

Emergency Medical Services (EMS) in Montana

Presentation by the

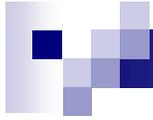
Legislative Audit Division

To the Children, Families, Health and Human Services Legislative Interim Committee

January 25, 2008

Services Visted During Fieldwork





Areas of Discussion

- EMS Incidents
- EMS Units
- EMS Workforce



EMS INCIDENTS

- Number of Incidents
- Characteristics of Incidents
- Demographics of Individuals Using EMS

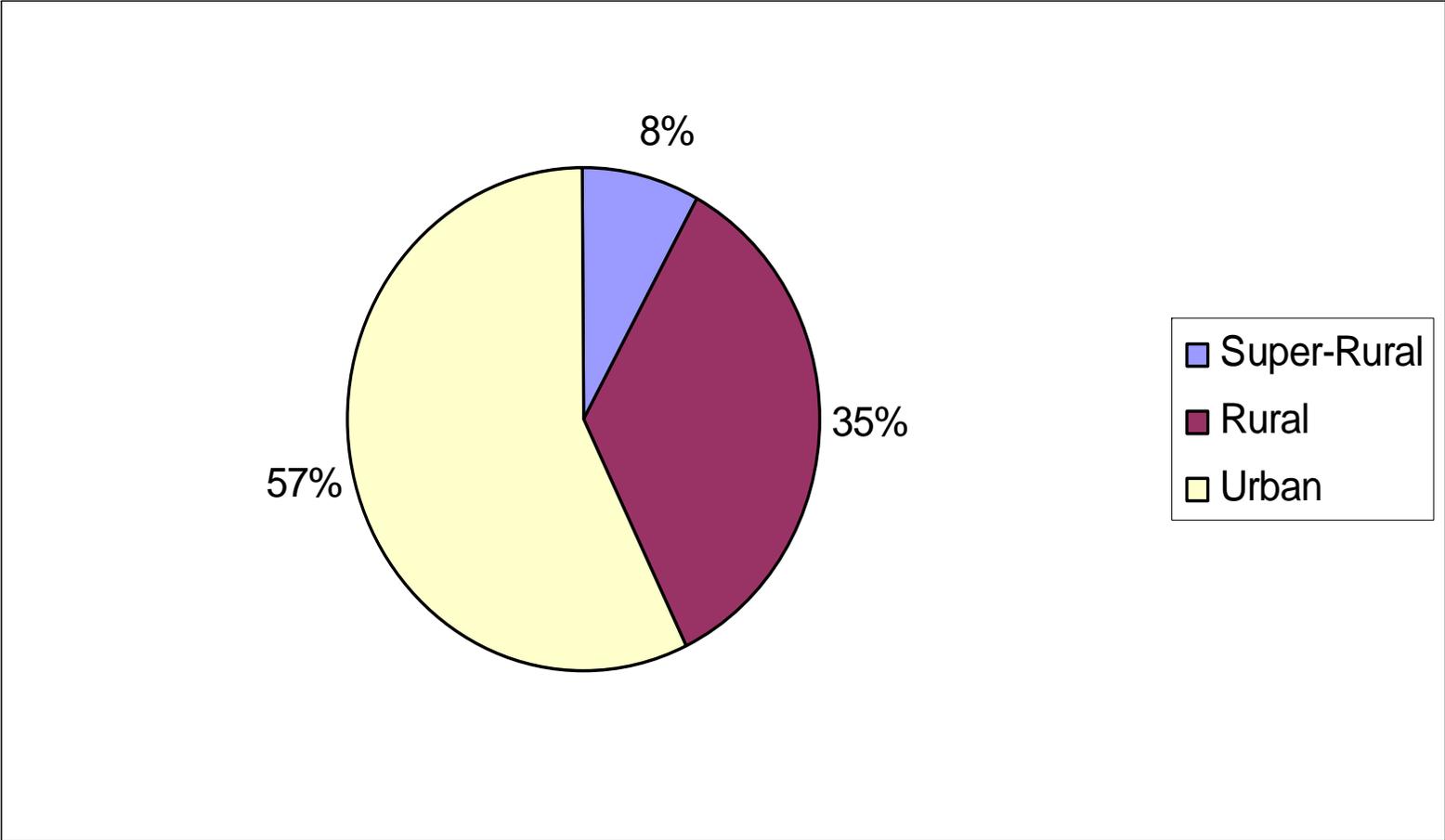


Estimated Total Number of EMS Incidents in CY2006

- Statewide Total = 72,382
- Up to 30% did not result in a patient transport.

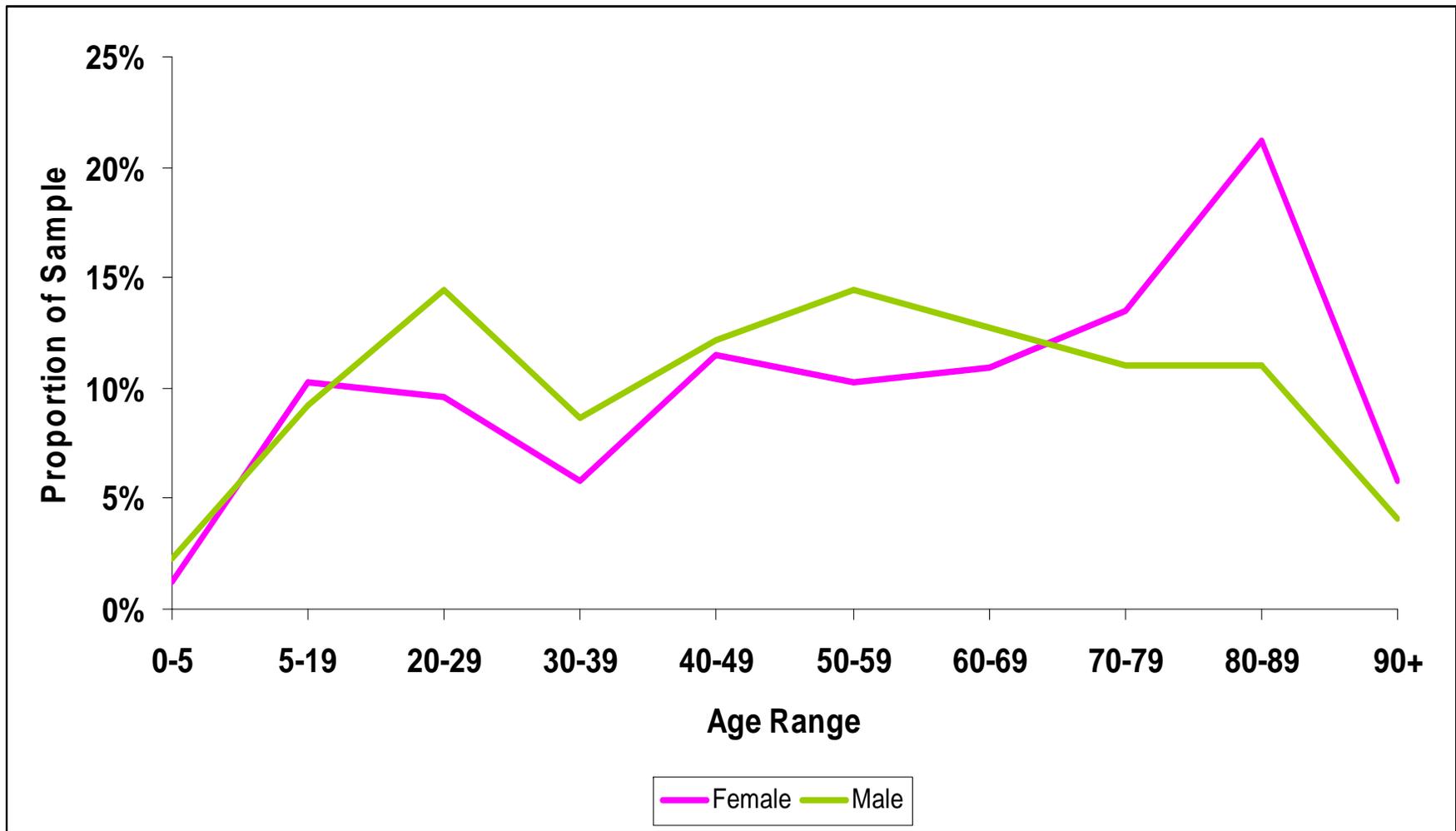
Source: Compiled by LAD from EMS unit records using variable sampling methodologies.

Occurrence of EMS Incidents by Population Designation



Source: Compiled by LAD from EMS unit records using variable sampling methodologies.

Age Data by Gender



Source: Compiled by LAD from sampled patient care records.



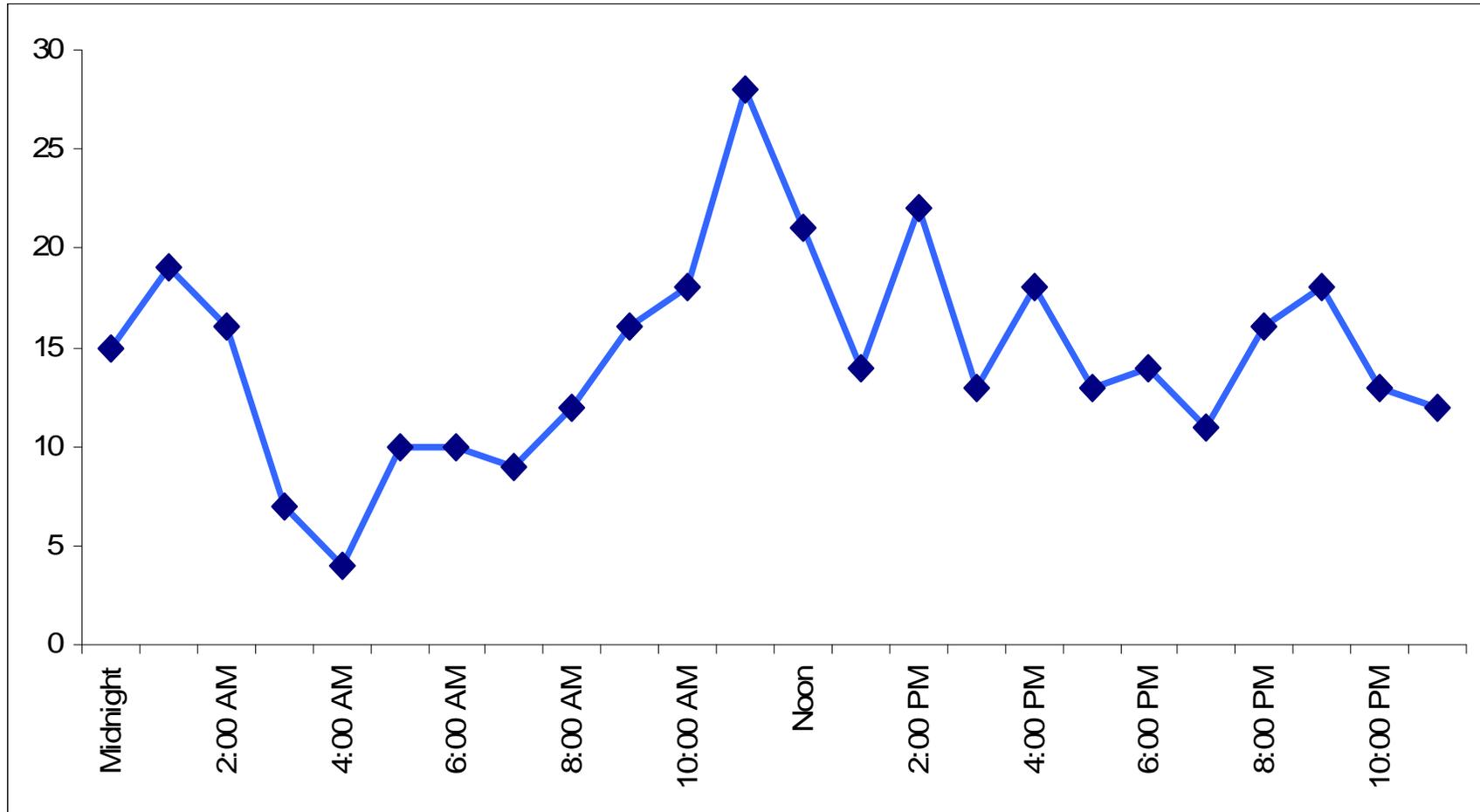
Reasons for Calling 911 for EMS Care

Type of Incident	Percentage
Medical	58%
Motor Vehicle Crash	16%
Trauma	9%
Suicide/Suicide Attempt	5%
Cardiac-Related Medical	4%
Other/Miscellaneous	3%
Criminal Assault	3%
Alcohol and Drug Related	1%

Type of Scene	Percentage
Home/Residence	51%
Street or Highway	21%
Public Building	12%
Health Care Facility	5%
Miscellaneous (Trade, Fire, Ranch)	6%

Source: Compiled by LAD from sampled patient care records.

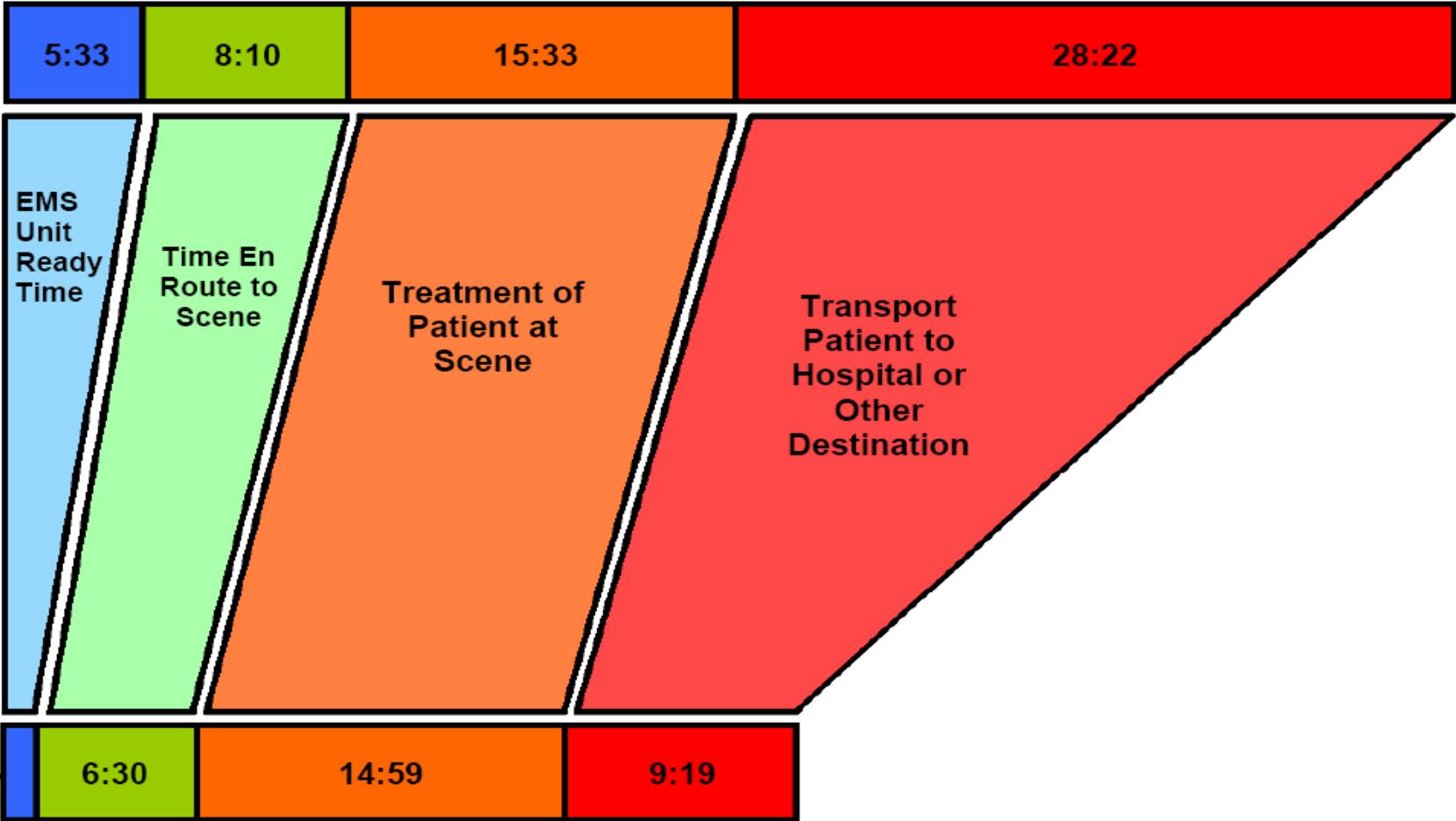
Time of Day Data



Source: Compiled by LAD from sampled patient care records.

Rural EMS Response

Total Incident Time 57:38



Urban EMS Response

Total Incident Time 32:05

Source: Compiled by LAD from sampled patient care records.



Insurance Information

Type of Insurance Coverage	Percentage
MEDICARE	39%
NO INSURANCE	28%
PRIVATE INSURANCE	17%
MEDICAID	11%
INDIAN HEALTH SERVICES	2%
VA	1%
CONTRACT / 911	0.7%
WORK COMP	0.5%

Source: Compiled by LAD from professional billing service records.



EMS UNITS

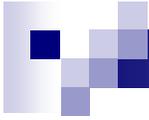
- Information on how units are organized and funded.
- Location of EMS units to the statewide total population and to populations on American Indian Reservations.



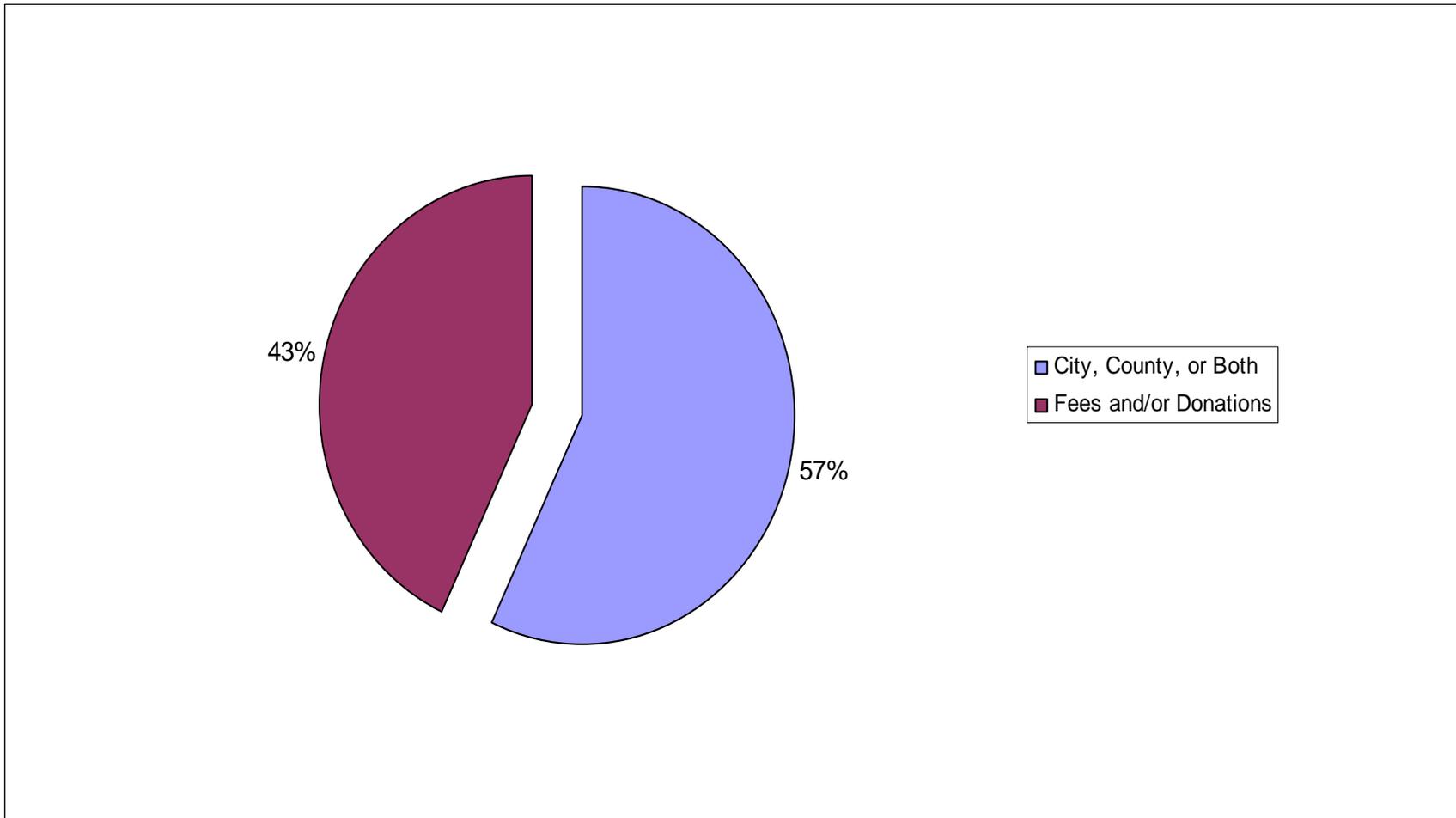
EMS Unit Organization/Classification

- Industrial
- Private
- Hospital
- City
- County
- Volunteer
- Fire Department
- Law Enforcement
- Non-Profit corporation
- Tribal
- Other

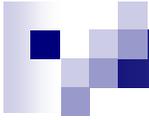
- Public
- Private
- Fire
- Hospital Based



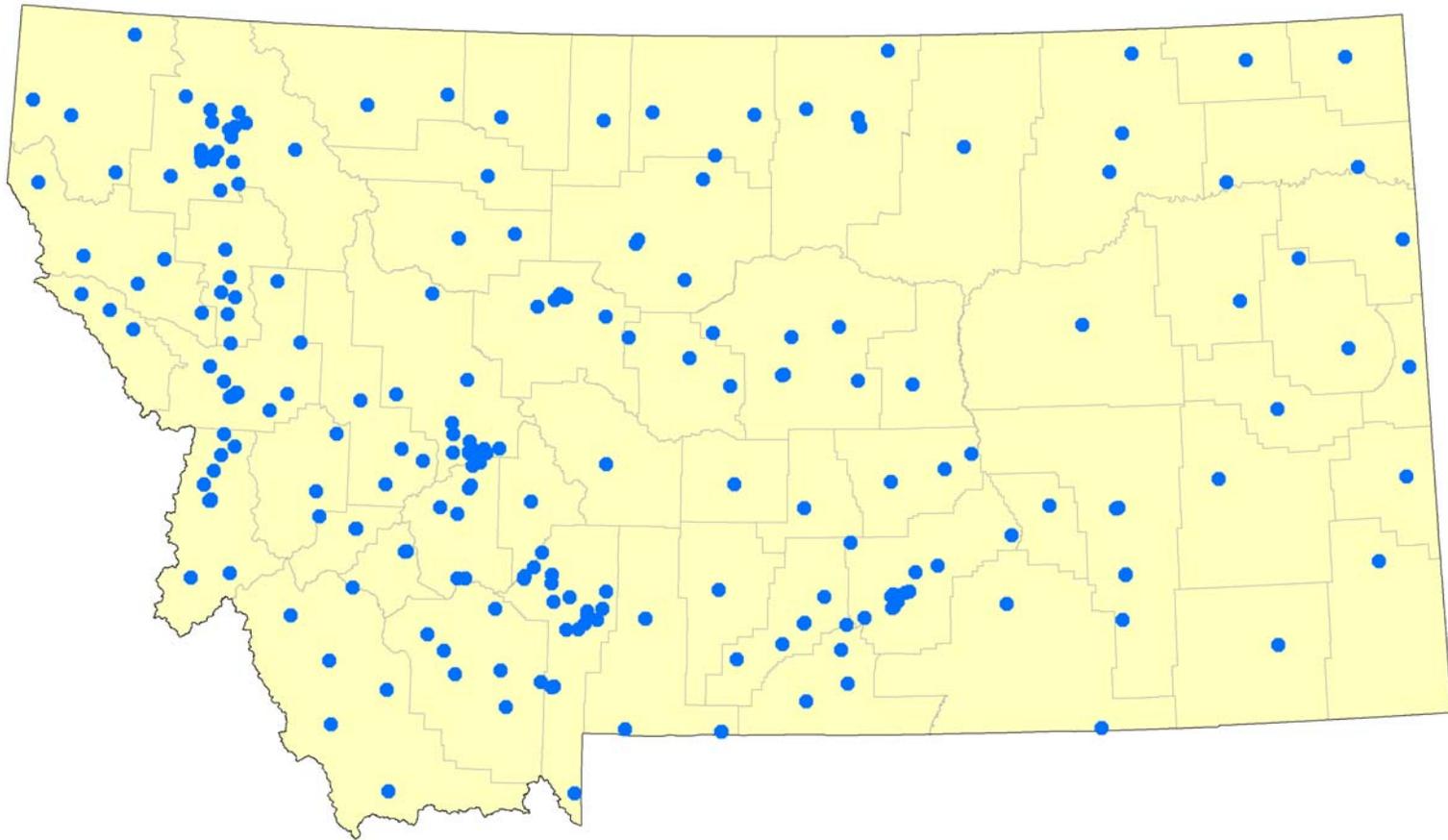
Primary Funding Sources



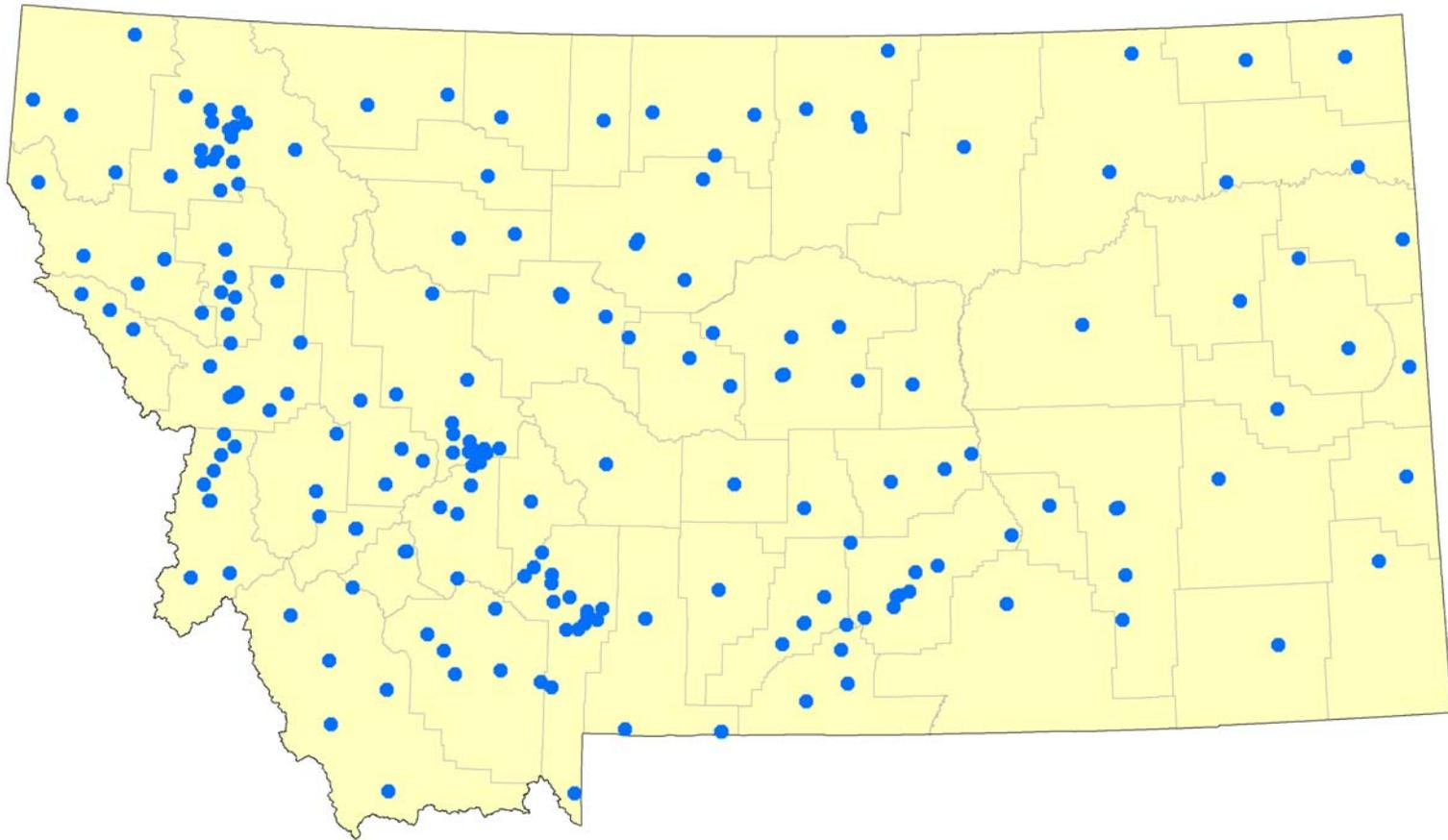
Source: Compiled by LAD from DPHHS records (EMS license applications).



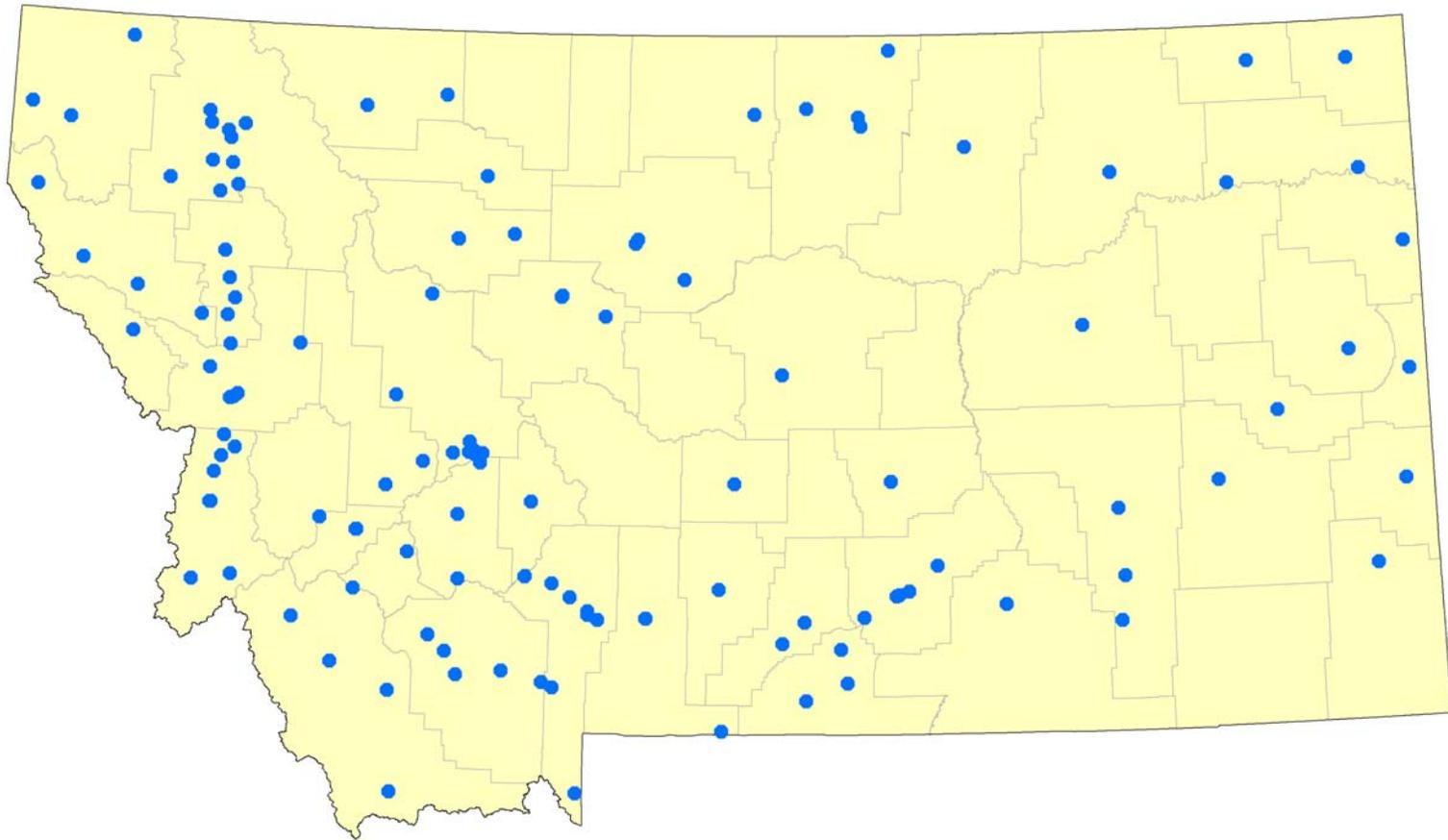
Licensed EMS Units



911 Responding EMS Units



Some Level of Advanced Care



Proximity of Montana's Population to EMS Urban vs. Rural

Within 5 Miles of an EMS Unit		
Type of EMS Unit	Urban	Rural
All 911 Responding Units	97%	72%
Some Level of ALS Care Units	62%	50%
ALS Care 24/7 Units	83%	18%

Within 10 Miles of an EMS Unit		
Type of EMS Unit	Urban	Rural
All 911 Responding Units	100%	85%
Some Level of ALS Care Units	77%	66%
ALS Care 24/7 Units	93%	27%

Within 30 Miles of an EMS Units		
Type of EMS Unit	Urban	Rural
All 911 Responding Units	100%	99%
Some Level of ALS Care Units	100%	92%
ALS Care 24/7 Units	95%	55%

Source: Compiled by LAD from DPHHS records and 2000 U.S. Census Bureau data.



Montana's American Indian Reservation and Rural Populations Proximity to EMS Comparison

	American Indian Reservations Population	Rural Population
5 Miles	59%	72%
10 Miles	70%	85%
30 Miles	95%	99%

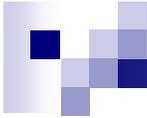
Source: Compiled by LAD from DPHHS records and 2000 U.S. Census Bureau data.



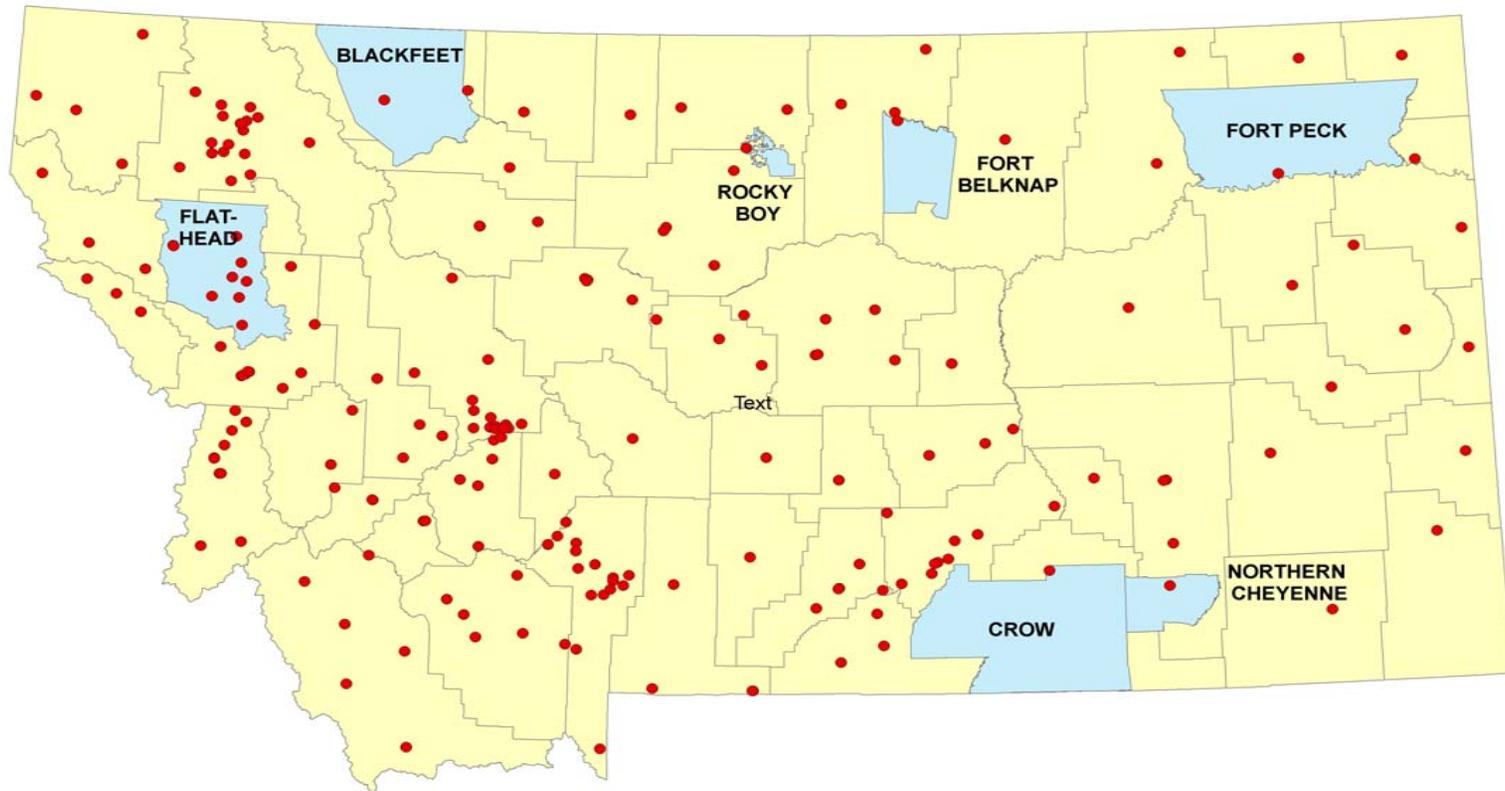
American Indian Population on Reservations and Proximity to EMS per Reservation

American Indian Reservation	5 Miles	10 Miles	30 Miles
Blackfeet	61%	70%	99%
Crow	13%	23%	69%
Flathead	83%	97%	100%
Fort Belknap	48%	49%	63%
Fort Peck	41%	47%	100%
Northern Cheyenne	60%	64%	100%
Rocky Boy	32%	68%	100%

Source: Compiled by LAD from DPHHS records and 2000 U.S. Census Bureau data.



Proximity of EMS Units to American Indian Reservations in Montana



Source: Compiled by LAD from DPHHS records and 2000 U.S. Census Bureau data.



EMS WORKFORCE

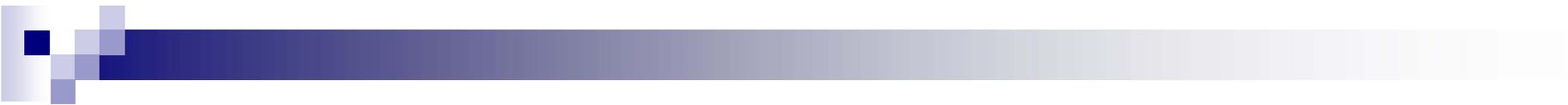
Emergency Medical Technicians (EMTs)

- Approximately 4600 EMTs
- Number of EMTs per Capita
- Practicing EMTs vs. Licensed EMTs
- Demographics
- Turnover



Number of Licensed EMTs per Capita

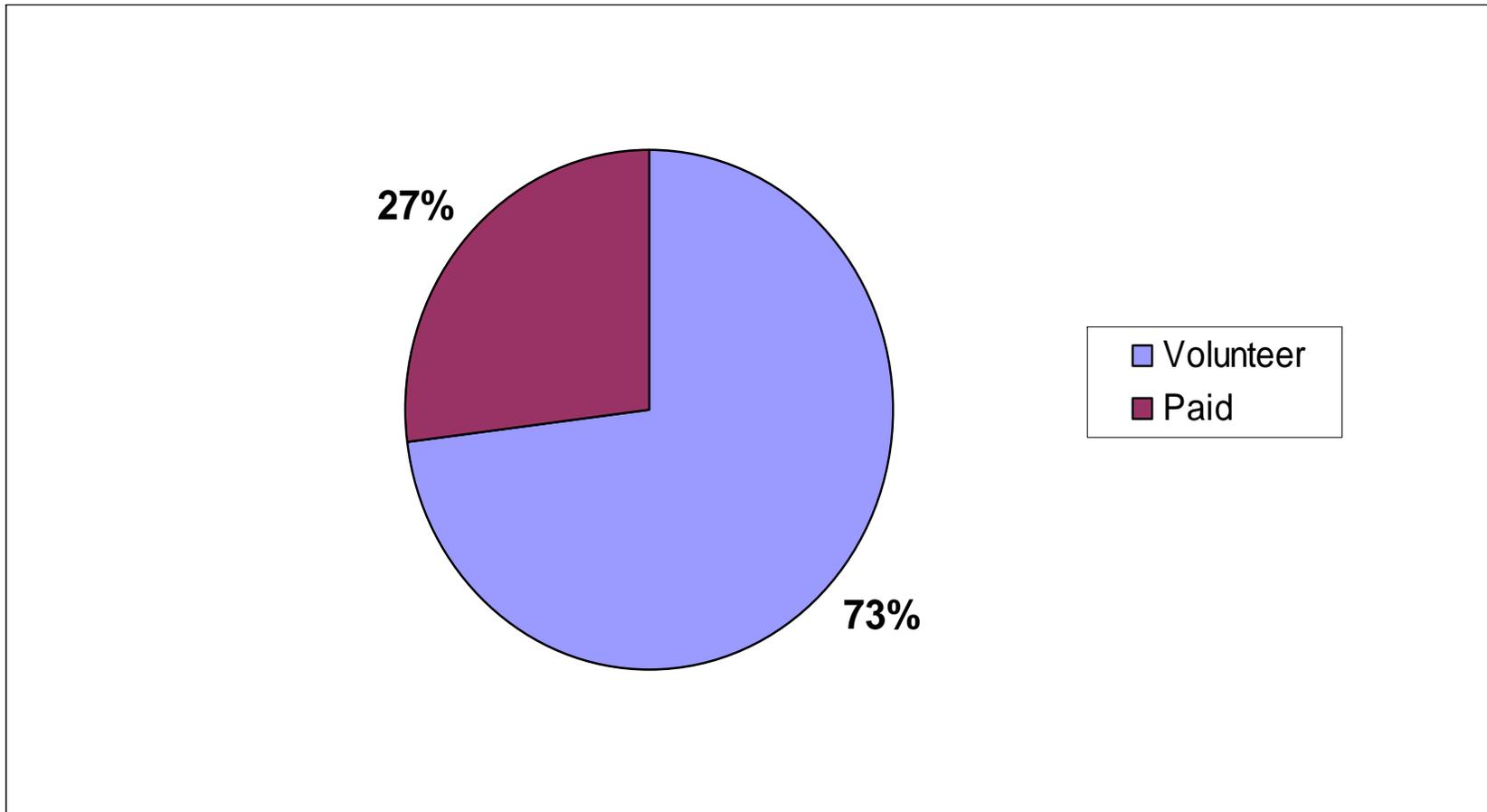
- In Montana, 5 EMTs per 1000 individuals.
- The national average is approximately 3 EMTs per 1000 individuals.



Practicing EMTs

- Number of licensed EMTs on EMS Unit rosters actually practicing EMS care.
 - 57% -- All EMS Units
 - 91% -- Paid Units
 - 48% -- Volunteer or Combination of Paid/Volunteer Units

Percentage of EMS Units Identifying Service Personnel as Paid or Volunteer



Source: Compiled by LAD from DPHHS hard copy records (EMS license applications).



EMS Units vs. Number of EMTs

Type of Compensation	Number of Units	Number of EMTs	Percentage
Paid	79	2,186	47%
Volunteer	181	2,462	53%

Source: Compiled by LAD from DPHHS information systems.



Age Data for EMTs

Age Range (years)	Total
18-29	20%
30-39	25%
40-49	28%
50 and older	28%

Source: Compiled by LAD from BOME records.



Length of Service for EMTs

Years of Service	Total
0-3	37%
4-6	24%
7-9	17%
10 or more	22%

Source: Compiled by LAD from BOME records.



Turnover in the Profession

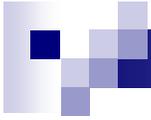
- Turnover exists.
- High stress occupation.
- Work is volunteer in nature in MT.
- All services facing issues with turnover, and rural volunteer services more affected.
- Detailed analysis of turnover in the profession in the audit report.



Summary of Workforce Data

■ EMTs:

- The total number of licensed EMTs does not reflect an accurate number of EMT practitioners.
- The work is considerably volunteer in nature in MT, primarily in rural areas
- Many have less than 3 years experience.
- Turnover is occurring—retention averages 6-8 years.



Questions?