

# Milestone 1: Research Plan

Team Powerhouse

HCDE 418

## I. Goal

- To understand how different agencies discover, use and share resources
- Identify pain points where this process could be improved via designs for the VCC

## II. Design Question

- How might we enable discovery and use of cross-agency and private resources to efficiently mobilize resources as part of a dynamic plan?

## III. Research Questions

Themes	Research Questions
Resources	What resources are in high demand and frequently used in incident and congestion management?  How could private resources and partnerships be useful?
Proprietary/Ownership/Jurisdiction	What resources can be shared and what ones can't?  When one agency requests a resource, which agency is responsible for mobilizing it?
Interagency Collaboration	How, where, when, and why do agencies share resources?  Which agencies most frequently share resources with each other?  How do agencies currently collaborate to share resources?  What have successful inter-agency relationships looked like in the past?  How do intra-agency teams share resources?
Communication	What does communication look like between agencies in terms of congestion vs incident management? With private businesses?

Decision Making	<p>What information is considered in the decision to mobilize certain resources?</p> <p>When in the incident response cycle do resource requests and mobilization come into play?</p>
Overall Experience	<p>How is the overall experience of mobilizing resources currently?</p> <p>How is the overall experience of finding resources currently?</p> <p>What does the resource discovery process look like now?</p>

**IV. Method**

- o Semi-structured interviews lasting about 45 minutes

**V. Interview Questions**

Thank you again for volunteering your time to interview with us! *[Introduce ourselves]*. We're planning for about 45 minutes. However, if you have extra time and are willing to continue, we're available for a little extra time beyond 45 minutes. Also, are you willing to have this interview recorded just so we can refer back to it later?

We have a set of questions, but we're really looking to have a conversation around your use of resources. Specifically, we're curious about the use of cross-agency and private resources during a response to a dynamic plan.

Hopefully that context makes our project area a little more clear. If you have any questions right off the bat, feel free to clarify now... *(pause to give them a chance to ask anything)* and we'll go ahead and get started with our questions. *(Focus throughout on what would be ideal/what they'd want to happen)*

1. What resources do you frequently use in incident and congestion management? By resources, we mean personnel, local agencies and businesses, and traffic control equipment.
2. Can you walk us through one incident where a variety of resources were used and what the communication flow looked like?
3. What information influences a decision to mobilize resources? By mobilization, we mean how that resource is implemented and put to use.
  - a. How do you compile that information?

- b. Where does that information come from?
      - c. Who makes the decision to mobilize resources?
  4. At what point in the incident response cycle do you most frequently bring in additional resources (*inject resources*)?
  5. How does your team share resources with other agencies currently?
    - a. If so, which resources?
    - b. If so, in what situations?
    - c. If so, with who?
  6. Does your agency have any resources that can't be shared?
    - a. Have you encountered a time when you wanted a certain resource but another agency wasn't able to provide it? If so, why not?
  7. When an agency requests a shared resource, who is responsible for mobilizing it?
    - a. When you request, who mobilizes? (*This may change when they request from different agencies*)
    - b. When they request from you, who mobilizes?
  8. Have you previously used resources from private businesses or partnerships during a response?
    - a. Yes → Can you tell us about that experience?
    - b. No → Is there any reason why not?
  9. How do you discover which resources are available to you? By discovery, we mean your knowledge of available resources and the process of finding new ones.
    - a. (*Ask one of below*)
      - i. How does discovering resources dynamically during a changing response work?
      - ii. How does resource discovery work in pre-planned standard operating procedures?
  10. How do you normally transition from discovery to mobilization of these resources? (*time-permitting*)
    - a. How does this transition differ for different resources?
  11. Any other comments/opinions you would like to share?
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## VI. Participants

- Captain Sean O'Donnell (SPD, Head of the Traffic Section and member of Steering Committee for VCC)
- Tony Leingang (WSDOT, State Incident Management and Operations Administrator, TMC)

## VII. Data Collection

- Recorded Zoom meeting after obtaining consent

## VIII. Data Analysis

- Manually transcribe interviews (transcribing the opposite interview that we attended)
- Qualitatively code fact tidbits
- Affinity diagramming to sort the tidbits and find overall patterns