86 percent of students surveyed reported a high level of concern over becoming the victims of violence and 95 percent had a high level of fear of crime*

**Goal**
Develop a compelling wearable that aids in ensuring personal safety of students within university campus communities

---

**Path Convergence**
Mote coordinates departure times and paths to concentrate foot traffic for safety in numbers

**Research Finding**
When walking alone, students follow others for mutual protection

---

**Voice Guided Navigation**
Voice interface provides distraction free route guidance

**Research Finding**
Students are reluctant to use cell phones while walking alone at night because it draws undesired attention and reduces vigilance

---

**Mote Vision**
Allows users to broadcast their journey to their closest friends, family, and emergency services with the Mote Vision feed

**Research Finding**
Students seldom use the Night Walk service because it is socially awkward, has limited service reach and inconvenient to schedule

---

**Companion Behaviors Explained**

**Foot Traffic Measurement and Navigation Network**
Wayposts provide an Environment-Distributed Interface which allows users to navigate and interact with the Mote network without having to pull out a phone

---

**Inner Circle + Campus Police**
Mote leverages personal networks and campus police resources to improve responses to personal safety threats

---

**Process**

**Research**
- Literature Review
- 3rd Party Survey Study (176 Responses)
- Interviews (16 Participants)

**Design**
- Research Results Analysis
- Sketching
- Paper Prototype

**Prototype**
- 3D Modelling & Printing
- Physical Computing w/ Arduino

**Test**
- Guerilla Usability Test:
  - Scenarios + Questions
  - 6 Participants
  - Paper/3D Printed Prototypes

---

**Contact**

JOHN CASTRO | ANNE ZHENG | DANIEL ROWLAND
sayhello@johnalvincastro.com | xiang23@uw.edu | daniel.o.rowland@gmail.com