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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Office of the Secretary Of Defense	<b>Date:</b> February 2015
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide I BA 2: Applied Research</i>					<b>R-1 Program Element (Number/Name)</b> PE 0602670D8Z I <i>Human Social Culture Behavior (HSCB) Modeling Applied Research</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	2.000	-	-	-	-	-	-	-	-	Continuing	Continuing
P270: <i>Human Social Culture Behavior (HSCB) Modeling Applied Research</i>	-	2.000	-	-	-	-	-	-	-	-	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

The Office of the Secretary of Defense (OSD) Human Social Culture Behavior (HSCB) Modeling Program is a vertically integrated effort to research, develop, and transition technologies, tools, and systems to programs of record and users in need. The program exists to optimize United States (U.S.) forces' ability to perform population-centric sensing, understand behaviors driven by social and cultural variables, and select effective courses of action in the full range of military operations. Program research will enhance population-centric intelligence, surveillance, and reconnaissance (ISR) capabilities for understanding the increasingly complex global environment to address national strategic challenges such as instability, aggression, proliferation of weapons of mass destruction, and violent extremism. In three integrated program elements (PE), the program will conduct applied research, mature and demonstrate advanced technology, and develop transitionable methods, technology, tools, and prototypes. Work under PE 0602670D8Z will focus on developing an applied science base, to include validated theory and methods, along with knowledge products and resources to support sociocultural behavior data collection, analysis and forecasting of sociocultural behavior, course of action planning, and effects analysis. Research will address needs in two areas: modeling and data. It will develop and validate theoretical constructions, generate knowledge products, and develop stand-alone computational models of sociocultural behavior; and improve methods for collecting data that will facilitate model development and enhance forecasting and analysis capabilities. The program will ensure that supported research is clearly tied to warfighters and their needs.

Human behavior based theory, knowledge products, and stand-alone models will support development of software to help users represent, understand, and forecast sociocultural behavior at strategic, operational, and tactical levels.

Improved data collection methods will help build the sociocultural science base, facilitate subsequent model development and validation, and address emerging data types and sources.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
0400: Research, Development, Test & Evaluation, Defense-Wide I BA 2: Applied Research		PE 0602670D8Z I Human Social Culture Behavior (HSCB) Modeling Applied Research			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	2.000	-	-	-	-
Current President's Budget	2.000	-	-	-	-
Total Adjustments	-	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Office of the Secretary Of Defense										Date: February 2015		
Appropriation/Budget Activity 0400 / 2					R-1 Program Element (Number/Name) PE 0602670D8Z / Human Social Culture Behavior (HSCB) Modeling Applied Research				Project (Number/Name) P270 / Human Social Culture Behavior (HSCB) Modeling Applied Research			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
P270: Human Social Culture Behavior (HSCB) Modeling Applied Research	-	2.000	-	-	-	-	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Office of the Secretary of Defense (OSD) Human Social Culture Behavior (HSCB) Modeling Program is a vertically integrated effort to research, develop, and transition technologies, tools, and systems to programs of record and users in need. The Program exists to optimize United States (U.S.) forces’ ability to perform population-centric sensing, understand behaviors driven by social and cultural variables, and select effective courses of action in the full range of military operations. Program research will enhance population-centric intelligence, surveillance, and reconnaissance (ISR) capabilities for understanding the increasingly complex global environment to address national strategic challenges such as instability, aggression, proliferation of weapons of mass destruction, and violent extremism. In three integrated program elements (PEs), the Program will conduct applied research, mature and demonstrate advanced technology, and develop transitionable methods, technology, tools, and prototypes. Work under PE 0602670D8Z will focus on developing an applied science base, to include validated theory and methods, along with knowledge products and resources to support sociocultural behavior data collection, analysis and forecasting of sociocultural behavior, course of action planning, and effects analysis. Research will address needs in two areas: modeling and data. It will develop and validate theoretical constructions, generate knowledge products, and develop stand-alone computational models of sociocultural behavior; and improve methods for collecting data that will facilitate model development and enhance forecasting and analysis capabilities. The Program will ensure that supported research is clearly tied to warfighters and their needs.

Human behavior based theory, knowledge products, and stand-alone models will support development of software to help users represent, understand, and forecast sociocultural behavior at strategic, operational, and tactical levels.

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Title: Human Behavior Based Theory and Model Development	1.000	-	-
Description: The Human Behavior Based Theory and Model Development conducts the research necessary to develop and refine theoretical constructs and validate them using empirical data. Develop knowledge products including conceptual models, decision frameworks, and ontologies that will support population-centric sensing. Apply validation techniques to quantitative models of sociocultural factors in coalition warfare and sociocultural factors of military significance for emerging conflicts. Develop stand-alone models that instantiate social science theoretical constructs to address mission-specific needs to support population centric sensing and warning.			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b><i>FY 2014 Accomplishments:</i></b> Developed "Big Data" modeling and analysis tools that support construction of intelligence-driven operational views providing decision makers with the ability to make better decisions faster. Social, broadcast, and print media data sources can be used to identify "tripwires" that indicate adversarial activity, including non-State actors/terrorists and criminal organizations. Developed understanding of how sociocultural data can be exploited to provide insight into countering use and proliferation of weapons of mass destruction.			
<b><i>Title:</i></b> Data Collection Methods  <b><i>Description:</i></b> The Data Collection Methods develop scientifically validated strategies to collect cultural and societal information in denied or difficult to penetrate areas. Develop methodologies and supporting technologies capable of extracting relevant data into databases for further modeling to support denied, restricted, or unavailable area sociocultural data. Develop technologies capable of leveraging extracted data, and processing and validating it, with a particular focus on data from social media.	1.000	-	-
<b><i>FY 2014 Accomplishments:</i></b> Developed data collection tools that allow analysts to quickly aggregate information based on model output recommendations ("tripwires"). These tools allow easy aggregation of information including people of international interest infrastructure documentation, and data from physical sensors.			
<b>Accomplishments/Planned Programs Subtotals</b>	2.000	-	-

  

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• PE 0603670D8Z BA 3: HSCB Advanced Development	2.000	-	-	-	-	-	-	-	-	Continuing	Continuing
• PE 0604670D8Z BA 4: HSCB Research and Engineering	2.000	-	-	-	-	-	-	-	-	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b>											
N/A											

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E. Performance Metrics N/A		