

# National Institute of Justice

**Award Title:** Physical and Environmental Effects on the Performance of Body Armor

**Award Description:**

PERF proposes to integrate data collection using a survey instrument and interviews with data collected via ballistic testing of body armor. Phase I will be to review prior work on the effects of physical/environmental factors on the performance of body armor, then evaluate how soft body armor is maintained and used in the field by collecting survey data on actual field use and maintenance of body armor (e.g., environmental conditions, hours of usage, physical activity engaged in by the wearer, storage conditions and maintenance techniques). Phase II will collect used body armor from a sample of officers and collect detailed histories on the use of the armor through interviews and conduct ballistic testing of the used armor to examine the effects of degradation/environmental conditioning. Deliverables will include a research report that will assist in validating the current conditioning requirements in the new NIJ Standard-0101.06 Ballistic Resistance of Body Armor. The research will also create a data driven national inventory of policies, training methods and practices from a representative sample of law enforcement agencies as they pertain to the wear, care and storage of soft body armor. Also, it will produce a separate Guide or contribute to the current Selection and Application Guide for practitioners and policymakers on the factors that affect the ballistic performance of soft body armor.

Among other purposes, this project supports the American Recovery and Reinvestment Act, through increases in economic efficiency by spurring technological advances in material longevity and material science research with regards to ballistic body armor. Longevity of Body Armor materials will increase wear and decrease replacement costs thereby increasing law enforcement and corrections efficiency.

In addition to supporting the goals of the Recovery Act, this project also supports the purposes of the Byrne Justice Assistance Grant Program by helping to increase the economic efficiency and effectiveness of law enforcement activities. This project will address law enforcement technology requirements and priorities in the areas of ' officer safety, public safety, and decision-making. In consideration of the goals and objectives, this project demonstrates the potential for support of job creation or preservation on an expedited time frame.

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<b>Awardee Name:</b> POLICE EXECUTIVE RESEARCH FORUM	<b>Award Number:</b> 2009-SQ-B9-K112
<b>Solicitation Title:</b> NIJ FY 09 Recovery Act: Law Enforcement Technology Research and Development	<b>Fiscal Year:</b> 2009
<b>Amount:</b> \$405,596.00	<b>Earmark:</b> No
<b>Recovery Act:</b> Yes	<b>State/Territory:</b> DC
<b>County:</b> District of Columbia	<b>Congressional District:</b> Delegate District (at Large)
<b>Award Status:</b> Closed	