



The National Training and Education System (NTES)

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September 25, 2015

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Why NTES?

“Foster a more integrated and effective approach to building the knowledge and skills of homeland security professionals”

Three primary objectives to achieve this goal:

- Continuously improve the knowledge and core capabilities of homeland security professionals;
- Build and sustain a community of practice for homeland security training and education; and
- Establish a defined career path, and associated training and education requirements, for emergency management professionals.

Preparedness Based Questions:

- How prepared are we as a nation and how have Homeland Security training and education programs impacted our level of national preparedness?
- What is the return on investment for a degree in Homeland Security?



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Addressing Training Requirements

FEMA is using a systematic, data-driven approach to identify and address training requirements and strengthen our Nation's preparedness



- Through the NTES, FEMA is addressing the preparedness training needs of its stakeholders by:
 - Using data that states have already provided via State Preparedness Reports and Threat and Hazard Identification Risk Assessments to develop a clear understanding of their specific training requirements;
 - Improving data quality to identify and address stakeholders' training requirements;
 - Tailoring training efforts, including courses and curricula, to better meet identified needs; and
 - Fostering and facilitating a training and education community of practice to gather feedback on NTES.



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Data-Driven Decision Making in Training and Education

FEMA's National Training and Education System (NTES)

Threat and Hazard
Identification and
Risk Assessment
(THIRA)

State
Preparedness
Reports
(SPR)

Quadrennial
Homeland
Security Review
(QHSR)

National
Preparedness
Reports (SPR)

Executive and
Congressional
Requirements

Exercise Data /
After Actions and
Lessons Learned

Biannual Strategy
Implementation
Report (BSIR)
data

Stakeholder
and Partner
Input

Student
Evaluation
Data

Data Driven Decision Making to Improve Preparedness

FEMA uses THIRA and SPR data to guide the development of preparedness programs and to inform planning efforts at the national and regional levels

- Link operational planning efforts across all States in support of the threats and hazards identified by the jurisdictions with training and education objectives
- Support exercise priorities for homeland security exercises nationwide
- Assess and prioritize training efforts for training and education partners in order to meet the needs of the whole community
- Support the development of training and educational policy, doctrine, and tools for use by the whole community

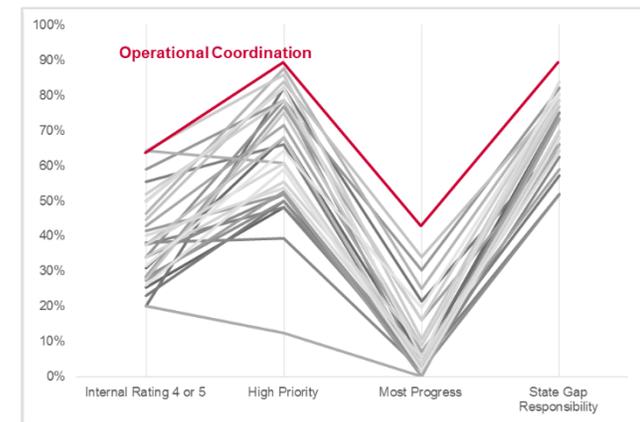


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Data-Driven Decision Making

FEMA uses a systematic, analytical process to help identify focus areas and awardees for the CTG program

- Added cybersecurity training as CTG focus area in FY14
 - The Requirements Analysis used National Preparedness System inputs, such as the 2013 SPR, to identify core capabilities with high and low training needs
- Incorporating a **broader set of data sources to develop FY15 focus areas**, including:
 - FY15 Appropriations Act
 - 2014 Quadrennial Homeland Security Review
 - 2014 National Preparedness Report
 - 2014 NTES Requirements Analysis Report
 - 2013 SPR and Threat and Hazard Identification and Risk Assessment reports
 - Rural National Needs Assessment Report



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NTES Products:

What applicability do you see for your programs?

Shared/tested with partner organizations: *National Domestic Preparedness Consortium, CHDS, HSAAC, University of Maryland*

Mapping Tool



Analysis of course content alignment with core capabilities

State Decision Support



Provides visualization of analyzed reported state preparedness levels, gaps, and funding priorities

Seasonal Demand Analysis



Analysis of training and education demand, such as season fluctuations (e.g. hurricane season), declared disasters, and National Special Security Events (NSSEs).



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Course-to-Core Capability Mapping Tool

● Green Dot = Secondary Core Capability
● Yellow Dot = Core Capability that is flagged for evaluation / review to see if content can be increased so that mapping is granted

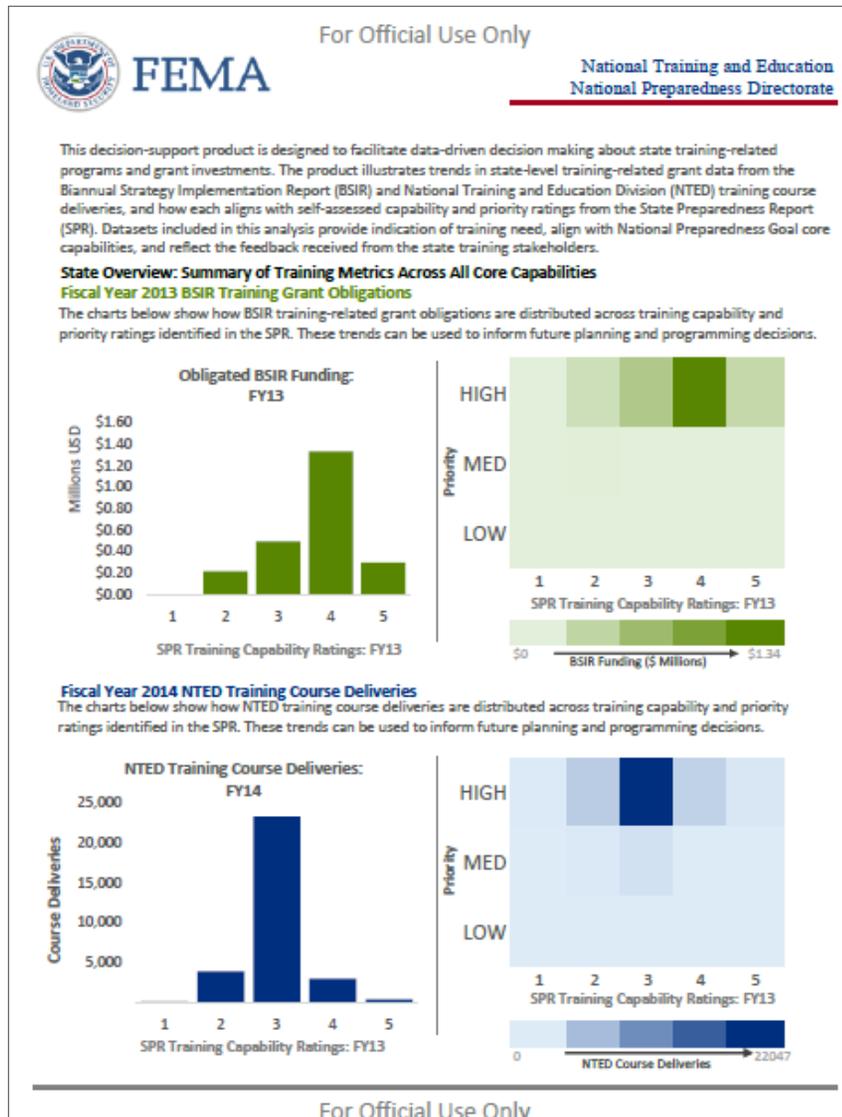
CC #	Core Capability	Number of EOs hu CC	Percent of EO hu CC	EO Complexity by CC	Percent of Class Time	Weighted Average EO
	Access Control and Identity Verification	0	0.0%	0.0	0.00%	0.00
	Community Resilience	0	0.0%	0.0	0.00%	0.00
	Critical Transportation	0	0.0%	0.0	0.00%	0.00
	Cybersecurity	0	0.0%	0.0	0.00%	0.00
	Environmental Response / Health and Safety	0	0.0%	0.0	0.00%	0.00
	Fatality Management Services	0	0.0%	0.0	0.00%	0.00
	Forensics and Attribution	0	0.0%	0.0	0.00%	0.00
	Health and Social Services	0	0.0%	0.0	0.00%	0.00
	Housi					
	Intellig					
	Interd					
	Mass					
	Mass					
	Natur					
	None					
	On-si					
	Opera					
	Physi					
	Public					
	Public					
	Public					
	Screen					
	Situational Assessment	0	0.0%	0.0	0.00%	0.00
	Supply Chain Integrity and Security	0	0.0%	0.0	0.00%	0.00
	Threats and Hazard Identification	0	0.0%	0.0	0.00%	0.00
	Planning	1	6.7%	2.3	5.42%	0.15
	Operational Coordination	1	6.7%	3.0	7.13%	0.20
	Long-term Vulnerability Reduction	1	6.7%	3.4	7.99%	0.22
	Infrastructure Systems	3	20.0%	4.1	19.54%	0.82
	Risk and Disaster Resilience Assessment	3	20.0%	10.6	16.98%	2.11
	Risk Management for Protection Programs and	3	20.0%	10.7	16.12%	2.13
	Economic Recovery	3	20.0%	13.1	26.82%	2.63

Weighted Average Enabling Objective Complexity by Core Capability

Core Capability	Weighted Average EO
Economic Recovery	2.63
Risk Management for Protection Programs and Activities	2.13
Risk and Disaster Resilience Assessment	2.11
Infrastructure Systems	0.82
Long-term Vulnerability Reduction	0.22
Operational Coordination	0.20
Planning	0.15

Learning Objective Assessment	Graph - Core Capabilities	Graph - Mission Area	Knowledge
dy			

State Decision Support

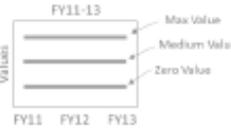


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State Detail: Training Metrics by Core Capability
This section provides core capability-specific information for a number of training-related metrics.

Core Capability	BSIR Funding (millions USD)			NTEd Course Deliveries			SPR		
	Trend	FY13	Nat Av	Reg Av	FY14	Nat Av	Reg Av	Rating	Priority
	FY11-13								
Access Control and Identity Verification	↗	\$0.01	\$0.00	\$0.00	0	9	0	2	M
Community Resilience	↗	\$0.04	\$0.02	\$0.01	43	23	16	3	H
Critical Transportation	↗	\$0.00	\$0.00	\$0.00	0	0	0	4	H
Cybersecurity	↗	\$0.00	\$0.00	\$0.00	3583	100	717	2	H
Economic Recovery	↗	\$0.00	\$0.00	\$0.00	155	8	47	1	H
Environmental Response/Health and Safety	↗	\$0.18	\$0.07	\$0.04	0	0	0	2	H
Fatality Management Services	↗	\$0.03	\$0.01	\$0.03	99	6	20	2	H
Forensics and Attribution	↗	\$0.00	\$0.00	\$0.00	402	7	80	3	M
Health and Social Services	↗	\$0.00	\$0.00	\$0.00	0	0	0	2	H
Housing	↗	\$0.00	\$0.00	\$0.00	0	0	0	1	H
Infrastructure Systems	↗	\$0.00	\$0.00	\$0.00	81	13	16	4	H
Intelligence and Information Sharing	↗	\$0.14	\$0.08	\$0.05	14	115	55	3	H
Interdiction and Disruption	↗	\$0.20	\$0.10	\$0.04	203	17	69	4	H
Long-term Vulnerability Reduction	↗	\$0.00	\$0.03	\$0.00	0	5	0	3	H
Mass Care Services	↗	\$0.13	\$0.01	\$0.03	172	32	39	4	H
Mass Search and Rescue Operations	↗	\$0.85	\$0.09	\$0.21	138	25	39	4	H
Natural and Cultural Resources	↗	\$0.00	\$0.00	\$0.00	0	0	0	3	M
On-scene Security and Protection	↗	\$0.30	\$0.13	\$0.06	470	202	767	5	H
Operational Communications	↗	\$0.02	\$0.03	\$0.01	301	83	87	4	H
Operational Coordination	↗	\$0.11	\$0.40	\$0.08	1660	198	722	4	H
Physical Protective Measures	↗	\$0.00	\$0.01	\$0.02	130	56	33	3	H
Planning	↗	\$0.29	\$0.35	\$0.09	1054	245	409	3	H
Public and Private Services and Resources	↗	\$0.00	\$0.14	\$0.00	0	0	0	4	H
Public Health and Medical Services	↗	\$0.03	\$0.01	\$0.01	3486	88	704	3	H
Public Information and Warning	↗	\$0.00	\$0.00	\$0.00	240	82	69	3	H
Risk and Disaster Resilience Assessment	↗	\$0.00	\$0.00	\$0.00	788	78	187	3	M
Risk Mgmt. for Prot. Programs and Activities	↗	\$0.00	\$0.00	\$0.00	263	12	53	2	M
Screening, Search, and Detection	↗	\$0.04	\$0.22	\$0.01	470	145	158	4	H
Situational Assessment	↗	\$0.00	\$0.01	\$0.09	110	68	25	3	H
Supply Chain Integrity and Security	↗	\$0.00	\$0.00	\$0.00	0	3	0	3	H
Threats and Hazard Identification	↗	\$0.00	\$0.00	\$0.00	16950	542	4207	3	H

Trend Graphs
Use the diagram on the right to interpret your state's funding trend graphs. From left to right, the line depicts changes in funding from FY11 – FY13. The vertical position of the line depicts the relative amount of funding or number of course deliveries. The bottom position of each line graph represents a zero baseline (no funding), while the top of each graph represents that core capability's maximum funding amount between FY11 – FY13.



KEY

Trend
FY11-13

Max Value
Medium Value
Zero Value

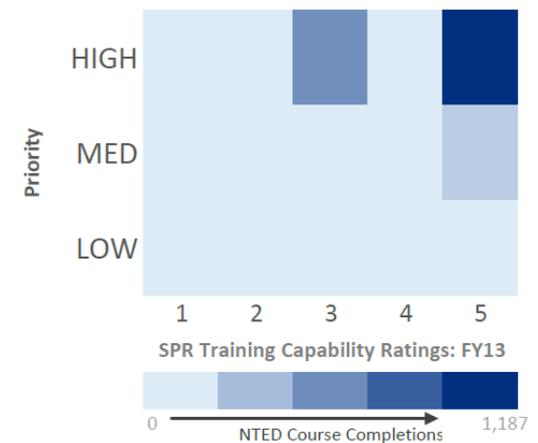
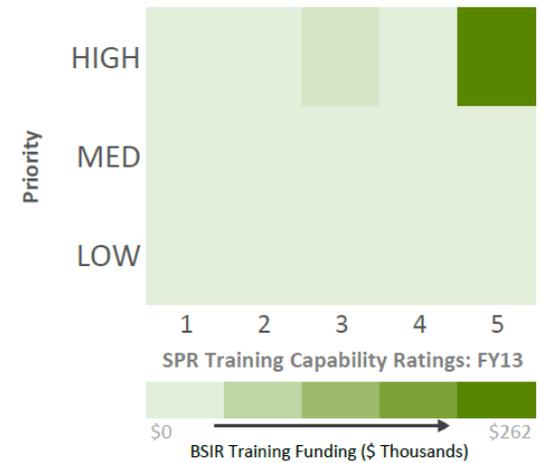
Abbreviations

- * Nat Av: National average value, weighted by state population
- * Reg Av: Average value, weighted by state population within state's FEMA Region
- * Rating: 2013 SPR training capability rating
- * Priority: 2013 SPR capability priority rating

Exercise Data coming in FY16

State Decision Support

- **Application of state-reported data**
 - **Provide analytic support to states** through decision-support products that highlight training capabilities, course completions, and funding in the context of national trends
 - **Provide clear metrics** on how FEMA’s training courses address each core capability: **course mapping**
 - Inform FEMA **budget decisions and programs**, such as the Continuing Training Grant (CTG) Program
- **Optimize training offerings**
 - **Modify courses** to best meet training needs
 - **Target training resources to address high/low capability levels**
 - **Streamline courses offerings** by defining the scope of FEMA’s training efforts and incorporating courses from other Federal partners into training programs
- **Better integrate training and education partners into the National Preparedness System**
 - **Inform training and education partners’ decision-making** on course content and curriculum development



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Seasonal Demand Analysis

Training Course Data

Key Points

- Availability of training course data from the CDP dataset represents the largest unknown for this project. Acquiring a better understanding of the information available from the CDP database and a coordinated plan to obtain it through proper channels are high-priority next steps.
- Training courses must be mapped to hazard incidents to conduct the desired analysis. One possible course-of-action (COA) is to apply the core capability-to-incident type crosswalk in use for other FEMA offices and components (e.g. NPAD, ORR).

Dataset	Information Needed	Priority	Notes
Training Course Completions	Full course details	High	
Individual-level Training Course Completions	Date of course completion by individual	Need to collect. The level of detail available from the CDP database is unknown at this time.	High
	State in which courses were completed by individual		
	Position title by individual		

IN DEVELOPMENT

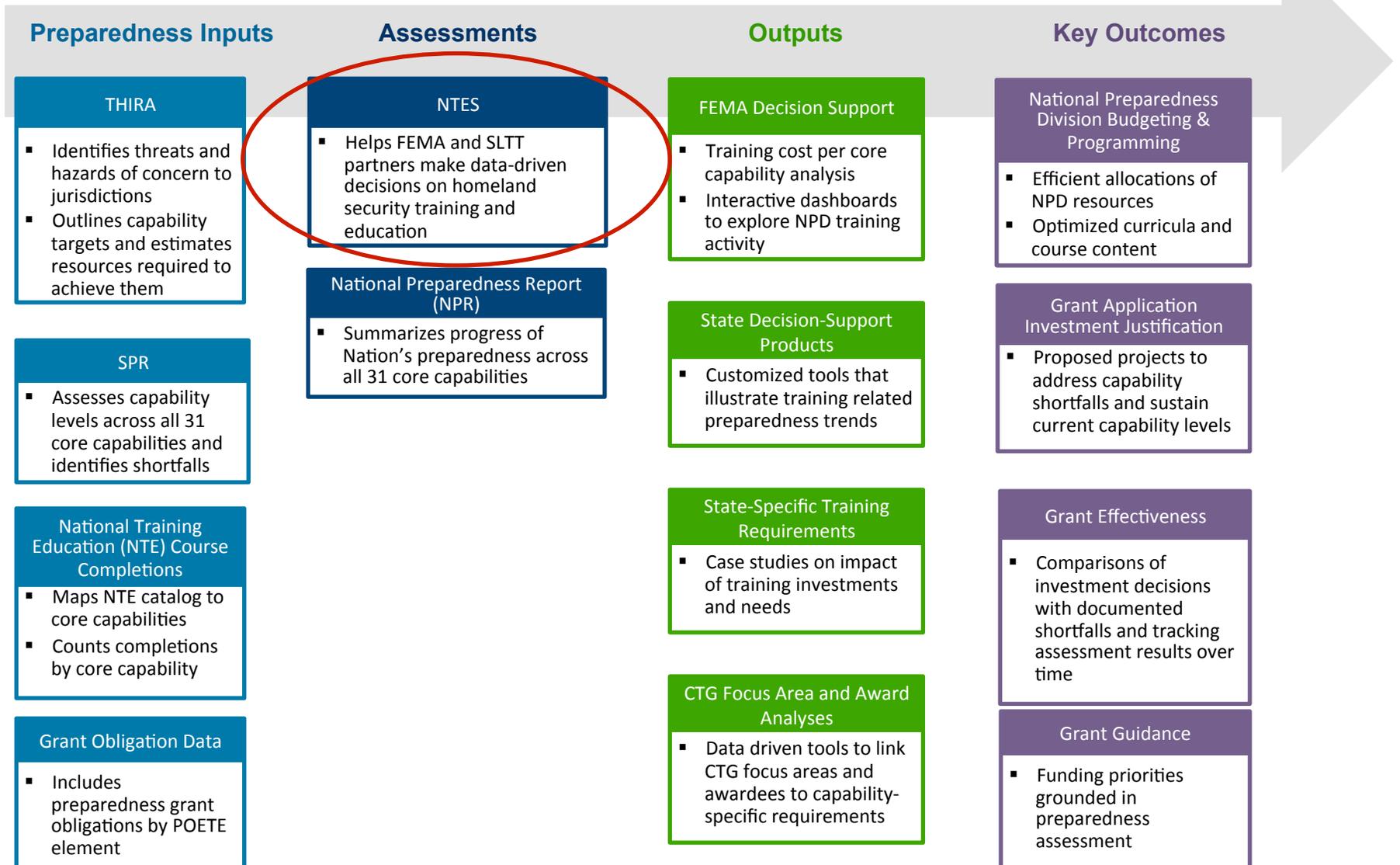
Hazard Seasonality and Incident Data

Key Points

- Detailed disaster declaration data exist within FEMA. Developing a coordination plan to obtain permission to use this data is a high-priority next step.
- Hazard seasonality datasets are still a bit undefined. More open source research should be conducted to evaluate potential COAs before taking action.



How it All Fits Together: NTES



Mapping Tool Demo

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Engagement Questions: FEMA and CHDS-UAPI

Alignment: How do you view higher education course work compared with the National Preparedness Goal?

Need: What drives the creation of new courses/program (e.g., student demand, risks and strategic priorities, surveys/assessments)?

Demand: What types of courses and curricula are students asking for? Are there particular knowledge or capability gaps that students are trying to fill through your academic program?

Targeted Disciplines: What are the differing academic interests and priorities of students who come from various disciplines (e.g., fire, law enforcement, emergency management, etc.)?

Benefits: If research can have a direct actionable impact on homeland security at the SLTT and Fed levels, what are some examples?

National Standards: Can standardized national curricula on homeland security be created?

Available data: What types of data does your institution capture and use with respect to course effectiveness? How can FEMA use your student survey data to improve our overall preparedness programming?



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