



Engineering the Future: EMS Agenda 2050

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Mike Taigman
Improvement Guide

**FIRST
WATCH**

Every Record. In Real Time. Automatically.

Associate Professor
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Health Services

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Interprofessional Leadership

UCSF



EMS 2050
AGENDA


Envision the future.





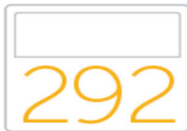
American Ambulance Association



10  TEP members

4  REGIONAL public meetings

71  Organizational Liaisons


292

YEARS OF EXPERIENCE
among members of TEP

769 REGISTRANTS for public meetings

132  Silver Spring, MD

250  Dallas, TX

 180 PARTICIPANTS in the EMS Agenda 2050 webinar

166  Minneapolis, MN

221  Los Angeles, CA

248  PAGES OF COMMENTS RECEIVED as response to FICEMS request for information

266 WRITTEN COMMENTS  during public comment periods on EMS Agenda 2050 Straw Man documents and draft

1 VISION
for the future of EMS



People-centered EMS



People Centered



EMS AGENDA 2050

**ADAPTABLE
& INNOVATIVE**



**INHERENTLY
SAFE & EFFECTIVE**



**SUSTAINABLE
& EFFICIENT**



**INTEGRATED
& SEAMLESS**



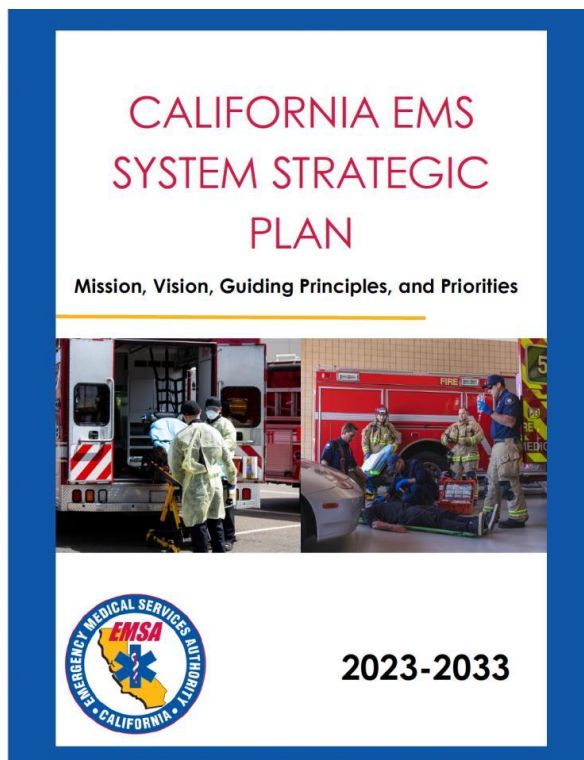
**SOCIALLY
EQUITABLE**



**RELIABLE
& PREPARED**



EMS Agenda 2050 and State and National Planning



California EMS System Vision, Mission, and Guiding Principles



California EMS System Vision Statement

The California EMS System is a person-centered and evidence-based healthcare system that provides, with dignity, respect, and the highest level of safety and care, the best possible outcomes for all patients and professionals.



California EMS System Mission Statement

The California EMS System provides equitable, high-quality emergency medical care and seamlessly integrates with the continuum of healthcare services.



California EMS System Guiding Principles

As a person-centered EMS system, the California EMS System embraces the following eight Guiding Principles:

- Safe and Effective
- Data-Driven and Transparent
- Sustainable and Efficient
- Accessible and Equitable
- Integrated and Coordinated
- Prepared and Resilient
- Professional and Quality-Focused
- Adaptable and Innovative

Safe and Effective

The California EMS System is safe, effective, efficient, timely, and person-centered to optimize outcomes. Decisions are made considering the healthcare goals of patients, their families, EMS professionals, healthcare providers, and the public. Clinical care operations and medical oversight are based on the best available evidence, allowing systems to deliver effective service that focuses on outcomes and includes the individuals receiving and providing care.

Data-Driven and Transparent

The California EMS System informs policy and decision-making, drives action, and promotes evidence-based person-centered care using reliable and consistent data elements. Transparency is characterized by visibility and accessibility of information while protecting confidentiality.

Sustainable and Efficient

The California EMS System is fiscally responsible, sustainable, and conducive to optimizing patient care and outcomes. The California EMS System brings value to patients and the community, minimizes waste, and efficiently optimizes existing systems and resources.

Accessible and Equitable

The California EMS System of care is inclusive, diverse, and provides equitable, quality care without bias and regardless of socioeconomic status. Patients have access to necessary resources to meet their healthcare needs, and EMS professionals are confident, prepared, and empowered to care for all.



■ TYPICAL PATIENT (OVERALL)



Age 61-70 - 5,103,468 (15.9%)
Race White - 12,776,533 (63.9%)
Sex Female - 16,381,716 (50.87%)
EMS Transport Method Ground-Ambulance - 24,798,752 (98.74%)

Inclusion criteria: 911 initiated and patient contact was made. Values that were marked Not Applicable or Not Recorded are removed.

■ TYPICAL PEDIATRIC PATIENT



Age 17 - 180,663 (11.8%)
Race White - 2,838,674 (64.0%)
Sex Male - 1,035,204 (51.2%)
EMS Transport Method Ground-Ambulance - 2,122,204 (97.4%)

Inclusion criteria: 911 initiated and patient contact was made. Values that were marked Not Applicable or Not Recorded are removed.



Integrated and Coordinated

The California EMS System is fully integrated with healthcare and community resources. Communication, collaboration, and coordination across the care continuum are seamless to ensure that providers have the information and resources needed to deliver care within this integrated system, comprised of many parts.

Prepared and Resilient

The California EMS System is scalable and able to respond to fluctuations in day-to-day demand, and major events, both planned and unplanned. The system promotes wellness of EMS professionals while meeting California EMS System demands.



Professional and Quality Focused

The California EMS System is guided by state and local medical control which maintains standards of practice. EMS professionals foster a culture that champions safety, respect, and the delivery of high-quality care. EMS professionals collaborate to develop innovative solutions to address problems and test, measure, and evaluate their ideas.

Adaptable and Innovative

The California EMS System continuously evaluates processes, innovative technologies, system designs, educational programs, and all components to incorporate medical, social, and operational advances while meeting the changing needs of communities and professionals. New ideas are implemented in a safe and systematic way to encourage the development of effective state programs.





TELEMEDICINE FRAMEWORK for EMS and 911 ORGANIZATIONS

Federal Interagency Committee on
Emergency Medical Services

- **Sustainable and efficient**
 - Establishing new reimbursement models and maintaining effectiveness without hospital transport
 - Benefit: lower cost per visit, elimination of inappropriate utilization, lower emissions, lower wear and tear on equipment
- **Adaptable and innovative**
 - Developing new methods for delivering healthcare services
 - Benefit: rapidly overcome care delivery challenges to unforeseen events (e.g., telemedicine has been used for this purpose during the COVID-19 pandemic)

Alignment with EMS Agenda 2050

Building on the foundation laid by the 1996 *EMS Agenda for the Future*, *EMS Agenda 2050* was developed through a multi-year initiative that established a vision of people-centered EMS and 911 systems. The document articulates a bold plan for innovative, people-centered possibilities to advance EMS systems. A key component was to foster models for systems that account for changes in social needs, including new reimbursement models. Establishing and implementing telemedicine programs for EMS and 911 systems follows that purpose. The six guiding principles of *EMS Agenda 2050* are shown in Figure 2. This resource document has been developed to support those guiding principles.

Figure 2: EMS Agenda 2050 Guiding Principles
Source: National Highway Traffic Safety Administration



- **Inherently safe and effective**
 - Providing high quality care without in-person interactions
 - Benefit: reduction of response crashes, reduction of emergency motor vehicle crashes and risks, elimination of lights and sirens use
- **Integrated and seamless**
 - Incorporating various data sources, increasing connectivity with providers, and coordinating care across jurisdictions
 - Benefit: easily adapt to the out-of-hospital workflows and environments
- **Reliable and prepared**
 - Routine, effective telemedicine interactions and effectively adapting to challenges
 - Benefit: new technologies such as FirstNet and satellite broadband enable capabilities regardless of location
- **Socially equitable**
 - Providing telemedicine care appropriate for urban and rural areas, cognizant of the needs of different patient populations
 - Benefit: patient access to care regardless of the ability to pay or transportation resources

Imagine a Struggling EMS System

• Problem List

1. APOT
2. Staffing/Workforce issues
3. Professionalism
4. Data Systems antiquated
5. Burnout /Lack of Career Advancement
6. EMS injuries / Ambulance Crashes
7. Lack of integration
8. Conflict between fire-based/ private ambulance services
9. Funding challenges



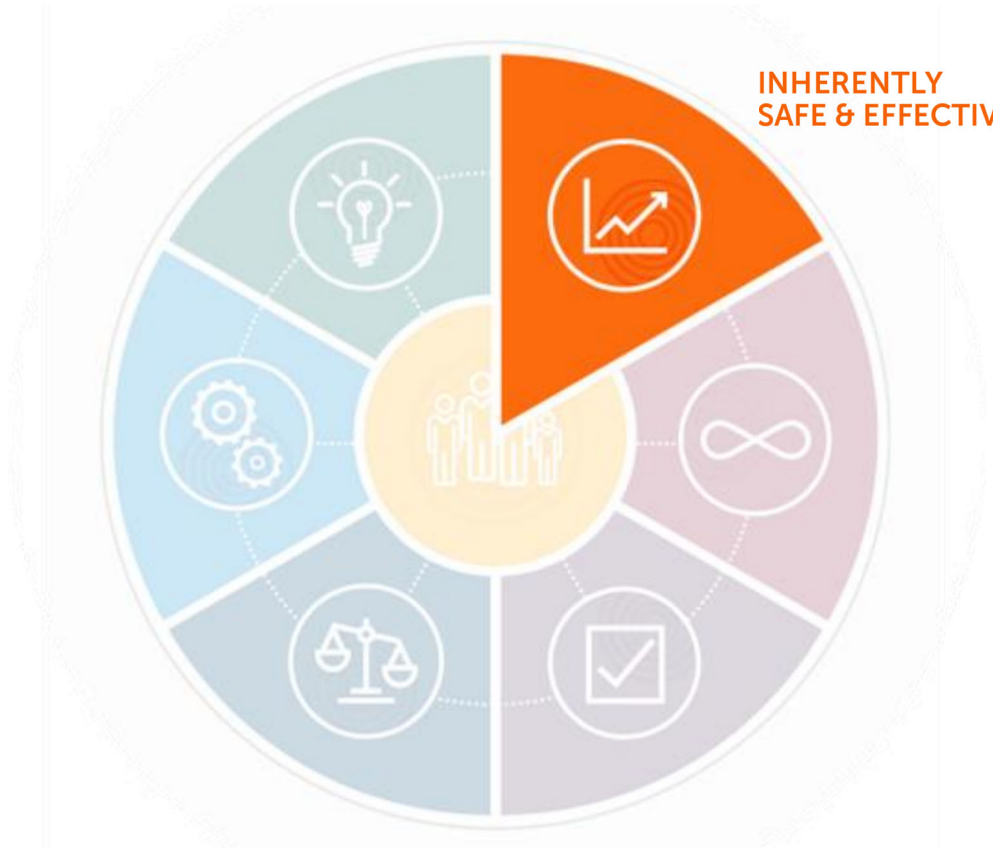
- You are a group of experts in administration and medical oversight of EMS systems hired to evaluate and make recommendations for system improvements to this struggling EMS System...





ConsultSolutions.EMS@gottheanswer.gov

The Guiding Principles

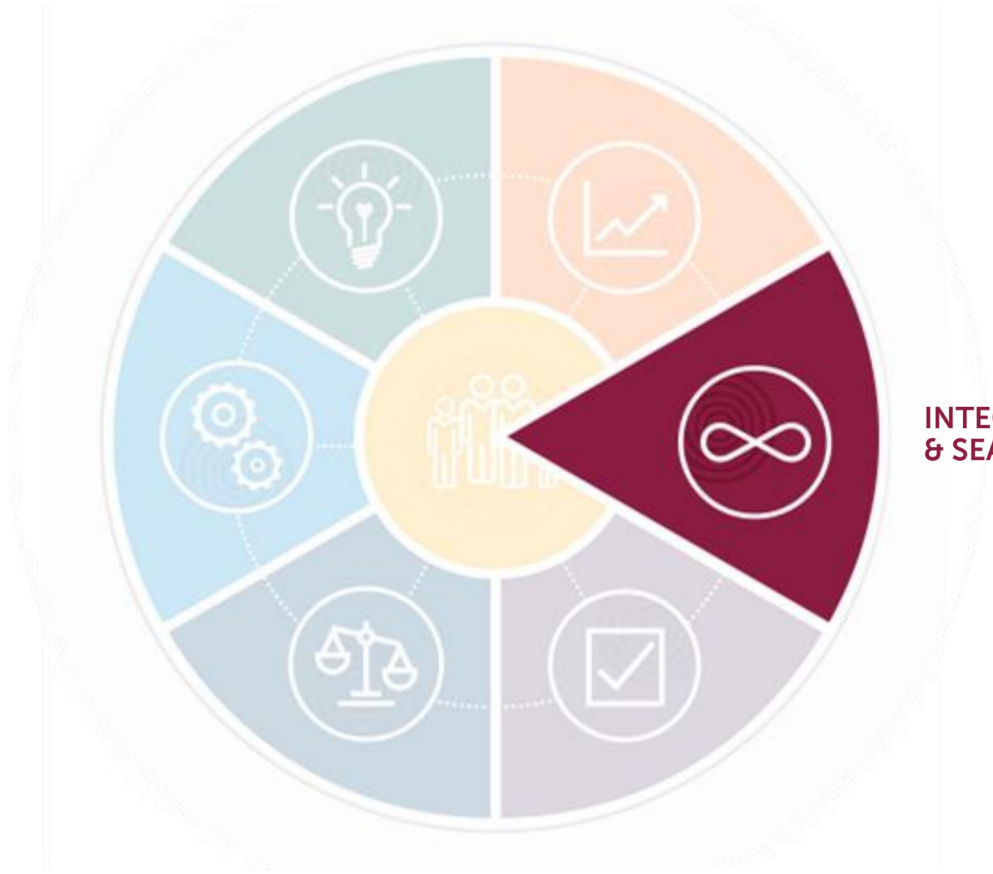


Inherently Safe and Effective

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The Guiding Principles



**INTEGRATED
& SEAMLESS**

Integrated and Seamless

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The Guiding Principles



Reliable and Prepared

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The Guiding Principles



Socially Equitable







2 Kinds of EMS Systems



2 Kinds of EMS Systems

Disparities in the quality of care!



2 Kinds of EMS Systems

Disparities in the quality of care!

Have not looked at their data.

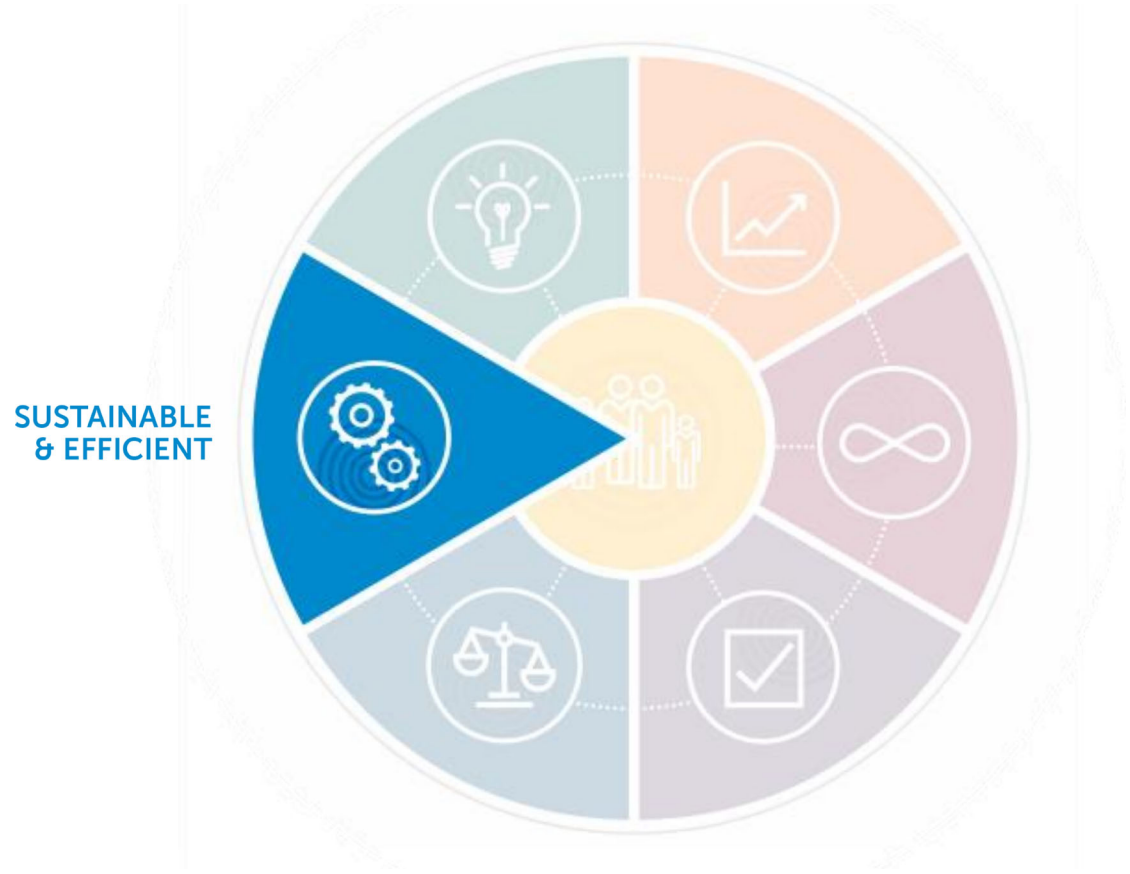




Socially Equitable

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The Guiding Principles

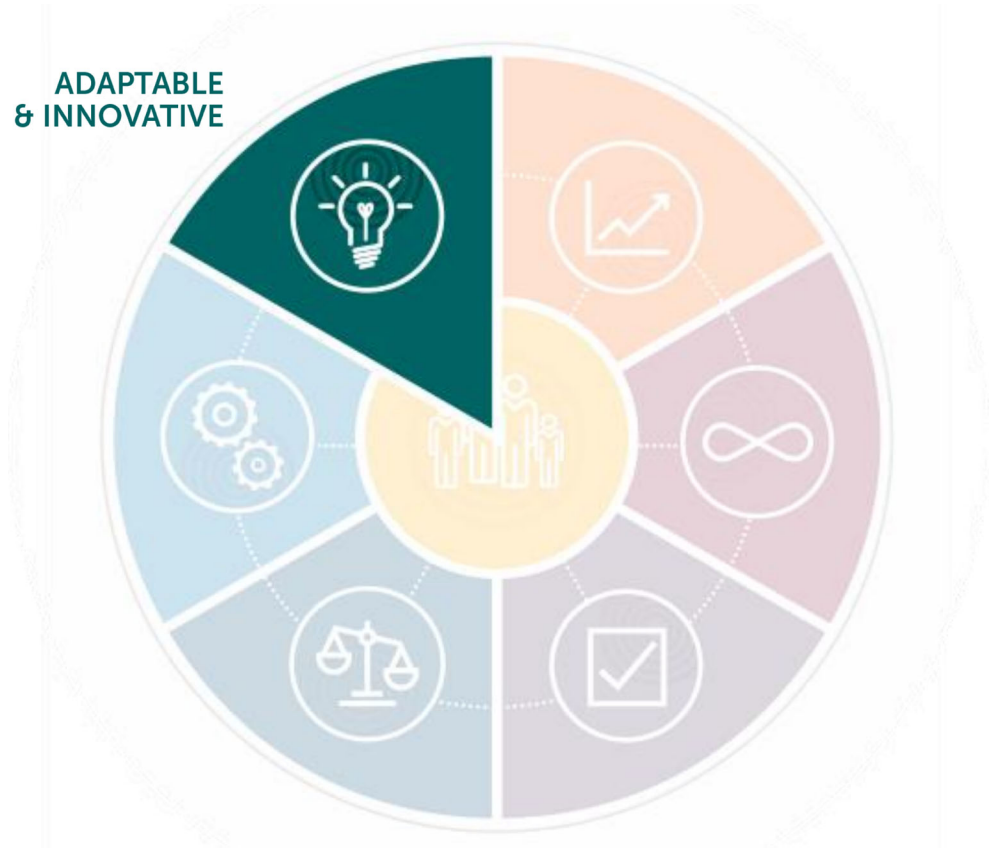


Sustainable and Efficient

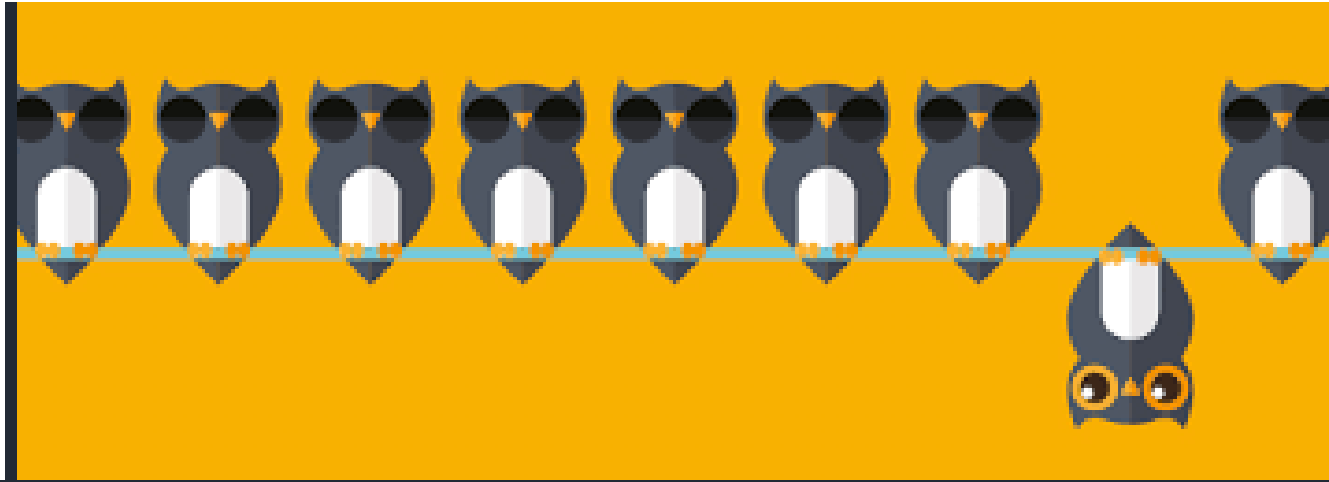
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The Guiding Principles



Adaptive and Innovative



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EMS AGENDA 2050



Questions?

