## Table of Contents

**Introduction**.........................................................................................................................................................iii

**Strategic Priority I: Promote Research to Improve Safety Within the Criminal Justice System**.........................................................................................................................................................1

### Strategic Priority I: Spotlight on Two Ongoing Research Projects

- School Safety and School-Based Mental Health Services in a Large Metropolitan School District .......................................................................................................................... 3
- Evaluating the Efficacy of Lighting, Markings, and Paint Schemes in Reducing the Incidence of Law Enforcement Vehicle Crashes .............................................................................. 4

### Strategic Priority I Action Plan

- **Objective I.1:** Promote vehicular and traffic safety for officers ........................................................................... 5
- **Objective I.2:** Support development, and promote strategies, policies, practices, and technologies that enhance the safety of criminal justice personnel ............................................................................. 5
- **Objective I.3:** Study the unique safety concerns presented by correctional settings ............................................. 6
- **Objective I.4:** Develop policies, strategies, and technologies to promote safety in criminal justice interactions with the public ................................................................................................. 6
- **Objective I.5:** Develop knowledge, systems, and technologies that increase the safety of schools ............................................................................................................................................. 7

**Strategic Priority II: Support Research of Health and Wellness Within the Criminal Justice System**.........................................................................................................................................................8

### Strategic Priority II: Spotlight on Two Ongoing Research Projects

- Measuring the Effects of Correctional Officer Stress on the Well-Being of the Officer and the Prison Workplace and Developing a Practical Index of Officer Stress for Use by Correctional Agencies ......................................................................................... 11
Suicide Prevention and Intervention Strategies by Law Enforcement Agencies:
Utilization, Characteristics, and Costs............................................................................................................... 12

Strategic Priority II Action Plan........................................................................................................................... 11

Objective II.1: Promote research to improve the physical and mental health
of individuals working in the criminal justice system.......................................................................................... 13

Objective II.2: Study both trauma and suicide among criminal justice employees ........................................ 13

Objective II.3: Assess the impact of criminal justice work stressors on the
families of individuals employed in the criminal justice system ........................................................................ 14

Objective II.4: Promote science-based tools and strategies to
monitor physical and mental health................................................................................................................... 14

Objective II.5: Reduce suicide and self-harm in corrections,
with a specific focus on jails .............................................................................................................................. 14

Objective II.6: Assess the effect of in-custody conditions on physical and
mental health and the impact of these conditions on preparing these
individuals for reintegration in the community ............................................................................................... 15

Objective II.7: Promote scientifically based tools and strategies to
monitor physical and mental health of individuals under the
supervision of the criminal justice system ......................................................................................................... 16

Objective II.8: Support research to improve health and
wellness support for victims .............................................................................................................................. 16

Objective II.9: Support research to understand how children and
families of criminal justice-involved individuals are affected by
the criminal justice system .............................................................................................................................. 17

Objective II.10: Develop knowledge, systems, and technologies that
improve the health and wellness outcomes of criminal justice interactions
and support within schools .............................................................................................................................. 17

Acknowledgements .............................................................................................................................................. 18
Introduction

About the National Institute of Justice

The National Institute of Justice (NIJ) — the research, development, and evaluation agency of the U.S. Department of Justice — is dedicated to improving knowledge and understanding of crime and justice issues through science. NIJ provides objective and independent knowledge and tools to reduce crime and promote justice, particularly at the state and local levels.

Safety, Health, and Wellness Mission

NIJ’s mission for safety, health, and wellness is dedicated to the development of knowledge and tools to promote safety, health, and wellness for law enforcement officers, individuals under the supervision of the criminal justice system, as well as those in contact with or affected directly or indirectly by the criminal justice system.

Safety, Health, and Wellness Strategic Research Plan Purpose

NIJ has developed the Safety, Health, and Wellness in the Criminal Justice System Strategic Research Plan to describe the current and projected efforts of NIJ to promote the safety, health, and wellness of individuals affected by, or employed within, the criminal justice system. This document will be of interest to researchers (academic, governmental, and industry); federal, state, local, and international government partners; and justice policymakers and practitioner communities. Findings from activities that fall within this strategic research plan will be disseminated among these constituents and partners in ways designed to achieve the greatest impact.
A Call for Collaboration

The research directions included within this strategic research plan intentionally span many scientific disciplines. The breadth of research is driven by the magnitude of questions that need to be addressed within the criminal justice system. NIJ envisions that the research resulting from this agenda will require both interdisciplinary collaboration and partnerships between traditional researchers and the practitioner community. Finally, mirroring the need for collaboration among researchers, NIJ will seek partnerships with other federal agencies and institutions that support research relevant to criminal justice applications. These partnerships should include: co-sponsoring research awards; convening meetings to bring key players together; and providing criminal justice system expertise to discussions and meetings pertaining to safety, health, and wellness.

Definitions and Scope

Our focus on individuals working within the criminal justice system includes but is not limited to: police officers, corrections staff, courts staff, parole and probation officers, school resource officers, victim advocates, and defense and prosecution council.

Additionally, individuals affected by the criminal justice system include but are not limited to: individuals under the supervision of the criminal justice system, children and families of the incarcerated, exonerees, victims and their families, and the families of criminal justice system employees.

Aligned with the Occupational Safety and Health Act of 1970 statement, “To assure safe and healthful working conditions,” NIJ uses the word safety to convey the condition of being secure or unlikely to cause risk or injury to individuals affected by the criminal justice system.

For this document, NIJ is adopting the definition of health from the World Health Organization, which states that, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” Importantly, this definition highlights the well-being of a person. Additionally, the Centers for Disease Control states that, “Well-being integrates mental health and physical health resulting in more holistic approaches to disease prevention and health promotion,” which further highlights the integration of physical and mental health when considering wellness.
Strategic Priority I: Promote Research to Improve Safety Within the Criminal Justice System

NIJ is committed to building a knowledge base focused on the safety of individuals employed within criminal justice occupations, as well as individuals under the supervision of the criminal justice system, and members of the public as they interact with the system.

Background

The National Institute of Justice has played an ongoing role in the development of equipment, standards, technologies, and practices to improve officer safety within the criminal justice system. These investments have included the development of ballistic vests, studies of in-vehicle safety, and the evaluation of less-lethal technologies to increase police and public safety. NIJ will continue to promote research to further police and correctional officer safety in their unique work environment. Additionally, NIJ will continue its focus on examining the safety of incarcerated populations and the public as they interact with the criminal justice system.

Objectives

The objectives supporting Strategic Priority I build on strengths that NIJ has developed over decades. NIJ has formed strong partnerships with research organizations throughout the United States, which support research on safety in criminal justice occupations, and for individuals who come in contact with the criminal justice
system. NIJ will continue to work with partners, including other federal agencies, to develop improved technologies, standards, and practices to support safety. NIJ will continue to assess the safety needs within criminal justice settings, as well as opportunities for improvement.

**Related to individuals working in criminal justice occupations**

- *Objective I.1:* Promote vehicular and traffic safety for officers.
- *Objective I.2:* Support development, and promote strategies, policies, practices, and technologies that enhance the safety of criminal justice personnel.

**Related to criminal justice interactions with incarcerated populations**

- *Objective I.3:* Study the unique safety concerns presented by correctional settings.

**Related to criminal justice interactions with the public**

- *Objective I.4:* Develop policies, strategies, and technologies to promote safety in criminal justice interactions with the public.
- *Objective I.5:* Develop knowledge, systems, and technologies that increase the safety of schools.
Strategic Priority I: Spotlight on Two Ongoing Research Projects

School Safety and School-Based Mental Health Services in a Large Metropolitan School District

NIJ is supporting a study to determine how expanding and enhancing school-based mental health (SBMH) programs can promote school safety and improve the wellbeing of students. Previous research has shown a reduction in behavior problems for children who received school-based mental health services and a concurrent improvement in the overall school climate for all students.

Noting that more rigorous research is needed to build upon previous studies, the Research Triangle Institute is conducting a nearly $5 million study of the effects of three levels of SBMH in the Charlotte-Mecklenburg Schools in Charlotte, NC. The diverse school system has selected eight of its 24 middle and K-8 schools to receive different levels of SBMH programs. The schools receiving “enhanced” mental health program are providing training for mental health providers and student services staff in two evidence-based treatments – Dialectical Behavior Therapy for students exhibiting significant mental health problems, and a group therapy program called Structured Psychotherapy for Adolescents Responding to Chronic Stress for students with behavioral problems.

In schools selected for and expanded services program in addition to the enhanced program, mental health programs are being made available to students who otherwise could not pay for the services. Other schools from the eight selected for the study are continuing with their standard SBMH program.

The schools with enhanced and expanded services are expected to show improved student behaviors and school-level safety and climate improvements compared to schools with the standard SBMH program. All eight of the schools with the SBMH program are expected to show improved results over a control group of eight schools that do not provide student mental health services. At the end of the project, the researchers intend to provide a toolbox to help other schools evaluate their SBMH programs and provide evidence to policymakers for the benefits of SBMH.
Evaluating the Efficacy of Lighting, Markings, and Paint Schemes in Reducing the Incidence of Law Enforcement Vehicle Crashes

Traffic incidents have been the largest source of law enforcement line-of-duty injuries and deaths over the past decade. To address the issue, researchers at the Virginia Polytechnic Institute, funded with a NIJ grant of nearly $1 million, are working with six law enforcement agencies to evaluate the affect on safety of alternative police vehicle lighting, marking, and painting schemes. “Visibility of police officers affects their chance of being in an accident while driving or while parked on the side of the road,” the researchers note. “Visibility treatments on police vehicles affect the extent other drivers see them, and thus can affect accident rates.”

The researchers are positioning vehicles with different lighting, color schemes, and reflective chevrons, at several test locations and then using both video and radar units to track how quickly civilian drivers react to the vehicles. The study is examining emergency lighting and headlamp characteristics, as well as vehicle paint color and reflective materials.

The ultimate goal of NIJ’s traffic-safety research efforts, of which this study is a part, is to introduce new tools, policies, and practices that will significantly reduce the number of officers killed or injured on the road each year.
Strategic Priority I
Action Plan

OBJECTIVES

Related to individuals working in criminal justice occupations

Objective I.1: Promote vehicular and traffic safety for officers.

- Identify and assess technologies and/or features for criminal justice vehicles to enhance safety in vehicles
- Study the use of and effect of “smart car” technologies in policing
- Identify and assess technologies and/or policies to assist in vehicle pursuit management

Objective I.2: Support development, and promote strategies, policies, practices, and technologies that enhance the safety of criminal justice personnel.

- Promulgate equipment standards to improve the safety of criminal justice personnel
- Support research of safety equipment used in criminal justice applications
- Investigate new technologies, including less-lethal technologies, to promote safety and help control combative suspects
- Support research of technology, practices, and procedures that enhances situational awareness, enabling informed decision-making
OBJECTIVES (CONTINUED)

Objective I.3: Study the unique safety concerns presented by correctional settings.

- Assess factors that lead to nonfatal and fatal injuries within prisons and jails, or in police custody
- Develop technologies, strategies, and policies to reduce contraband that lead to a hazardous environment within institutional corrections

Objective I.4: Develop policies, strategies, and technologies to promote safety in criminal justice interactions with the public.

- Study law enforcement interactions with civilians who have mental illness, cognitive delays, or physical disabilities; have been exposed to trauma; or are in an altered mental state due to substance use to identify strategies to enhance the safety of both the individual and the officer
- Study law enforcement interactions with minors to identify strategies to enhance the safety of both the individual and the officer
- Investigate and evaluate technologies, practices, and procedures that promote safety of the public in criminal justice interactions that involve the use of force
- Investigate and evaluate new technologies and practices that improve the imparting or exchange of information and their effect on public safety
Objective I.5: Develop knowledge, systems, and technologies that increase the safety of schools.

- Research how technology can best be used by law enforcement to ensure the safety of school students and school personnel
- Examine the role of law enforcement training, policies, practices, and programs on safe interactions with school students, including those with disabilities and mental or behavioral issues
- Study the role of law enforcement training policies, practices, and programs to identify the best ways for law enforcement to operate within schools to promote effective, consistent, and non-discriminatory treatment of school students
Strategic Priority II: Support Research of Health and Wellness of Individuals Within the Criminal Justice System

NIJ remains focused on studying health and wellness for those employed within the criminal justice system, individuals under the supervision of the criminal justice system, and those affected by the system. The science and technology investments in health and wellness are divided into two areas: physical health and mental health.

Background

In 2014, President Obama convened the Taskforce on 21st Century Policing. The taskforce report outlined a broad agenda to address a spectrum of safety and wellness needs in policing.

The “bulletproof cop” does not exist. The officers who protect us must also be protected against incapacitating physical, mental, and emotional health problems, as well as against the hazards of their job. Their wellness and safety are crucial for them, their colleagues and their agencies, as well as the well-being of the communities.

While this report had a specific focus on police officers and the communities they serve, the sentiment of wellness within the report is equally relevant for those who work in other parts of the criminal justice system, as well as those in custody. A comprehensive approach to health and wellness issues throughout the criminal justice system will improve the performance and wellness of each sector of justice and can provide a more coordinated response to the health risks and concerns of the communities they serve.
Objectives

The objectives supporting Strategic Priority II will build on prior research investments and collaborations and focus on health and wellness for both officers and individuals in custody. NIJ is specifically interested in understanding and improving the physical and mental health outcomes for those who are employed by, under the supervision of, or interact with the criminal justice system. Additionally, the focus on stress, trauma, and suicide and self-harm prevention cuts across demographic areas highlighting the importance of promoting research of these topics within the criminal justice system.

Related to individuals working in criminal justice occupations

- **Objective II.1:** Promote research to improve the physical and mental health of individuals working in the criminal justice system.
- **Objective II.2:** Study both trauma and suicide among criminal justice employees
- **Objective II.3:** Assess the impact of criminal justice work stressors on the families of individuals employed in the criminal justice system.
- **Objective II.4:** Promote science-based tools and strategies to monitor physical and mental health.

Related to individuals under the supervision of the criminal justice system

- **Objective II.5:** Reduce suicide and self-harm in corrections, with a specific focus on jails.
- **Objective II.6:** Assess the effect of in-custody conditions on physical and mental health and the impact of these conditions on preparing these individuals for reintegration in the community.
- **Objective II.7:** Promote scientifically based tools and strategies to monitor physical and mental health of individuals under the supervision of the criminal justice system.
Related to individuals directly and indirectly impacted by the criminal justice system

- **Objective II.8:** Support research to improve health and wellness support for victims.
- **Objective II.9:** Support research to understand how children and families of criminal justice-involved individuals are affected by the criminal justice system.
- **Objective II.10:** Develop knowledge, systems, and technologies that improve the health and wellness outcomes of criminal justice interactions and support within schools.
Strategic Priority II:
Spotlight on Two Ongoing Research Projects

SPOTLIGHT ON PROGRESS

Measuring the Effects of Correctional Officer Stress on the Well-Being of the Officer and the Prison Workplace and Developing a Practical Index of Officer Stress for Use by Correctional Agencies

Researchers at Arizona State University (ASU), supported by more than $650,000 in NIJ funding, are studying job stress among correction officers, linking it to the debilitating effects it may have on job performance. In addition, the researchers are developing a “stress index” to better identify officers in need of therapeutic intervention. The first phase of the project involves developing a model to determine how stress affects attitudinal, emotional, and behavioral well-being of an officer and how those impacts affect an officer’s performance and behavior on the job.

Correctional officers involved in the study are being interviewed to collect a “self-reported” measure of stress, and that data will be augmented with information on each surveyed officer that is available in correctional agency administrative files. The ASU researchers are working with the Massachusetts Department of Correction and Nebraska’s Department of Correctional Services. Northeastern University and the University of Nebraska at Omaha are collecting the correctional data. The final goal is to validate the stress index and determine its predictive ability.
Suicide Prevention and Intervention Strategies by Law Enforcement Agencies: Utilization, Characteristics, and Costs

There are more than a million law enforcement employees in the U.S., and recent epidemiologic data indicates that suicide deaths are more common in the field of law enforcement than any other individual American workforce (Violanti et al., 2013). Indeed, according to one study, suicide is a more common cause of death among police officers than other types of violence (Violanti et al., 1996).

In response to growing concerns about police suicides, NIJ is funding a $500,000-study by the RAND Corporation to survey and describe the types of programs law enforcement agencies, both in the U.S. and internationally, have adopted to prevent suicides. The programs are being compared to evidenced-based suicide prevention practices to provide guidance for policymakers and practitioners on how to improve and adopt effective suicide reduction programs. In addition to gathering and comparing program data from law enforcement agencies around the globe, the study seeks to uncover not only what law enforcement agencies are doing, but also what is missing from current approaches.

The research builds upon RAND’s extensive work evaluating suicide prevention in the military, among incarcerated individuals, across the general population in California, and among U.S. veterans. The goal of the research is to produce practical research with real-world applications and offer law enforcement agencies a guide that can be used to bolster their current approaches to suicide prevention.


Strategic Priority II
Action Plan

OBJECTIVES

Objective II.1: Promote research to improve the physical and mental health of individuals working in the criminal justice system.

- Identify and understand the occupational activities within criminal justice that lead to increased physical and mental health risks
- Promote methods and technologies to improve health outcomes for health problems associated with criminal justice professions
- Promote technologies to detect changes in an individual's mental or emotional state that may serve as precursors to physical or mental health problems
- Study the relationship between the stressors associated with criminal justice professions and the adoption of destructive behavior
- Examine the impact of wellness programs on outcomes such as the number of job-related injuries, stress-related disabilities, and citizen complaints against an officer

Objective II.2: Study trauma and suicide affecting criminal justice employees.

- Assess the prevalence of and contributing factors to trauma-related disorders in criminal justice professions
- Study the impact of exposure to traumatic events and vicarious trauma on mental health
- Identify specific risk factors associated with suicide in criminal justice professions
OBJECTIVES (CONTINUED)

Related to individuals working in criminal justice professions (continued)

**Objective II.3:** Assess the impact of criminal justice work stressors on the families of individuals employed in the criminal justice system.

- Examine the impact of occupational stress and work-related trauma on the families of criminal justice system employees
- Examine the impact of agency policies and characteristics, such as the availability of wellness programs, on families of criminal justice employees

**Objective II.4:** Promote science-based tools and strategies to monitor physical and mental health.

- Support research to identify available programs and technology to evaluate physical and mental health
- Promote innovation and implementation of longitudinal and cross-departmental physical and mental health assessment tools

Related to individuals under the supervision of the criminal justice system

**Objective II.5:** Reduce suicide and self-harm in corrections, with a focus on jails.

- Develop and evaluate programs for the prevention of self-harm and suicide for individuals under the supervision of the criminal justice system
Objective II.6: Assess the effect of in-custody conditions on physical and mental health and the impact of these conditions on preparing these individuals for reintegration in the community.

- Characterize the current and projected demographics of individuals under supervision of the criminal justice system and identify probable future health needs
- Develop tools, technology, and policies to support the continuity of care through the maintenance of health information from initial incarceration through reintegration
- Evaluate the specific health needs and best evidence-based practices regarding special populations within corrections, such as geriatric and pregnant inmates
- Examine the effects of extended use of restrictive housing on mental health
- Study the potential effects of changes in health care laws or provisions on individuals under the supervision of the criminal justice system
- Examine the availability and effectiveness of substance abuse programs within corrections and their impact on the individual post-release
- Study the relationships among racial, economic, and health disparities before, during, and after incarceration
**OBJECTIVES (CONTINUED)**

**Related to individuals under the supervision of the criminal justice system (continued)**

**Objective II.7:** Promote scientifically-based tools and strategies to monitor physical and mental health of individuals under the supervision of the criminal justice system.

- Promote the innovation and implementation of mental health assessment tools for individuals under the supervision of the criminal justice system, such as the ability to longitudinally track the health of individuals while under the supervision of the criminal justice system.
- Evaluate mental health assessment tools and their implementation for individuals under the supervision of the criminal justice system.
- Examine the effect of mental and physical health assessment practices on criminal justice decision-making for different offender populations.

**Related to individuals directly and indirectly impacted by the criminal justice system**

**Objective II.8:** Support research to improve health and wellness support of victims.

- Research the efficacy of the criminal justice and victims’ services response where victims are defendants in cases of mutual arrest, bidirectional violence in relationships, and victim-offender overlap.
- Examine the effects of bias crime (a.k.a. hate crime) on communities and their impact on the individual community members, taking into consideration the criminal justice and victims’ services response to such crimes.
- Study the impact of wrongful conviction on and health and wellness needs of both exonerees and original victims.
Related to individuals directly and indirectly impacted by the criminal justice system (continued)

**Objective II.9:** Support research to understand how children and families of criminal justice-involved individuals are affected by the criminal justice system.

- Study the impact of incarceration on family members, especially dependent children
- Support research on the use of technology, policy, and programs that are intended to promote family interaction with incarcerated individuals
- Study the effect of service delivery programs on the health and wellness of families of incarcerated individuals, such as partnerships between child protective services and the criminal justice system
- Promote research to understand the effect of childhood exposure to family violence and intervention programs for children exposed to violence

**Objective II.10:** Develop knowledge, systems, and technologies that improve the health and wellness outcomes of criminal justice interactions and support within schools.

- Examine the role of law enforcement training, policies, practices, and programs on interactions and health and wellness outcomes with school students, including those with disabilities and mental or behavioral health issues
- Study the role of law enforcement training, policies, practices, and programs to identify the best ways for law enforcement to operate within school environments to promote effective, consistent, and non-discriminatory treatment of students
- Research how technology can best be used by law enforcement to ensure the health of school students and personnel
- Examine how school-based interventions contribute to the health and wellness of students under the supervision of the juvenile justice system
Acknowledgements

Committee Members:

Chair: William Ford
Co-Chair: Cara Altimus, Ph.D.
Bethany Backes, Ph.D.
Mary Poulin Carlton, Ph.D.
Brett Chapman, Ph.D.
Marie Garcia, Ph.D.
Mark Greene, Ph.D.
Jack Harne
Seri Irazola, Ph.D.
Eric Martin
Brian Montgomery
Carrie Mulford, Ph.D.
Michael O’Shea
Steven Schuetz
Frances Scott, Ph.D.
Howard Spivak, M.D.
Heather Waltke

Contributing Authors:

Cara Altimus, Ph.D.
Bethany Backes, Ph.D.
Dara Blachman-Demner, Ph.D.
Mary Poulin Carlton, Ph.D.
Brett Chapman, Ph.D.
William Ford
Marie Garcia, Ph.D.
Mark Greene, Ph.D.
Jack Harne
Joseph Heaps
Seri Irazola, Ph.D.
Eric Martin
Brian Montgomery
Angela Moore, Ph.D.
Marilyn Moses
Carrie Mulford, Ph.D.
Michael O’Shea
Steven Schuetz
Frances Scott, Ph.D.
Howard Spivak, M.D.
George Tillery
Heather Waltke
Phelan Wyrick, Ph.D.

Federal reviewers:

Jennifer Bronson, Ph.D.
Bureau of Justice Statistics
Department of Justice

Maureen Buell
National Institute of Corrections
Department of Justice

Lauren Glaze
Bureau of Justice Statistics
Department of Justice

Jhamirah Howard
Office of the Assistant Secretary for Planning and Evaluation
Health and Human Services

Jane Pearson, Ph.D.
National Institute of Mental Health
National Institutes of Health

Jennie M. Simpson, Ph.D.
Office of Policy, Planning, and Innovation
Substance Abuse and Mental Health Services Administration

Madeleine Solan
Office of the Assistant Secretary for Planning and Evaluation
Health and Human Services

Hope Theisman, Ph.D.
National Institute of Occupational Safety and Health
Centers for Disease Control