

# SAFECOM: The Road to Interoperability



Governance

Standard Operating Procedures

Technology

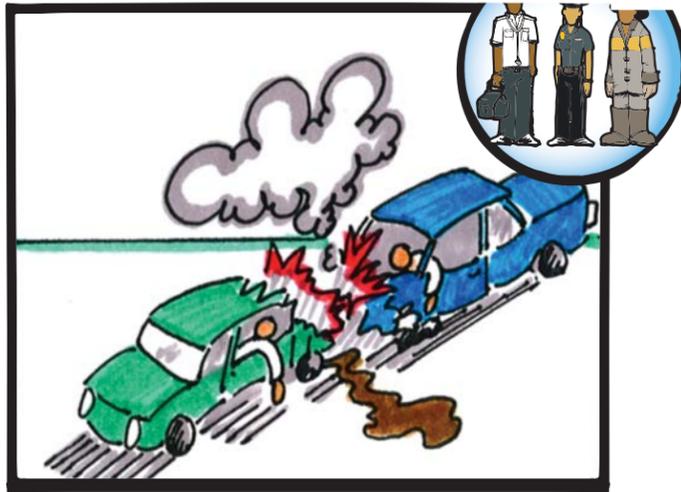
Training & Exercises

Usage

# The Problem "On the Ground"

From day-to-day to high impact incidents, our Nation's emergency responders too often cannot rely on their ability to communicate with one another across jurisdictions and disciplines. This limitation impedes emergency responders' ability to respond effectively to emergencies at all levels. This significantly increases the risk of harm or death to both the responders arriving on scene and the victims relying on them for help.

SAFECOM's philosophy supports the notion that the same interoperability solutions that are used daily for local emergencies should be scalable for response to any statewide incident as well as for natural disasters and terrorist attacks. If responders use interoperability solutions every day, the coordinated communications in response to any incident will be a natural instinct.



Happens almost daily but with relatively low consequences

## The Problem:

Local police, fire, and EMS cannot effectively communicate.

## Impacts:

- Lives at risk
- Risk for redundant, uncoordinated response



Happens less often but when it does, there are higher consequences

## The Problem:

Local and state responders cannot effectively communicate across agencies and disciplines.

## Impacts:

- Lives at risk
- Risk for redundant, uncoordinated response
- Property, data, and infrastructure at risk
- Health risks
- Local business interrupted

## TERRORIST ATTACK



Happens least often but when it does, there are very high consequences

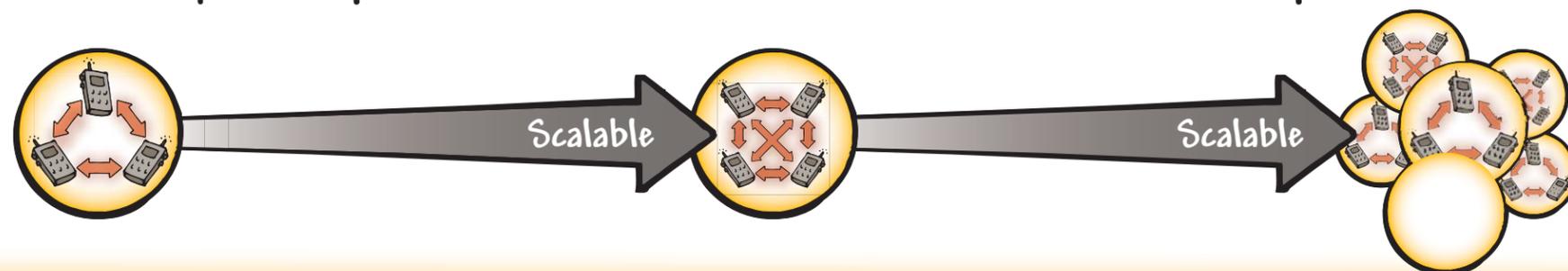
## The Problem:

Local, tribal, state, and Federal responders cannot effectively communicate across agencies and disciplines.

## Impacts:

- Emergency responders' and civilians' lives at risk
- Property, data, and infrastructure at risk
- Risk for redundant, uncoordinated response
- Local economy at risk

Interoperability solutions should be scalable to accommodate any incident.



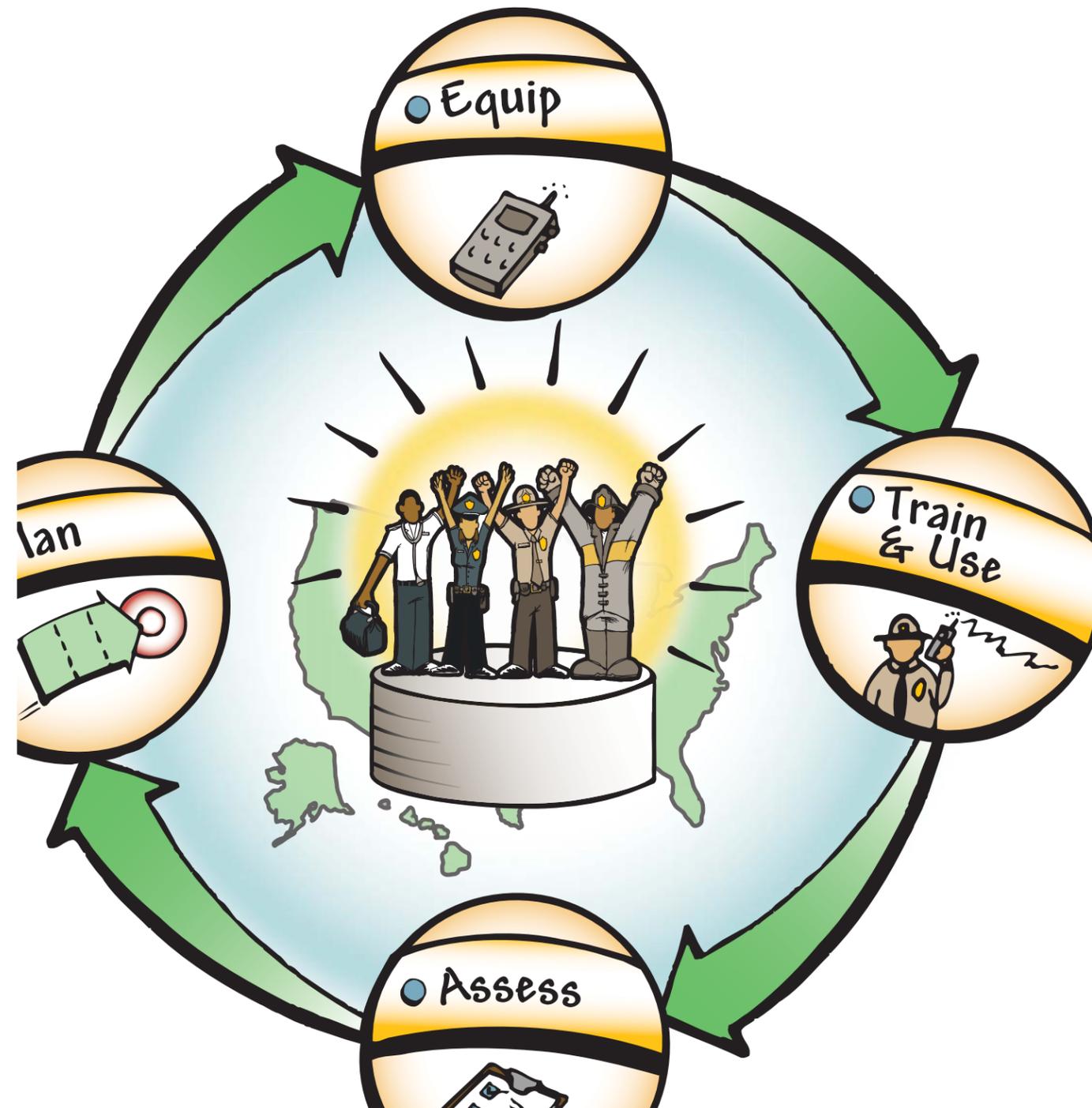
# Acronyms

## Terms

**EMS** - Emergency Medical Services

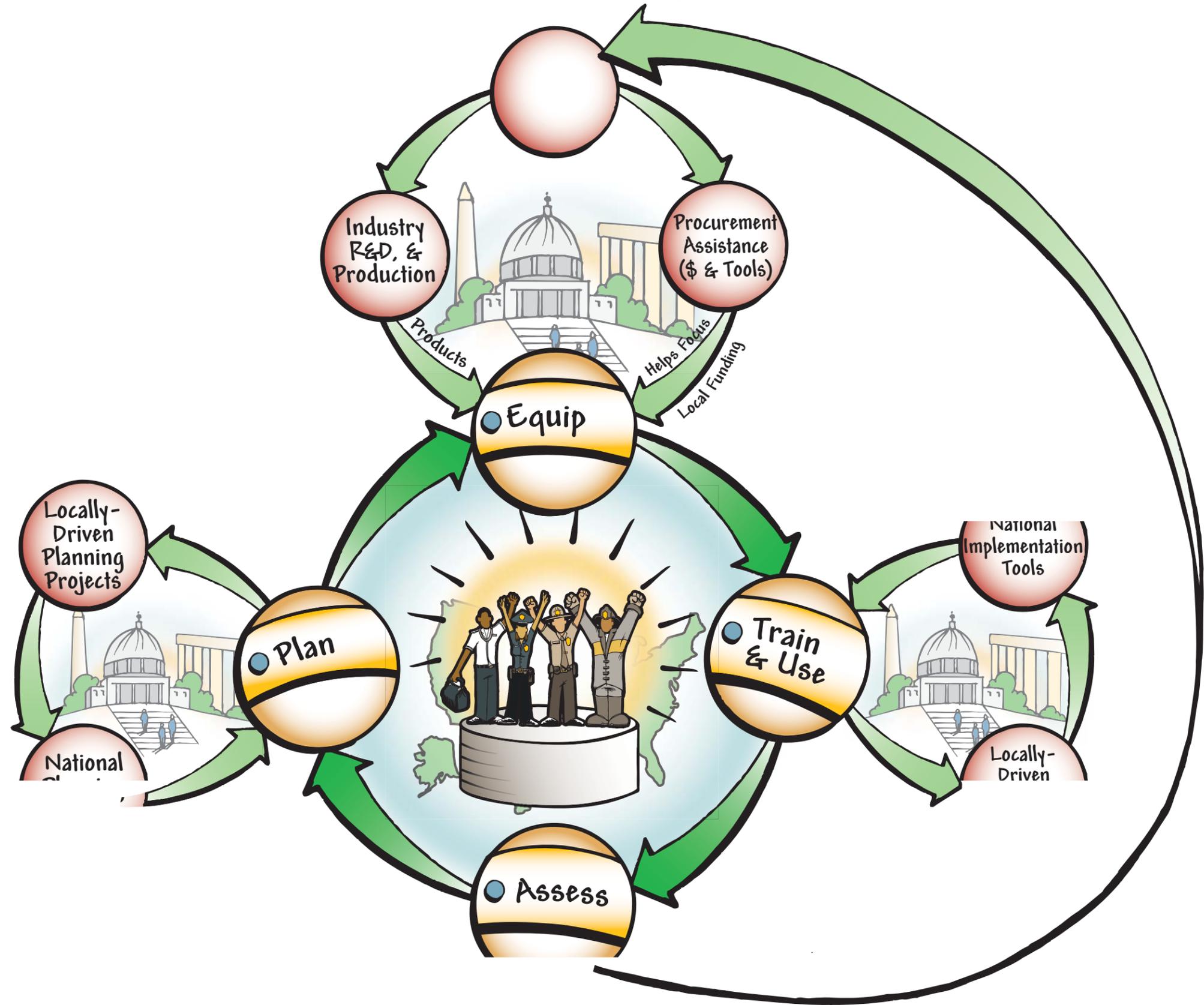
# The Local Community in Action: The Heart of the Interoperability Universe

This model represents the local emergency responder cycle for planning and implementing interoperability solutions. It is at the heart of the national strategy for achieving interoperability. The Federal role is not to interfere with this cycle, but to support and enhance local activities in each of these phases.



# Federal Impact on Emergency Responders

The local emergency responder cycle for planning and implementing interoperability is at the heart of the national strategy for achieving interoperability. Coordinated Federal interoperability programs support and enhance activities in each of these phases. This support provides emergency responders with tools and guidance to ensure agencies and localities have the best information and resources available to improve interoperability today and plan for tomorrow.



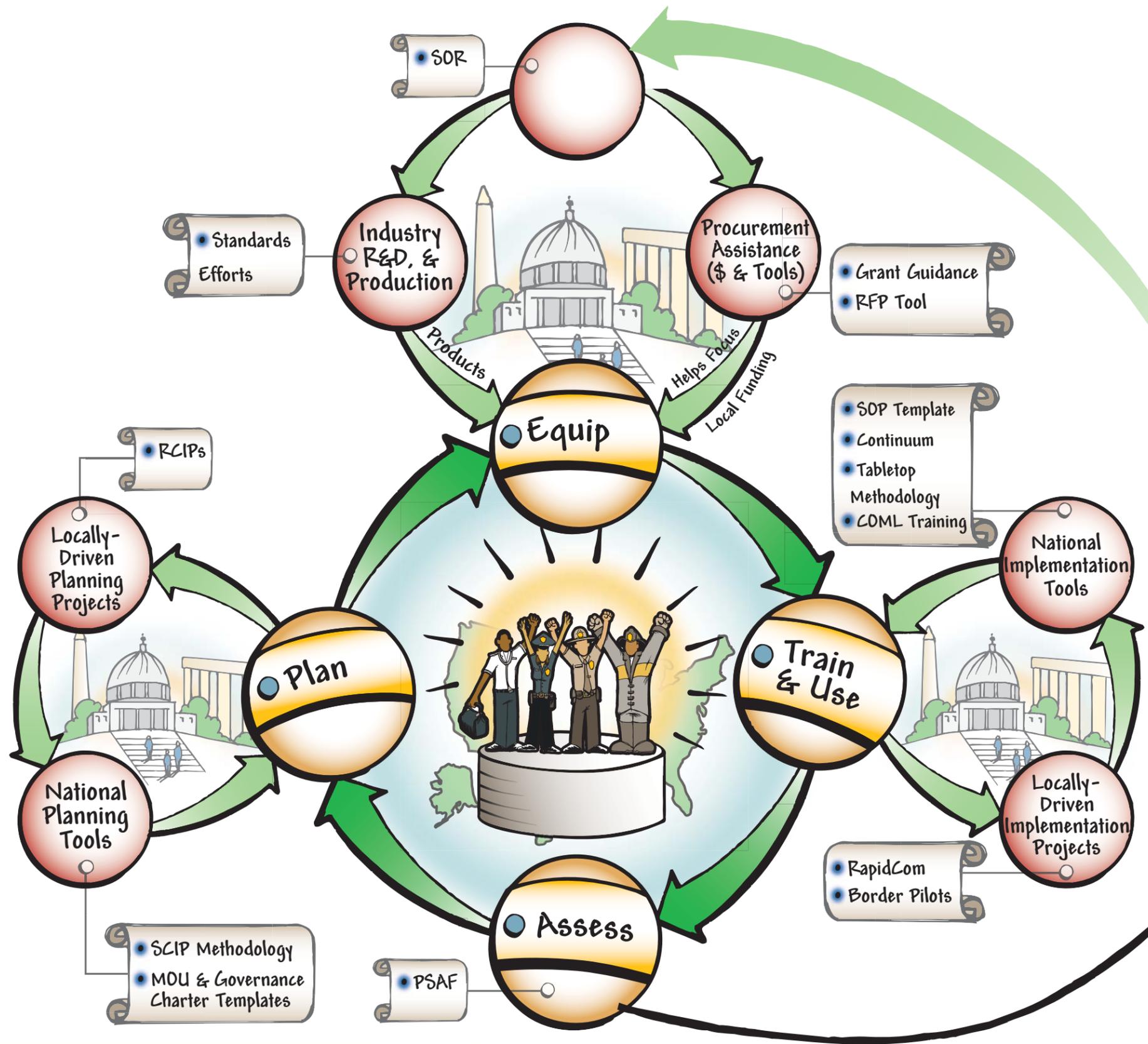
# Acronyms

## Terms

**R&D** - Research and Development

# SAFECOM Impact on Emergency Responders

This graphic depicts how SAFECOM efforts and programs support and enhance emergency responder activities.



Agency Key:

• SAFECOM

# Acronyms

## Terms

**COML** - Communications Unit Leader

**MOU** - Memorandum of Understanding

**SOP** - Standard Operating Procedures

**R&D** - Research and Development

## Program, Projects, and Tools

**PSAF** - Public Safety Architecture Framework

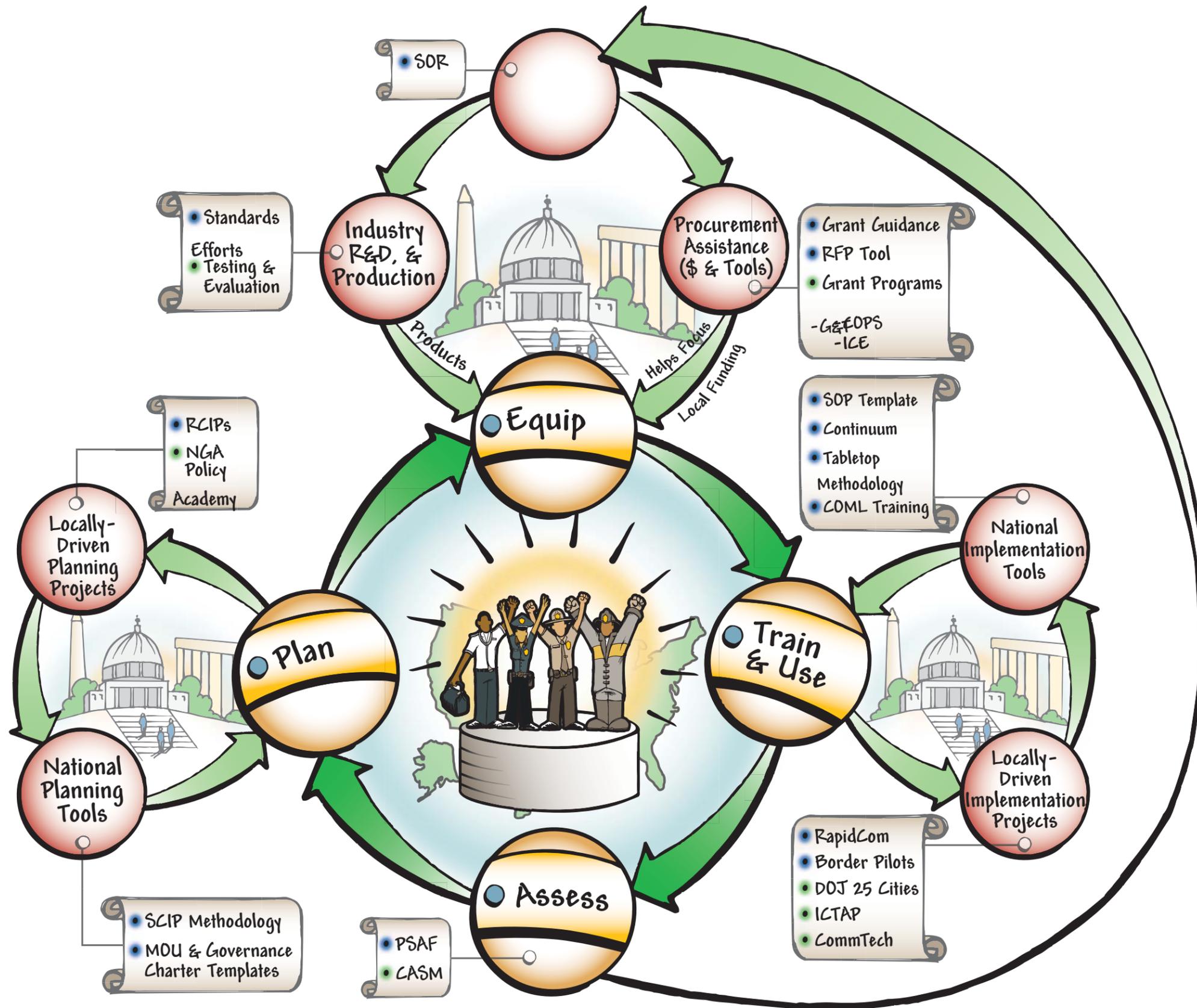
**RCIPs** - Regional Communications Interoperability Pilots

**SCIP Methodology** - Statewide Communications Interoperability Planning Methodology

**SOR** - Statement of Requirements

# All Federal Interoperability Efforts Impact on Emergency Responders

This graphic depicts how all Federal interoperability efforts and programs support and enhance emergency responder activities.



## Agency Key:

- SAFECOM
- Other Government Agencies

# Acronyms

## Agencies

**COPS** - Community Oriented Policing Service

**DOJ** - Department of Justice

**G&T** - Office of Grants and Training

**ICE** - Interoperable Communications Equipment

**ICTAP** - Interoperable Communication Technical Assistance Program

**NGA** - National Governor's Association

## Terms

**COML** - Communications Unit Leader

**MOU** - Memorandum of Understanding

**SOP** - Standard Operating Procedures

**R&D** - Research and Development

## Program, Projects, and Tools

**CASM** - Communications Assets Survey and Mapping

**PSAF** - Public Safety Architecture Framework

**RCIPs** - Regional Communications Interoperability Pilots

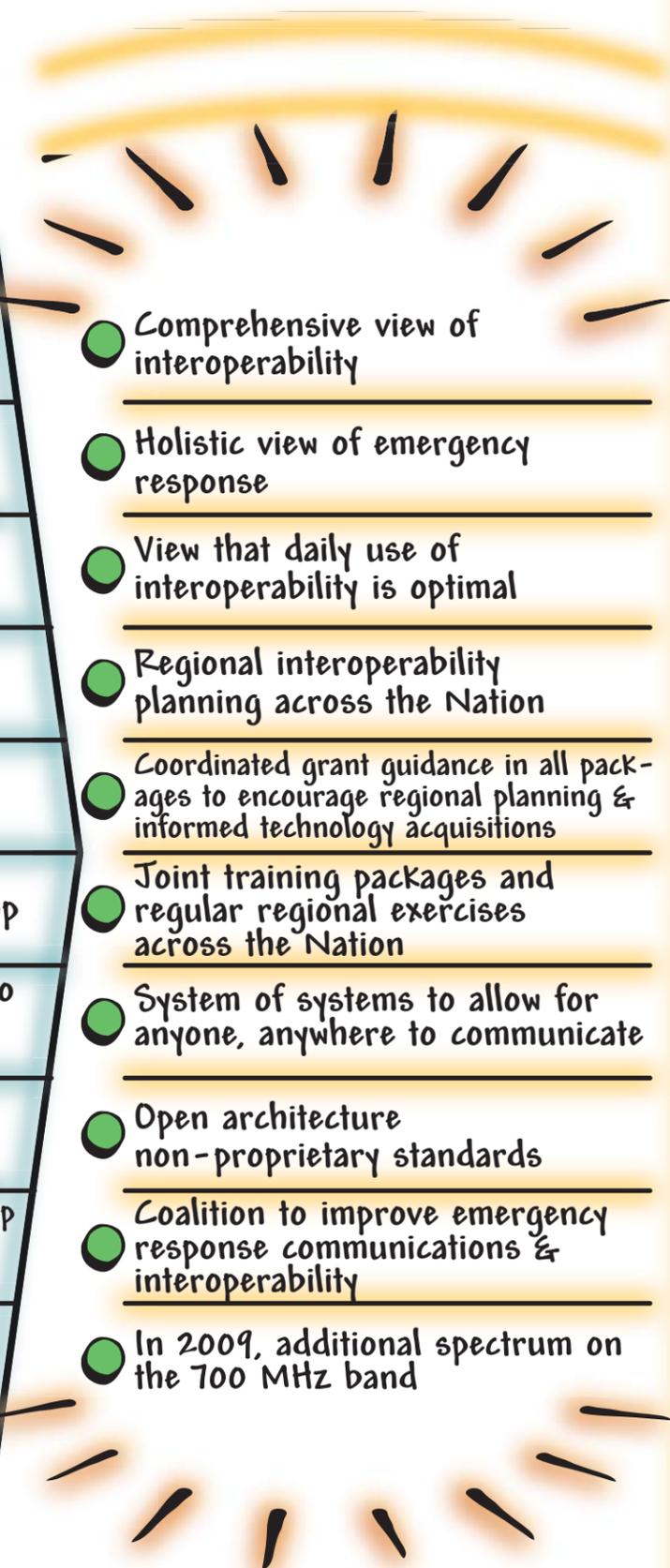
**SCIP Methodology** - Statewide Communications Interoperability Planning Methodology

**SOR** - Statement of Requirements

# Strategic Shifts

Achieving interoperability requires more than technology. Shifting all the elements requires a comprehensive, coordinated Interoperability is also technological, strategic, tactical and cultural change.

	PAST Pre-'04	PRESENT '04-'06	
Shift in Focus	● Sole focus on technology for improved interoperability	● Interoperability Continuum is shifting focus to all key factors	● Comprehensive view of interoperability
Definition of Emergency Responder	● Limited focus on traditional emergency responders (police, fire, EMS)	● Recognition that planning & response involves multiple agencies	● Holistic view of emergency response
Usage of Interoperability	● View that interoperability is only needed for special events	● Shift towards increased usage in some communities	● View that daily use of interoperability is optimal
Collaborative Planning/Governance	● Communities plan independently	● SCIP Methodology encourages collaborative statewide interoperability planning	● Regional interoperability planning across the Nation
Funding	● Fragmented funding & little guidance	● Coordinated grant guidance included in major interoperability grants	● Coordinated grant guidance in all packages to encourage regional planning & informed technology acquisitions
Training & Exercises	● Communities train & exercise independently	● Some communities have conducted multi-agency tabletop & functional exercises	● Joint training packages and regular regional exercises across the Nation
Technology	● Fragmented, uncoordinated solutions	● Patching devices & shared radio channels allow communications across some local areas	● System of systems to allow for anyone, anywhere to communicate
Standards	● Limited standards complete & published	● Accelerating P25 standards	● Open architecture non-proprietary standards
Industry	● Strained relationships between industry, government, & emergency response community	● Currently working together to develop solutions that meet emergency responder community's needs	● Coalition to improve emergency response communications & interoperability
Spectrum	● Limited & fragmented spectrum	● Ongoing spectrum needs assessment	● In 2009, additional spectrum on the 700 MHz band



# Acronyms

## Terms

**EMS** - Emergency Medical Services

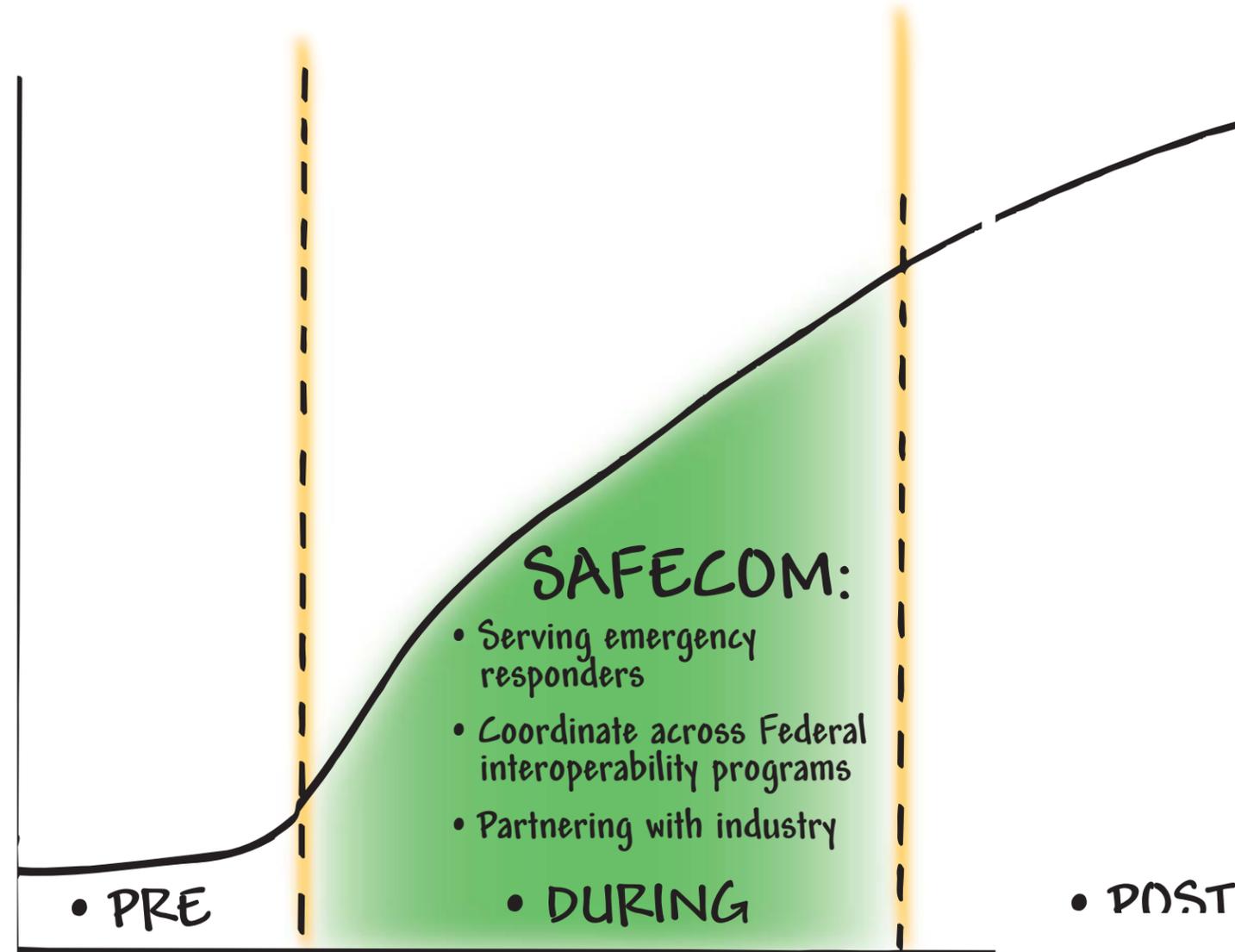
**MHz** - Megahertz

## Program, Projects and Tools

**SCIP Methodology** - Statewide Communications Interoperability Planning Methodology

# Making Interoperability the NORM!!

Before SAFECOM, interoperability efforts were uncoordinated and spread across a variety of Federal agencies. SAFECOM was introduced as an intervention and driver for change. The program is a catalyst to accelerate change and improve interoperability. Interoperability will continue to improve beyond the life of the SAFECOM program. The program's work will be complete when the continuum maturity model is a standard for achieving optimal levels of interoperability and when high natural disaster and terrorism targets are fully equipped to respond.



• The problem is REAL!!

• Intervention!!

• Interoperability needs to increase!!

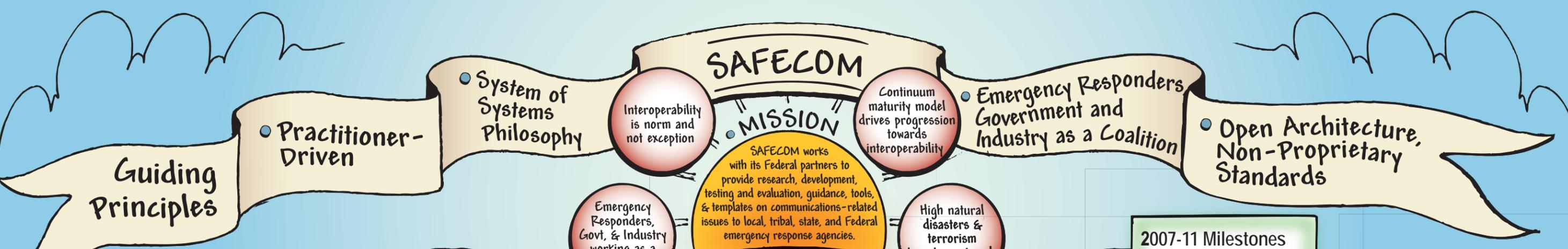
## Notional Exit Criteria for SAFECOM

1. All US regions and jurisdictions use the SAFECOM Continuum Capability Maturity Model to choose the appropriate target interoperability level, define the gap between where they are and where they need to be, and chart a course to close the gap.
2. States at high risk for natural disasters (e.g., Southern California and the Gulf States) have developed reliable interoperable solutions to minimize loss of life and property during flood and fire disasters.
3. High-threat metropolitan areas (e.g., New York, District of Columbia, and Los Angeles) have fully deployed and are routinely using interoperable voice and data capabilities.

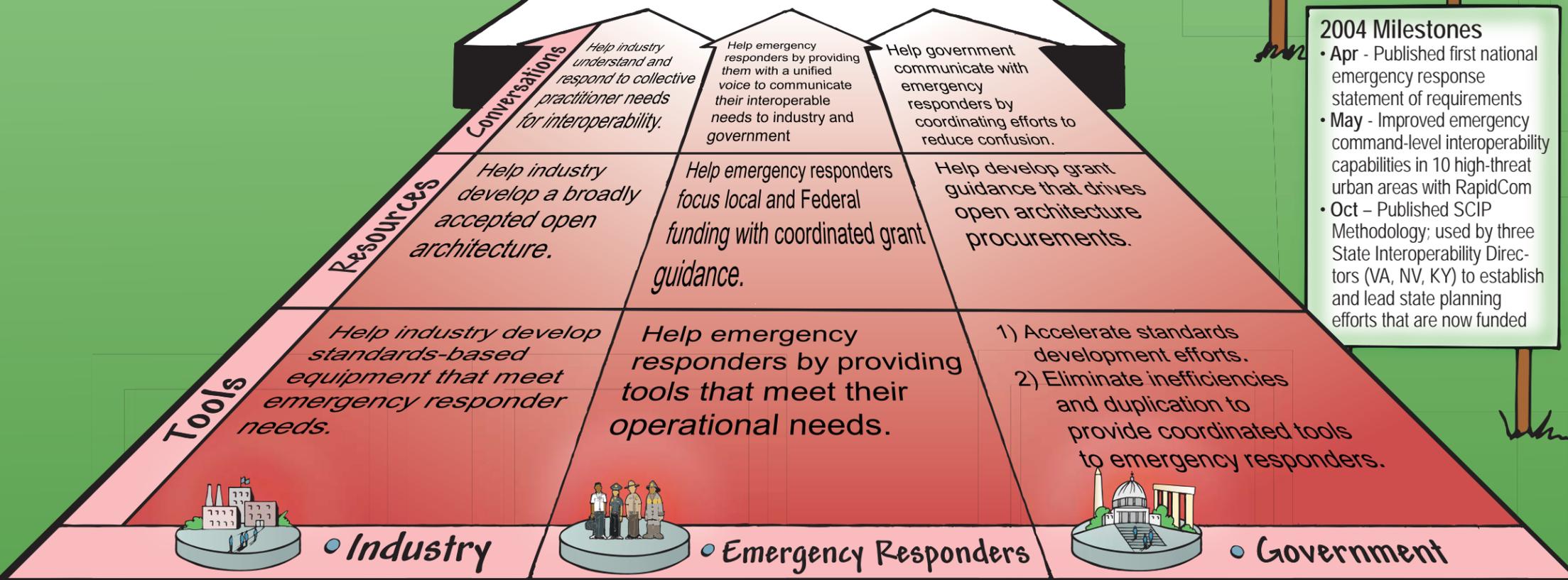
# SAFECOM

## MISSION

SAFECOM works with its Federal partners to provide research, development, testing and evaluation, guidance, tools, & templates on communications-related issues to local, tribal, state, and Federal emergency response agencies.



• Joint Problem solving  
• Collaborative planning



# SAFECOM

# Acronyms

## Agencies

**COPS** - Community Oriented Policing Service

**DHS** - Department of Homeland Security

**DOJ** - Department of Justice

**FEMA** - Federal Emergency Management Agency

**G&T** - Office of Grants and Training

## Terms

**MHz** - Megahertz

## Program, Projects, and Tools

**SCIP Methodology** - Statewide Communications  
Interoperability Planning  
Methodology

**TIC Plan** - Tactical Interoperable Communications Plan

# Overcoming Challenges to Collaborate and Interoperate Across Communities

Ideally, communities should align their cycles for planning and implementing interoperability solutions. However, there are common challenges that communities must overcome to collaborate and work towards regional interoperability. The SAFECOM Interoperability Continuum helps communities address all key aspects of the problem and overcome challenges. Some common challenges are listed below:

## **Common Leadership Challenge:**

Policy makers are not aligned with the needs for a region's interoperability requirements and therefore do not commit the resources required.

## **Common Governance Challenge:**

Independent disciplines and jurisdictions have difficulty giving up authority in favor of a regional governing body.

## **Common Standard Operating Procedures Challenge:**

Lack of established protocol leads to confusion during incidents.

## **Common Technology Challenge:**

There is often limited coordination across disciplines and jurisdictions on technology procurement and ongoing life-cycle management and support.

## **Common Training and Exercise Challenge:**

Familiarity with using interoperability equipment is not second nature to emergency responders because training and exercises are not conducted broadly or frequently enough.

## **Common Usage Challenge:**

Emergency responders from different jurisdictions and disciplines often do not interact on a daily basis.

