The Public Safety Communications Research (PSCR) Division is the primary federal laboratory conducting research, development, testing, and evaluation for public safety communications technologies. It is housed within the Communications Technology Laboratory (CTL) at the National Institute of Standards and Technology (NIST). It addresses the R&D necessary for critical features identified by public safety entities beyond the current generation of broadband technology.

**MISSION**

PSCR is driven towards advancing public safety communications technologies by accelerating the adoption and implementation of the most critical communications capabilities to ensure the public safety community can more effectively carry out their mission to protect lives and property during day-to-day operations, large scale events, and emergencies.

**PROMISE**

PSCR accelerates innovation by investing in research to transform the future of public safety communications, technology, and operations.
PULLING THE FUTURE FORWARD

ABOUT PSCR

5 KEY RESEARCH AREAS

STRATEGIC TOPIC AREAS

RESEARCH PARTNERS

INTRAMURAL IMPACTS

EXTRAMURAL IMPACTS

LMR TO LTE

LOCATION-BASED SERVICES

MISSION CRITICAL VOICE (MCV)

PUBLIC SAFETY ANALYTICS

SECURITY

RESILIENT SYSTEMS

USER INTERFACE

USER EXPERIENCE

PSCR.GOV
As the leading research facility, PSCR supports the development of a nationwide network and impacts the following strategic priority areas:

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<th>RESEARCH AREAS</th>
<th>INTRAMURAL IMPACTS</th>
<th>EXTRAMURAL IMPACTS</th>
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<td>AI to Increase Operational Response</td>
<td>Public Safety Resilient Communications</td>
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<td>Live 3D Indoor Tracking</td>
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<td>5G IoT Sensor Networks for Public Safety</td>
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<td>Public Safety Next Generation Heads Up Displays</td>
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PULLING THE FUTURE FORWARD
PULLING THE FUTURE FORWARD

ABOUT PSCR

5 KEY RESEARCH AREAS

STRATEGIC TOPIC AREAS

RESEARCH PARTNERS

INTRAMURAL IMPACTS

EXTRAMURAL IMPACTS

PRODUCTS

MEASUREMENT
METHOD
METRICS

MCV QUALITY OF
EXPERIENCE
PUBLIC SAFETY
PUSH-TO-TALK
MODELING
VIRTUAL REALITY
ENVIRONMENT

TOOLS

12 OPEN SOURCE
SOFTWARE

PUBLIC SAFETY
ANALYTICS
OPEN FRAMEWORK
INDOOR LOCALIZATION
ACCURACY

PUBLICATIONS

77

STANDARDS

LTE

483 CONTRIBUTIONS FOR PUBLIC SAFETY
SERVICE & FEATURE REQUIREMENTS,
ARCHITECTURE, & PROTOCOL
SPECIFICATIONS

LMR TO LTE

3GPP-STANDARDS BASED LMR TO LTE
INTERFACES FOR PUBLIC SAFETY

UNIQUE RESOURCES

PUBLIC SAFETY INNOVATION LAB

40-GIGABIT
CORE LTE NETWORK

P25 PHASE 1 AND 2
LMR SYSTEM

2 RF CHAMBERS
FOR TESTING DEVICES

INTEROPERABILITY LAB
INTERCONNECTING LMR AND LTE SYSTEMS

VIRTUAL & AUGMENTED
REALITY LAB

MOBILE RESEARCH VEHICLE
FOR FIELD MEASUREMENTS

REACH

HOSTED EVENTS

MORE THAN 60 STAKEHOLDER ENGAGEMENTS SINCE 2016

LABORATORY VISITORS

MORE THAN 1,300 VISITORS SINCE 2016

STAFF

99 # OF NIST STAFF
WORKING ON PSCR’S MISSION

PSCRGov
EXTRAMURAL RESEARCH
GRANTS AND COOPERATIVE AGREEMENTS

| OVER $58M IN GRANTS AWARDED TO DATE | 167 TOTAL AWARD RECIPIENTS SUBCONTRACTORS & PUBLIC SAFETY PRACTITIONERS |
| OPEN INNOVATION | 1 PATENT GRANTED FOR RESILIENT SYSTEMS AWARD RECIPIENT |
| PARTICIPANTS FROM 20 STATES & 7 COUNTRIES | 12 CHALLENGES LAUNCHED |
| WINNERS: 130 TEAMS | OVER $2.1M IN PRIZES AWARDED TO DATE |
| OVER 20 PUBLICLY AVAILABLE OPEN SOURCE CODE INCLUDING VR ENVIRONMENTS & ANALYTICS FRAMEWORKS | 3 PATENT APPLICATIONS SUBMITTED FOR LOCATION-BASED SERVICES AWARD RECIPIENTS |

WHICH WORDS BEST DESCRIBE PSCR'S ANNUAL STAKEHOLDER MEETING?
- CUTTING EDGE INNOVATION
- RELEVANT COMMUNITY
- FUTURISTIC ORGANIZED
- INFORMATIVE EDUCATIONAL
- DEDICATION NETWORKING
- TECHNOLOGY USEFUL
- WELL-RUN COLLABORATION

RESEARCH PUBLICATIONS

| OVER 350 TOTAL SUBMISSIONS | 77 PSIAP AWARD RECIPIENT PUBLICATIONS |
| 73 PROFESSIONAL JOURNAL/CONFERENCE PROCEEDINGS | 4 OTHER PUBLICATIONS |