



Hot Spot Mapping (HSM) and other Environmental Approaches to Sexual Violence (SV) Prevention on College Campuses:

Overview, Implementation Stories, & Considerations for Future Work

Practitioner Webinar
July 24, 2021

With support from CDC 1U01CD003208-01 (PI Decker)



Welcome

List of Presenters

Hot Spot Mapping Project, Johns Hopkins School of Public Health

- Dr. Michele R. Decker, Principal Investigator
- Paté Mahoney, Technical Lead
- Allison Yatco, Student Research Assistant
- Ishita Srivastava, Student Research Assistant

Maryland Coalition Against Sexual Assault

- Stephanie Erdice, Chief of Programming

Bowie State University

- Shanelle O'Connor, Sexual Assault Health Educator,

St. Mary's College of Maryland

- Michael Dunn, Assistant VP of Equity and Inclusion, Title IX Coordinator
- Helen Ann Lawless, Title IX Investigator and Prevention Specialist



Agenda

- Meeting Goals
- Overview of the HSM Project
- Literature Review Findings
- Implementation Story: Bowie State University (Q/A)

**** 5 minute BREAK****

- Implementation Story: St. Mary's College of Maryland (Q/A)
- HSM at MCASA
- Key Considerations
- Products in Development
- Moving Forward
- Discussion



Meeting Goals

- Describe current HSM and other environmental strategies for SV prevention
- Describe innovative HSM approaches as implemented by campus partners
- Articulate key considerations in HSM implementation
- Review & discuss products in development
- Offer an opportunity for questions and discussion



Project Overview

Creating Protective Higher Education Environments for Sexual Violence Prevention: Practice-based Evidence and Evaluation [Hot Spot Mapping]

CDC Collaborative Agreement

- Intentionally designed to foster research-practice collaborations with RPE partners
- Responsive to RFP “Creating Protective Environments” strategy for SV prevention



Leadership Team

Johns Hopkins

- Michele Decker (PI)
- Charvonne Holliday (Co-I)
- Andrea Gielen (Sr. I)
- Pate Mahoney (Tech Lead)
- Ishita Srivastava (Student RA)
- Allison Yatco (Student RA)
- Technical & evaluation leadership and implementation

MD Department of Health/ RPE

- Erin Boguski
- Joyce Dantzler
- RPE programs
- RISE network
- Strategic planning & dissemination
- Alignment with state-level strategic plan
- Fit with RPE needs and priorities

Maryland Coalition Against Sexual Assault

- Stephanie Erdice
- College Consortium
- Strategic planning & dissemination
- Practitioner lens on implementation and evaluation framework
- Fit with state-level college/university initiatives



Campus Partners



Bowie State University

- Dr. Rita Wutoh, Director of Wellness Center
- Shanelle O'Connor, Sexual Assault Health Educator



St. Mary's College of Maryland

- Michael Dunn, Assistant VP of Equity and Inclusion, Title IX Coordinator
- Helen Ann Lawless, Title IX Investigator and Prevention Specialist



Project Aims

Aim 1:

- Characterize campus-based HSM **implementation, evaluation capacity and institutional commitment to sexual violence prevention/response** with college and university

Aim 2:

- **Formative work** with campus partners to
 - refine a HSM logic model & evaluation framework
 - identify available evaluation data and gaps
 - refine measures for SV location, context, situation, timing

Aim 3:

- **Pilot HSM** measures & evaluation framework
 - Emphasis on fit with theory of change, pathways, implementation parameters, institutional SV capacity

Aim 4 (pending):

- **Full trial** evaluating impact of HSM on sexual violence outcomes



Why HSM for SV Prevention?

- Promising strategy for identifying actionable risk zones for geographically-targeted prevention
 - Shifting Boundaries (CDC technical package)
 - Women's Safety Audit
- Geospatial mapping can inform areas for
 - Changes to built environment
 - Social engineering through policy change
 - Understanding sexual/power geographies
- If successful → prevention at scale!
- Engages stakeholders/students in thinking about how environments are related to sexual violence risk
- Unique value for higher education settings



HSM: Existing Evidence

- Current study motivated by the limited evidence to date on HSM efficacy in reducing SV
- Gaps in implementation guidance
- Gaps in evaluation frameworks:
 - Logic model
 - Causal pathways
 - Measures



Literature Review

Key questions:

- What can we learn from existing evidence?
- What HSM/environmental approaches are being used in the SV space?
 - By whom?
 - For what?



Literature Review: Available Articles

	Predominant SV Prevention	Minimal SV Prevention	Other GBV	Other crime prevention on campus
College	13	4	3	4
Non-college	4	4	7	0

- *Predominant SV*
 - Article specifically talks about SV as its topic of focus
- *Minimal SV*
 - SV mixed with other forms of violence
- *Other GBV*
 - Other forms of gender-based violence other than SV
- *Other crime prevention on campus*
 - Use of similar tools on college campuses, not relative to SV



Location, Environment, Situation, Time

LEST Data Elements (selected)

Location	Environment	Situation	Time
<p>Actual location</p> <p>Features of the location</p> <ul style="list-style-type: none"> • Public vs private space • Dorm room • Off campus private apt/home • Indoor vs outdoor 	<p><u>Phys Env</u></p> <p>Presence of:</p> <ul style="list-style-type: none"> • Security cameras • Lighting • Sight lines • Exit routes <p><u>Social Env</u></p> <ul style="list-style-type: none"> • Social support • Positive bystander presence • Inclusivity of campus climate • Power geographies 	<p>Pre-event and event activity:</p> <ul style="list-style-type: none"> • Studying • At a party • Walking on campus <p>Event features:</p> <ul style="list-style-type: none"> • Alcohol • Other people <p>Relationship to perpetrator</p> <p>Power disparities in relationship to perpetrator</p>	<p>Time of:</p> <ul style="list-style-type: none"> • Day • Week • Semester • Year



Location, Environment, Situation, Time (LEST) Data Gathering Techniques

	Report to Authorities/ Entity	Hot Spot Mapping	Safety Audit/ Walking Tour	Place-based Qs
Detail	<p>A survivor provides LEST information during an incident report</p> <p>Enables spatial or descriptive analysis</p>	<p>Using a map and icons to indicate feelings of safety or risk.</p>	<p>People walk a pre-determined route or general geographical region and document features of the physical (and social) environment relevant to feelings of safety.</p>	<p>Questions on a survey/guide that ask about LEST features related to an assault or perceptions of safety.</p>
Data Type	Actual risk	Risk perception	Risk perception	Actual or perceived risk



Notable Findings in Peer-reviewed Research on College Campuses

A. When LEST data is captured and described, it is most often not discussed specifically in recommendations

ie the data is not used → missed opportunity

B. Environmental strategies to prevent SV are not proposed, despite identification of LEST factors in relation to campus SV



Notable Findings in Peer-reviewed Research on College Campuses

C. Little guidance available on:

- How to do it well
 - How many students to engage?
 - How should you recruit those students?
 - How should you decide what to measure?
 - Which data collection method should you use?
- How to use the data to plan environmentally-oriented solutions that address actual sexual assault risk
- How to evaluate effectiveness of environmentally-oriented solutions to prevent SV
 - Does using these techniques lead to better outcomes?





Enhancing Campus Sexual Assault Prevention Efforts

THROUGH SITUATIONAL INTERVENTIONS

Meredith T et al (2020)

<https://www.valor.us/publications/enhancing-campus-sexual-assault-prevention-efforts-through-situational-interventions/>



From Meredith T et al (2020)
 Enhancing Campus Sexual
 Assault Prevention Efforts
 through Situational Prevention
<https://www.valor.us/publications/enhancing-campus-sexual-assault-prevention-efforts-through-situational-interventions/>















Social Spaces at Williams College

College life provides many opportunities to interact with students in social spaces.







How do you feel in this social space at Williams College?

Please use as many stickers as you wish to illustrate, using **GREEN** for your positive feelings and **RED** for your negative feelings about these issues:

The Environment

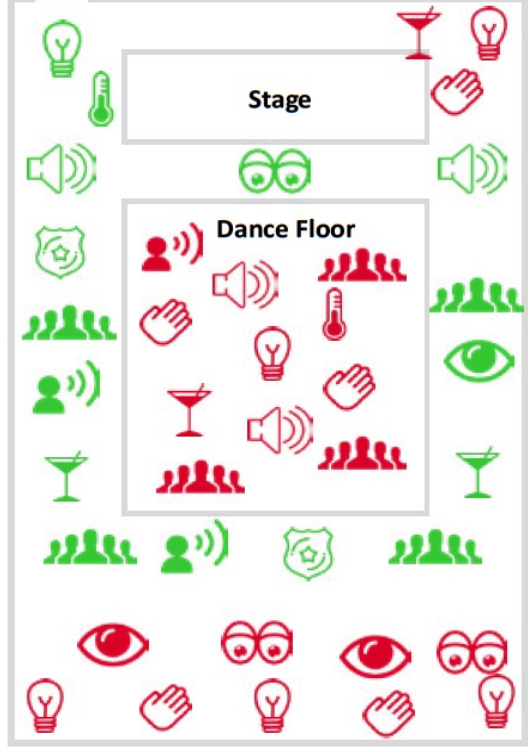
Lighting		
Noise		
Temperature		
Crowd Density		
Vision/Sight Lines		
Drunkenness		
Campus Security		

Interactions with Others

Look		
Talk		
Touch		

Example

Entry
↓



Please describe yourself (circle):

Gender

Male
 Female
 Gender Diverse

Sexuality

Hetero/straight
 Bisexual
 Gay/Lesbian
 Queer
 Asexual

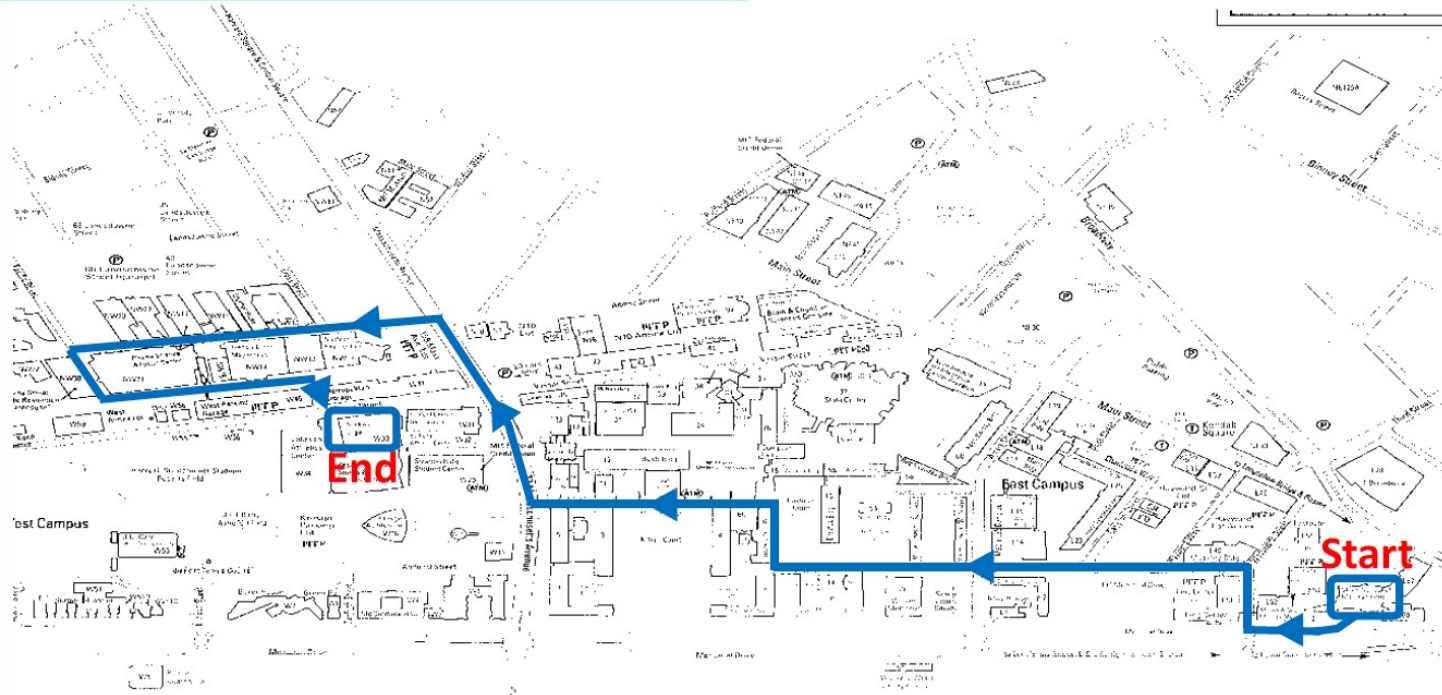
Race

White
 Asian/Pacific Islander
 Black/African America
 Latinx
 First Nations
 More than 1 Race
 Other

Class

First Year
 Sophomore
 Junior
 Senior
 Staff
 Faculty

MIT Walking Focus Group – May 2018 Route



RELEVANT TOPICS TO DISCUSS ALONG THE ROUTE

NOTE: For each topic, discuss your experiences with sexual violence (on a continuum from micro-aggressions, staring/gawking, verbal harrassment, physical harrassment and assault)

- Lighting (Working? In the right locations? Sufficient to illuminate walkways?)
- Visibility (How far can you see & be seen? Obstructions? Is there comfortable/informal surveillance by others?)
- Social Use of Space (Lots of people around? Can you relax/reduce stress? Signs/messages/insignia that impact your feelings of safety and support?)

10-step Process for Developing a Situational Approach to SV Prevention



1 System Scan and Gap Analysis



2 Identify Focus of Environmental/Situational Interventions



3 Develop Mapping Tools to Identify Potential Environmental/Situational Interventions



4 Gather Mapping Data



5 Analyze Mapping Data



6 Report Back on Mapping Data & Generate Intervention Ideas



7 Develop Considerations



8 Share Considerations



9 Determine Actions—Campus-Driven Activity



10 Plan for Ongoing Evaluation



Bowie State University

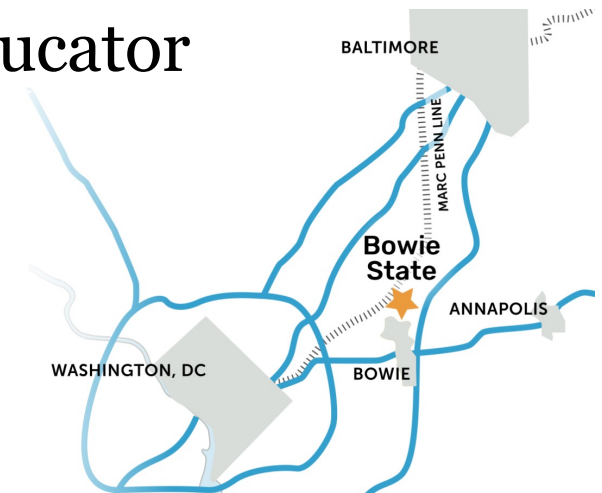
Bowie, MD



Dr. Rita Wutoh, Director of Wellness Center

Shanelle O'Connor, Sexual Assault Health Educator

- Urban setting
- 70% commuters & 30% residents
- Total Population: about 6200 students



How We Began

Title IX Reports

- Identified residence halls as the area where sexual assault is most prevalent
- Decided to focus on sexual violence prevention in residence halls



Campus Stakeholders

Stakeholders

- Residence Life-Robert Alicea and Resident Directors
- New Student Orientation-Thomasina Boardley
- Athletics-Jason Imperati
- Greek Life-Steve Stephens
- LGBTQ Community-Kendrick Peters



Campus Stakeholders

Weekly meetings with stakeholders:

- What did they want to learn about the residence halls?
- Why did they believe it was a risky place for sexual violence

Topics that emerged:

- Security Cameras
- Visitation Policy
- RA Patrol
- Additional Spaces



Planning for Focus Groups

Collaborate with researchers familiar with running focus groups

- Develop a “focus group guide”
 - Lists general topics to cover
 - Opening statements and questions for each section, to get the discussion going
 - Prompts to keep the discussion going
 - 6-8 participants is a good number for encouraging discussion



Planning for Focus Groups

Facilitator should be someone

- Who could closely follow the guide
- Who the participants are most likely to feel comfortable speaking to candidly

Stakeholders decided on two focus group

- One with residents
- One with RAs and RDs



Recommendations from Participants

Security measures

- More cameras, especially in stairwells, elevators and exits
- Better lighting in hallways and elevators

Visitation policy

- Enhance training of RAs
- Mandatory sign in log

Other

- Camera Sign: “You are being recorded”
- Increase awareness of blue lights
- Interactive and engaging education training



Recommendations from Participants

Highlight: Have more spaces for students to gather

- Introduced to participants based on prior research
- To address concerns that students have few options to congregate other than dorm rooms
- Students responded very well to this suggestion, agreeing that there are not enough spaces on campus for students to comfortably meet, relax, and hang out late into the night



Walking Tour

Residence Hall Walking Tour

- In response to Focus Group concerns
- Participants
 - Dr. Wutoh, myself and one Resident Director
- Structure of tour
 - Six residence halls
 - Safety Checklist
 - Created Summary
- Findings
 - Non operational or limited cameras
 - Poor Lightning



Planning Process Moving Forward

- Planning additional data collection activities
 - Hot Spot Mapping
- Working with partners and stakeholders to consolidate data across various sources
 - Title IX
 - Focus groups
 - Two walking tours (one of campus, one of residence halls)
- Working with Public Safety and Resident Life to address security concerns
- Working with Public Safety and Division of Student Affairs to discuss additional spaces for students to gather



time
for a
break



St. Mary's College of Maryland



HSM at MCASA



Key Considerations



Key Considerations

- If you want environmentally-oriented data, is HSM the best way to get it? Why?
- What do you expect to learn about, and from whom?
 - What question are you trying to answer?
 - Whose voices will be represented in your data, and how well do they map to the needs of the student body and the specific type of SV you are intending to address



Key Considerations

- How - specifically - will you use the data you gather?
- How does it fit into your overall programming?



Key Considerations

- Longer time horizon to see evidence of reduction in SV (or proxies) relative to educational approaches
 - Data collection (iterative)
 - Partnerships with non-traditional partners: student affairs, residential life, facilities (building design), grounds, and other partners
 - Brainstorming & development
 - Policy change, changes to built environment take planning/different set of activities
- Institutional support is key to success!



Breaking the Myths on HSM

- Geography is not causality!
 - Remember, location may just be a risk marker, not a cause!
 - Settings and the behaviors & norms that occur in settings, can drive SV
 - Geography can be a marker for how people use space
 - Programming must target underlying issues within geographies
 - Potential solutions:
 - Dig deeper to understand how space is being used and why
 - Check assumptions before implementing solutions



Breaking the Myths on HSM

- Risk perception is not risk!
 - Remember, risk perception is often driven by myths, especially for SV
 - Mapping risk perception but not risk itself could be costly and ineffective
 - Potential solutions:
 - Ensure that programming decisions are informed by data on SV incidents (in addition to risk perception where relevant)



Breaking the Myths on HSM

- Attention to theory of change needed to ensure informed solutions identified by HSM are likely to lead to SV reduction
- Consider:
 - Is the solution increasing actual safety or perception of safety?
 - Is the solution specific enough to SV prevention (or focused on general crime prevention)?
 - Is the solution targeting the type of SV you are hoping to reduce?



Assumption Testing

[Solution] could work to reduce SV if [conditions are true].

Increased lighting in hallways and stairwells could work to reduce SV if dark hallways and stairwells are places where SV happens.



How does HSM Create Change?

HSM creates change by increasing our understanding of how and why SV occurs on our campuses, with a focus on the wider physical and social environment of the campus and how features and use of space is related to SV risk. These activities will lead us to novel approaches to SV prevention that have the promise of prevention at scale.

- HSM is not an intervention activity
- HSM will not reduce SV without using the data you gather for programming and intervention development



Products in Development

Data Triangulation Table

Activity Table



Data Triangulation Table:

What data currently exist? Where are the gaps?

- Colleges and universities maintain multiple data sources related to sexual violence, which can be useful despite their limitations
 - Campus climate survey
 - Title IX reports
 - Campus security reports
- Some of these data sources may contain valuable information about location, environment, situation and context for SV



Data Triangulation Table: What data currently exist? Where are the gaps?

- Data are often reviewed in silos, and may not be considered for informing LEST elements
- The triangulation table is designed as a framework for synthesizing inputs across data sources to identify key learnings on location, environment, situation and context for SV



Data Triangulation Table

Data Source	Data Owner	Population and inclusion criteria	Timing, frequency of data collection	Most recent data available	# cases reviewed & date (where applicable)	Description (#+source+interval)	Data Type: Risk perception (y/n)	Data type: Actual incident (y/n)	Current Major Findings
Campus climate Survey									
Title IX reports									
Campus crime report									
Confidential support line/services									
Focus group: students									
Focus group: other stakeholders									
Walking tour									



DATA ELEMENT	Campus climate Survey	Title IX reports	Campus crime report	Confidential support line/services	Focus group: students	Focus group: other stakeholders	Walking tour	Summary of findings
Experience details								
Touch vs non-touch								
penetration vs non								
Social context								
on a date								
at a party								
studying								
number of people present								
alcohol available/used								
drugs available/used								
victim/perp relationship								
Social features of space								
Public /private								
Students only / other								
Any non-student oversight								
Physical location								
Indoor / Outdoor								
On Campus / Off Campus*								
Campus Owned / Not*								
Physical Features of Space								
Lighting								
Noise level								
Line of sight (barriers?)								
Any hidden spaces								
If indoors,can room be closed off to others								



Activity Table

ACTIVITIES	GOALS	PROCESS OUTPUTS	DATA OUTPUTS	Comments- How will this data be used?
Hot Spot Mapping	Gather data re: outdoor locations that feel unsafe & relevant features	# of participants in mapping activity # maps created	Locations that feel unsafe & relevant features on a hot spot map	Visual analysis for prevention planning, presentations to leadership
	Collect data from various demographic groups	# demographic groups represented	Locations that feel unsafe & relevant features on a hot spot map	Examine differences between demographic groups for prevention planning
Walking Tour	Gather data re: outdoor locations that feel unsafe & relevant features	# of individual or group summaries And/or # completed surveys # photographs	List of locations that feel unsafe List of features that increase perception of risk	To develop a list of potential actions to address problem locations



Help us refine these tools!

- We will send you a copy of these tables & a guide
- We will check in with you 2-3 times over the course of the year to see if you have used them & ask for your feedback
- We will include a link to sign up for this process in a post-webinar email



Moving Forward

- Continue our formative work to refine a general theory of change for HSM and LEST approaches to SV prevention
- Continue refinement of tools to provide structure for those using these approaches
- Develop evaluation framework
 - Develop/refine needed measures
 - LEST concepts
 - Factors related to successful implementation



Moving Forward

Coming soon: SV Prevention Landscape Survey

- SV prevention professionals in higher education
- Characterize HSM/LEST implementation, evaluation capacity and concurrent SV prevention programming
- In-depth interviews with selected survey participants
- Invitation to participate be sent out via messaging through NASPA & other email lists
- Please participate and distribute widely!



Discussion

- How do you envision Hot Spot Mapping or other LEST approaches could impact your programming?
- What barriers might you face?
- What other tools, measures, or support do you need to bring HSM/LEST to your campus?



CDC

Hot Spot Mapping Evaluation Project



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