4%	0.23%	3%	0.76%	3%	0%	6%	2.66%
Final Code	6%	0%	8%	0%	10%	0%	10%	0%
Customer Service	2%	0%	2%	0%	2%	0%	5%	0.07%
Total Accreditation Acceptance	3%	0.07%	3%	0.28%	3%	0.11%	3%	0.19%

Goal Outcome: Met



CLINICAL EXCELLENCE

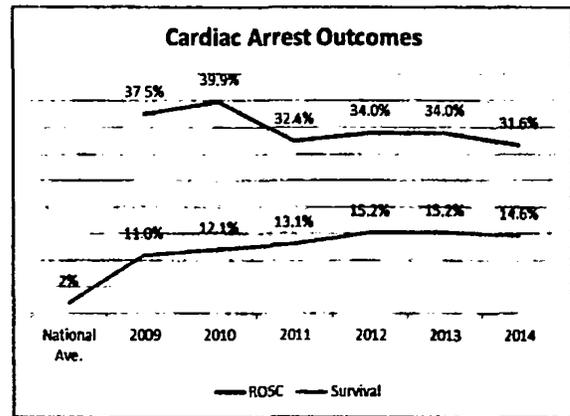
Sudden Cardiac Arrest

Sudden Cardiac Arrest (SCA) calls are among the most challenging EMS personnel face. That's why the Medical Program Director and EMS providers have implemented a number of enhancements over the years to improve a patient's chance of surviving. All of the fire first responders and AMR's crews are trained and equipped to provide an evidence based approach in caring for these critical patients. As a result, the District has some of the highest SCA survival rates in the nation.

Goal: > 9%

2013 Performance: 14.6% Goal Outcome: Met

Return of Spontaneous Circulation (ROSC) is defined as the patient's pulse and heart rhythm being restored along with significant respiratory effort at time of arrival at the hospital. Survival is defined as the patient being discharged from the hospital with preserved neurologic function. Of note is the survival rate of 42% for patients with a shockable rhythm (Ventricular Fibrillation & Ventricular Tachycardia).



Cardiac Triage Composite for Percutaneous Coronary Intervention (PCI)

Another key measure in cardiac care is making sure the time to cardiac reperfusion is kept at a minimum for certain patients suffering from blocked coronary arteries. Paramedics work closely with area hospitals by activating cardiac teams at the hospital so the cath lab is open and the interventional cardiologist is ready for the patient with a minimum delay in the hospital emergency department.

Goal: 90 mins.

2014 Performance: 56 mins. Goal Outcome: (Met)

	National Standard	PHSW	Field STEMI (+) EKG in ED	Field STEMI (+) EKG in ED
Hospital Arrival to Perfusion	90 Mins.	56 mins	82%	18%



CLINICAL EXCELLENCE

Trauma Scene Times

It is crucial that severe trauma patients receive rapid surgical intervention at a trauma hospital. Fire first responders and AMR's crews work together to rapidly access, package and treat trauma patients while rapidly transporting them to hospitals specifically designed to treat major multisystem trauma. This type of intervention provides the greatest chance of survival for the patient.

Goal: 10 mins.

2014 Performance: 10 mins. @ 20.5%

Goal Outcome: Not Met***

*** Note—The ability to drill down on this data was eliminated, with the loss of the EMS Data Analyst due to the transition of ambulance contract administration to the City of Vancouver. Previous years' performance has been at, or above 90%.



ECONOMIC EFFICIENCY

Ambulance Rates

The ambulance contractor is funded 100% by user fees. It receives \$0 in subsidy, which is a significant accomplishment considering AMR collected 39.5% of the amount it billed to insurance plans and private payers. Despite the challenges of reduced federal funding from Medicare and Medicaid, and a growing uninsured and underinsured population, the District has been able to keep the average annual rate of inflation at 3.3% compared to the medical care services rate at 3.9%³. In fact, AMR's 2014 ALS base rate was 10% below the average charged from both private and public ambulance services (excluding subsidy if any) in the five surrounding counties.

The District regulates ambulance rates through an Average Patient Charge (APC), Maximum Patient Charge (MPC) and Maximum Mileage Charge (MMC). The APC is based on the Unit Hour Cost (cost of staffing and equipping a paramedic ambulance per hour) for services offering similar service levels and market conditions. The MPC protects against extraordinary cost shifting caused by elective discounts that are not due to higher collections, or higher non-emergency transport ratios.

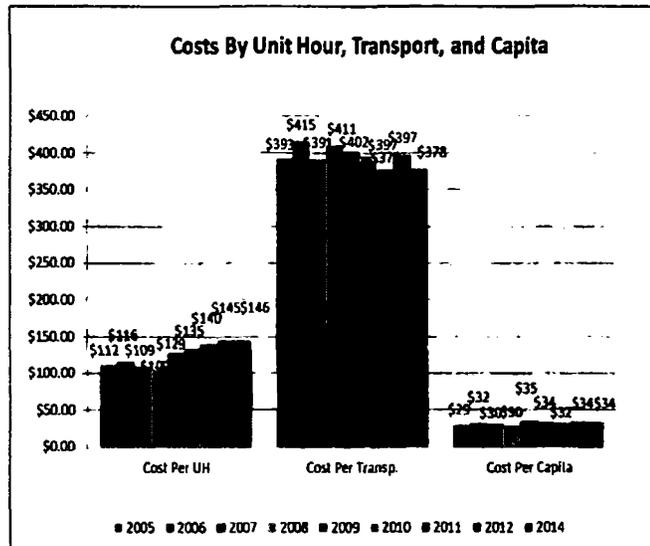
Goal:	APC	\$861.87	2014 Performance:	APC	\$859.57
	MPC	\$1,159.54		MPC	\$1,145.25
	MMC	\$12.50		MMC	\$12.50

Goal Outcomes: Met

Ambulance Costs

This is a performance based and not level of effort contract. As a result, there are no cost standards established. AMR determines what factors of production it needs to use to meet the performance obligations. Even though there are no cost standards, the District monitors AMR's costs to track the financial stability of the ambulance contract.

While the cost of operations continues to rise at 3.3% annually (see "Cost per UH", AMR has kept the "Cost per Transport" relatively flat at -.42% annually due to the system design features that maximize economic efficiency including: an exclusive 9-1-1 and non-emergency contact; an all-ALS ambulance system; and a large multi-jurisdictional contract services area.



³ Medical Care Services average annual inflation rate from 2006 – 2014, CPIU Table 25, 1982-84-100.



COMMUNITY OUTREACH & SUPPORT

EMS District #2's ambulance contract and American Medical Response have made significant contributions to the community's health and safety; as well as enhancing the first responders ability to provide care when help is needed. Over the past 21 years, the District and American Medical Response have contributed over 3 million dollars to improve our EMS response (See "A History of Progress" for details). Some of the key contributions include:

- ✓ \$151,000 to purchase 800 MHz radios for all EMS providers when the county upgraded from UHF radios in 1997 (clinical upgrade reserve fund);
- ✓ \$223,000 to purchase the 12-lead EKGs for all first response paramedic services when initially required in 1998 (clinical upgrade reserve fund);
- ✓ \$203,000 to purchase mobile computing devices in 2004 for EMS providers when the county began providing 9-1-1 data to emergency responders (CRESA EMS Program Fund Balance); and
- ✓ Over \$180,000 to purchase AEDs for fire and law enforcement units (Contractor proposal commitments and response time fines)

In addition to financial support, American Medical Response participates in public safety fairs, child safety seat inspections and community CPR training.

A summary of Community Outreach and Support efforts in 2014 are as follows:

<u>Goal:</u>	<u>2014 Performance:</u>
Public CPR Training –	Public CPR Training –
✓ 5 courses per yr.	✓ 7 courses per yr. and 1,380 persons
Public Access of Defibrillation –	Public Access of Defibrillation –
✓ 50 AEDs at beginning of 2004 contract.	✓ 168 AEDs since beginning of 2004 contract
	✓ \$25,000 to Purchase PulsePoint ⁴ in 2013
Child Safety Seat Inspections –	Child Safety Seat Inspections –
✓ 12 clinics per yr.	✓ 12 clinics per yr.
First Responder ALS Medical Supplies –	First Responder ALS Medical Supplies –
✓ Purchase or exchange	✓ Purchase or exchange at \$38,598 ⁵ .
	✓ ALS First Response Agreements \$182,133

Goal Outcomes: Met

⁴ PulsePoint is a smart phone application that lets subscribers know the location of public cardiac arrests and locations of AEDs

⁵ Vancouver stopped requesting reimbursement for supplies May 2013



CHALLENGES & OPPORTUNITIES

EMS Community Healthcare Program

In the last 20 years, EMS providers have seen a significant increase in the number of individuals who utilize 9-1-1 services for routine and episodic healthcare. Transferring these patients from the emergency system into a structured healthcare plan is challenging.

EMS organizations (emergency medical call-takers, fire first responders and ambulance service providers) throughout the Portland-Vancouver metro area strive to provide state-of-the-art services to the citizens we serve in an efficient manner. Despite these efforts, we have identified three distinct gaps in the patient care continuum:

- ✓ Lack of access to appropriate care systems;
- ✓ A need for a wider variety of response and destination options; and
- ✓ A need for additional methods to deal with frequent users of emergency medical resources.

An additional challenge for EMS in effectively responding to these gaps is ambulance insurance reimbursement requires transport to the hospital Emergency Department (ED) which perpetuates a costly healthcare system.

Community Healthcare Summit

In April 2014, CRESA's EMS Program coordinated a Community Healthcare Summit for the purpose of bringing together healthcare leaders for the opportunity to learn and explore how EMS can have a role in helping transform a system of care to achieve "better health, better care and lower costs."⁶ Over 150 persons attended from local health plans, hospitals, state and county health and human services, mental health providers, primary care and home health representatives, city and county elected officials, medical directors, 9-1-1 agencies and EMS providers.

EMS Community Healthcare Coalition

Following the Summit, CRESA's EMS Program assisted EMS and allied healthcare providers in the metro area to form an EMS Community Healthcare Coalition so that multiple organizations can come together to better coordinate a regionalized approach in addressing the healthcare challenges the community is facing. The proposed Community Healthcare Programs outlined below are based on the key national and local programs identified during the Summit and under development by the Coalition.



⁶ CMS Triple Aim

CHALLENGES & OPPORTUNITIES

911 - Nurse Triage Program

A trained nurse dispatcher manages low-acuity 9-1-1 calls and provides secondary triage designed to identify the most appropriate resource and destination. This simple, yet effective system provides an alternative option to emergency response. A substantial number of 9-1-1 calls do not require an EMS response, and many patients do not require a visit to a hospital ED. Some callers simply need help connecting with appropriate healthcare resources. The nurse dispatcher can field these calls to provide and find the appropriate services. Such services may include: scheduling appointments with a primary care provider, making arrangements for transportation, or dispatching a community paramedic unit to respond for further assessment or hands-on help. The nurse dispatcher may help direct the patient to an in-network provider for continuity of care, or help find available alternate care resources for patients who are not assigned a primary care provider.



With the decline of fee-for-service based medicine and the transition to accountable care organizations, it's more important than ever to ensure patients are receiving the services most appropriate resulting in the best outcomes. A 9-1-1 nurse triage program alleviates some of the burden on the healthcare system by better allocating resources for non-emergent situations.

EMS Low Acuity Triage

Approximately 22% of EMS calls to 9-1-1 are for low acuity complaints that usually don't require a rapid emergency response,⁷ the EMS resources typically sent on 9-1-1 medical calls, or transport to an emergency department. Some low acuity patients may be appropriate for alternate care options⁸ such as: ambulance transport to urgent care; clinic appointment; physician consult; and home care.



During the assessment for alternate care services the paramedic can use the nurse dispatcher to help the patient access services for appropriate care.

Mobile Integrated Healthcare Practice (MIHP)

Fire departments and ambulance services provide non-emergent care in daily operations all across the country. When a patient dials 9-1-1 and receives an emergency response for a low acuity or non-urgent situation, the level of care provided is not only unnecessary but adds significant costs to the healthcare system.

⁷ Based on Clark County EMS District #2's 2012 patient acuity data and corresponding response priorities.

⁸ Based on OHSU's 2012 CMS Innovation Grant application estimating 6.3% of total EMS responses.

CHALLENGES & OPPORTUNITIES

An alternative response is the Mobile Integrated Healthcare Practice Program that utilizes more efficient vehicles and fewer EMS personnel, for example Community Paramedics, specially trained for pre-scheduled assessment/prevention (e.g., BP and BGL monitoring, prescription drug compliance, fall risk-assessment, 12-lead ECG tracing, specimen collection, immunizations/vaccinations and social interaction) and intervention services (e.g., breathing treatments, medication administration and IV monitoring). Eligible patients for the Mobile Integrated Healthcare Practice would be pre-identified as either frequent users of 9-1-1 services, or high likelihood to be re-admitted to the hospital.



CONCLUSION

The participating jurisdictions of EMS District #2 established a carefully structured EMS system and ambulance contract that ensured the standards of clinical excellence, response time reliability, and economic efficiency were met. This system was designed so that it was responsive to changes in economic conditions and advancements in clinical care. As a result, the District's EMS system has a 22 year proven track record that was self-correcting, provided stability, and consistently exceeded the performance standards established.

Our community's EMS system should continue a regional focus, especially as traditional sources of public and private funds continue to shrink. The EMS providers and elected officials need to critically look at these challenges and work together through proven and sound EMS system design elements to solve them.

In conclusion, it's important to recognize the past and present members of the EMS Administrative Board composed of citizen volunteers with expertise in business, finance, law, health care administration and insurance. This Board ended its 22 year commitment to oversee the design and administer the District's paramedic ambulance service contract that has consistently been viewed as a best practice in the industry. Of note is the Board's Chair, Mike Plymale, one of the original Board members who invested countless hours of his time and experience at ensuring the community was provided service that was transparent and accountable.

Recognition also goes to Dr. Lynn Wittwer, the Medical Program Director for Clark County. Due to his leadership, our county's EMS providers have often been the first in the region to implement leading innovations in patient care. He has not only played a key role in the quality of EMS locally, but is a leader in the state at guiding the direction of EMS education and patient care.

CRESA's EMS Program is fortunate to work these EMS professionals and community stakeholders these past 22 years who've focused on doing what's best for the patient as well as for those who provide the care.

EXHIBIT A

American Medical Response Priority Hot YTD Response Time Compliance

AMR w/FRA

	Urban <= 7m 59s 1st ALS*				Suburban <= 11m 59s 1st ALS*				Rural <= 19m 59s 1st ALS*			
	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %
2013-10	1568	1510	96.30%	96.30%	235	218	92.77%	92.77%	33	32	96.97%	96.97%
2013-11	1412	1365	96.67%	96.48%	200	190	95.00%	93.79%	46	45	97.83%	97.47%
2013-12	1496	1415	94.59%	95.84%	224	204	91.07%	92.87%	36	34	94.44%	96.52%
2014-1	1613	1552	96.22%	95.94%	212	201	94.81%	93.34%	41	40	97.56%	96.79%
2014-2	1132	1094	96.64%	96.05%	164	147	89.63%	92.75%	27	27	100.00%	97.27%
2014-3	1601	1537	96.00%	96.04%	220	203	92.27%	92.67%	45	42	93.33%	96.49%
2014-4	1426	1379	96.70%	96.14%	205	190	92.68%	92.67%	54	51	94.44%	96.10%
2014-5	1542	1505	97.60%	96.33%	192	183	95.31%	92.98%	47	46	97.87%	96.35%
2014-6	1591	1546	97.17%	96.43%	183	166	90.71%	92.75%	40	39	97.50%	96.48%
2014-7	1608	1536	95.52%	96.33%	252	241	95.63%	93.10%	45	44	97.78%	96.62%
2014-8	1539	1472	95.65%	96.27%	210	195	92.86%	93.08%	57	56	98.25%	96.82%
2014-9	1599	1536	96.06%	96.25%	196	185	94.39%	93.18%	40	40	100.00%	97.06%

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	Urban <= 9m 59s AMR Only				Suburban <= 13m 59s AMR Only				Rural <= 21m 59s AMR Only			
	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %
2013-10	1568	1493	95.22%	95.22%	235	214	91.06%	91.06%	33	33	100.00%	100.00%
2013-11	1412	1335	94.55%	94.90%	200	189	94.50%	92.64%	46	46	100.00%	100.00%
2013-12	1496	1381	92.31%	94.03%	224	205	91.52%	92.26%	36	34	94.44%	98.26%
2014-1	1613	1514	93.86%	93.99%	212	201	94.81%	92.88%	41	40	97.56%	98.08%
2014-2	1132	1071	94.61%	94.09%	164	151	92.07%	92.75%	27	27	100.00%	98.36%
2014-3	1601	1510	94.32%	94.13%	220	200	90.91%	92.43%	45	44	97.78%	98.25%
2014-4	1426	1373	96.28%	94.43%	205	192	93.66%	92.60%	54	52	96.30%	97.87%
2014-5	1542	1503	97.47%	94.83%	192	182	94.79%	92.86%	47	45	95.74%	97.57%
2014-6	1591	1529	96.10%	94.98%	183	165	90.16%	92.59%	40	40	100.00%	97.83%
2014-7	1608	1543	95.96%	95.08%	252	239	94.84%	92.86%	45	44	97.78%	97.83%
2014-8	1539	1455	94.54%	95.03%	210	199	94.76%	93.03%	57	57	100.00%	98.09%
2014-9	1599	1523	95.25%	95.05%	196	184	93.88%	93.10%	40	40	100.00%	98.24%

EXHIBIT A

American Medical Response Priority Cold YTD Response Time Compliance

AMR w/FRA

	Urban <= 11m 59s 1st ALS*				Suburban <= 17m 59s 1st ALS*				Rural <= 29m 59s 1st ALS*			
	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %
2013-10	847	786	92.80%	92.80%	116	109	93.97%	93.97%	10	10	100.00%	100.00%
2013-11	726	662	91.18%	92.05%	94	86	91.49%	90.95%	14	14	100.00%	100.00%
2013-12	808	730	90.35%	91.47%	102	94	92.16%	91.35%	19	19	100.00%	100.00%
2014-1	830	749	90.24%	91.16%	91	84	92.31%	91.56%	24	24	100.00%	100.00%
2014-2	584	526	90.07%	90.99%	69	62	89.86%	91.31%	9	8	88.89%	98.68%
2014-3	804	733	91.17%	91.02%	99	93	93.94%	91.77%	20	20	100.00%	98.96%
2014-4	814	757	93.00%	91.32%	100	96	96.00%	92.40%	16	14	87.50%	97.32%
2014-5	889	830	93.36%	91.61%	110	104	94.55%	92.70%	21	21	100.00%	97.74%
2014-6	864	783	90.63%	91.49%	121	116	95.87%	93.13%	20	20	100.00%	98.04%
2014-7	851	785	92.24%	91.57%	113	105	92.92%	93.10%	26	25	96.15%	97.77%
2014-8	860	774	90.00%	91.42%	120	114	95.00%	93.30%	19	18	94.74%	97.47%
2014-9	879	792	90.10%	91.30%	114	106	92.98%	93.27%	20	20	100.00%	97.71%

Page 1

	Urban <= 13m 59s AMR Only				Suburban <= 19m 59s AMR Only				Rural <= 31m 59s AMR Only			
	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %	Total Calls	Compliant Calls	Monthly %	YTD %
2013-10	847	798	94.21%	94.21%	116	109	93.97%	93.97%	10	10	100.00%	100.00%
2013-11	726	669	92.15%	93.26%	94	88	93.62%	93.81%	14	14	100.00%	100.00%
2013-12	808	738	91.34%	92.61%	102	95	93.14%	93.59%	19	19	100.00%	100.00%
2014-1	830	764	92.05%	92.46%	91	84	92.31%	93.30%	24	24	100.00%	100.00%
2014-2	584	543	92.98%	92.54%	69	64	92.75%	93.22%	9	8	88.89%	98.68%
2014-3	804	760	94.55%	92.89%	99	90	90.91%	92.82%	20	20	100.00%	98.96%
2014-4	814	778	95.58%	93.29%	100	94	94.00%	93.00%	16	14	87.50%	97.32%
2014-5	889	851	95.73%	93.64%	110	107	97.27%	93.60%	21	21	100.00%	97.74%
2014-6	864	800	92.59%	93.51%	121	115	95.04%	93.79%	20	19	95.00%	97.39%
2014-7	851	796	93.54%	93.51%	113	106	93.81%	93.79%	26	26	100.00%	97.77%
2014-8	860	787	91.51%	93.32%	120	112	93.33%	93.74%	19	18	94.74%	97.47%
2014-9	879	817	92.95%	93.29%	114	109	95.61%	93.92%	20	20	100.00%	97.71%