

Overview of NIJ Solicitation Development Process

Greg Ridgeway, Ph.D.
Acting Director



NIJ

NIJ Approach to Developing Solicitations

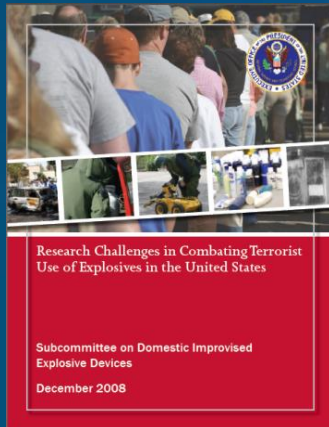
- Physical Science and Technology
 - Driven by needs of the field
- Forensic Science
 - Driven by research community
- Social Science
 - Driven by numerous factors: NIJ social scientists, Congress, research community

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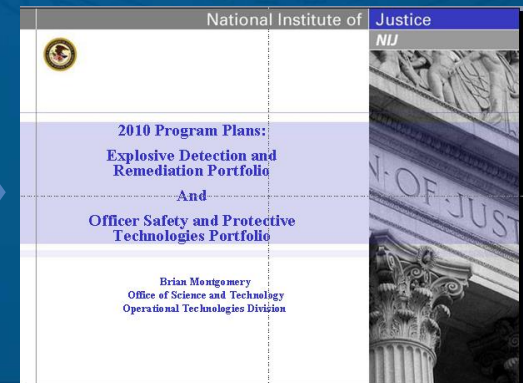
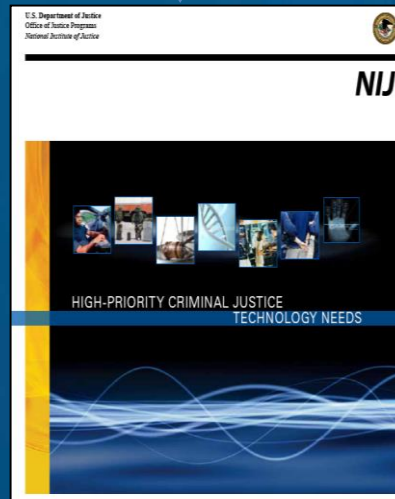
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Setting the Technology Research Agenda

Other Input



TWGs identify needs



NIJ Maintains Numerous TWGs...

- Aviation
- Biometrics
- Body Armor
- Communications
- Community Corrections
- Court Technologies
- DNA Forensics
- Electronic Crime
- Explosive Device Defeat
- General Forensics
- Geospatial Technologies
- Information-Led Policing
- Institutional Corrections
- Less-Lethal Technologies
- OR/Modeling and Simulation
- Personal Protection Equipment
- Pursuit Management
- School Safety
- Sensors and Surveillance



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NIJ Maintains Numerous TWGs... Slightly Fewer Now

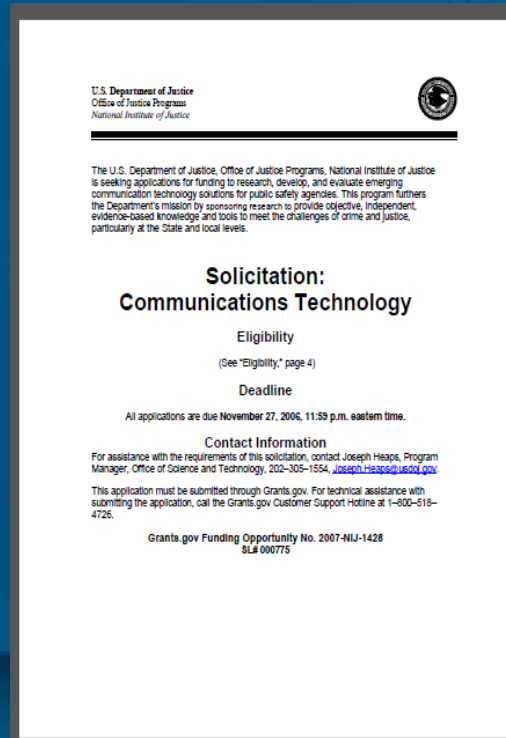
- Aviation
- Biometrics
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- **Communications**
- Community Corrections
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Dynamic Spectrum Access Was an Identified Need

- Communication TWG noted:
 - Wireless data technology able to seamlessly access required spectrum in a mobile environment



Stevens Institute of Technology Proposed a Solution

- “In this project we propose to research and develop software defined radio based **cognitive radio** technologies that facilitates public safety radios to **dynamically occupy and release spectrum** whenever and wherever they are available in the public safety bands.” (2007)

Dynamic Spectrum Startup Now Commercializing New Technology

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Stevens Institute of Technology Start-Up Dynamic Spectrum LLC Awarded NSF Grant to Commercialize Cognitive Radio Technology

Dynamic Spectrum, LLC, a new start-up commercializing cognitive radio technology from Stevens Institute of Technology, has been awarded a \$150,000 grant from the National Science Foundation (NSF) Small Business Technology Transfer (STTR) program. The grant gives a boost to Stevens' efforts to commercialize academic research and development. Dynamic Spectrum is building on a comprehensive Stevens solution, funded by the National Science Foundation and National Institute of Justice, for cognition-enabled dynamic spectrum access (DSA) wireless communications which allows intelligent, efficient and secure access to underutilized parts of the radio spectrum or spectrum white spaces. It has the potential to transform the multi-billion dollar global telecommunications market, leading to more efficient cellular networks, interoperable wireless public safety communications, low cost rural broadband connectivity, and infrastructure for robust mobile video applications.

Contact

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Current Structure Has Limitations

- Aviation
- Biometrics
- Body Armor
- Communications
- Community Corrections
- ~~Court Technologies~~
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Limitations

- High cost
- Narrow focus
- Impact is hard to measure
- Subject to overlooking needs



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No TWG Addressed Officer Safety Generally

- Aviation
- Biometrics
- Body Armor ←
- Communications
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In 2010

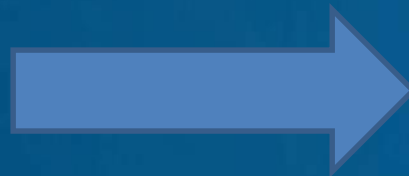
- 56 officers killed feloniously
- 63 officers killed in traffic accidents



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Moved Toward ‘Community of Practices’

- Aviation
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- **Policing**
- **Courts**
- **Corrections**

'Community of Practices' Approach Addresses Limitations

- Cost savings
- Capture a broader set of needs
 - Policy and practice needs as opposed to technology needs
- Better alignment with stakeholder organizations
 - IACP, NCSC, ACA

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Forensic Science Offers Two Broad Research Solicitations

Basic Research	Basic scientific research in the physical, life, and cognitive sciences
Applied Research	<p>Applied research and development projects that will:</p> <ul style="list-style-type: none">(1) increase knowledge or understanding necessary to guide forensic science policy and practice(2) useful materials, devices, systems, or methods that have the potential for forensic application <p>Aim to develop highly discriminating, accurate, reliable, cost-effective, and rapid methods for the identification, analysis, and interpretation of physical evidence for criminal justice purposes.</p>

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Social Scientists, NIJ Leadership, Tradition Drive Most Solicitations

- Passion-driven examples
 - Predictive Policing
 - Research on Offender Decisionmaking
 - Desistance from Crime Over the Life Course
- On key issues we solicit, but are less prescriptive
 - Trafficking
 - White Collar Crime
 - Firearm Violence
- Traditional programs
 - Data Resources Program
 - Graduate Research Fellowship
 - W.E.B. Du Bois Fellowship

Congress and Other Agencies Requests a Few Specific Solicitations

- Congress
 - Research on Domestic Radicalization
 - Research on Violence Against Women
 - Responses to Violence Committed Against Indian Women Living in Tribal Communities
 - Research on Residential Substance Abuse Treatment
- Other Agencies
 - Research on Youth with Sexual Offending Behavior
 - Evaluation of Homicide Reduction Initiative
 - Violence and Victimization in Oil Camps

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