Visit to University of Victoria: April 1, 2021

This report summarizes the visit of Dana Brechwald from the Association of Bay Area Governments that took place at the University of Victoria on April 1, 2021.

Itinerary or Agenda

Below is the itinerary of the visit:

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITY</th>
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<tbody>
<tr>
<td>1:00 PM – 2:30 PM</td>
<td>Visiting professional guest lecture to CIVE 411: Resilient Smart Cities class</td>
</tr>
<tr>
<td>5:30 PM – 6:15 PM</td>
<td>Informal meeting with department undergrad students in courses/classes, EERI Seismic Design Competition team, and/or other project teams where they can discuss career paths and ask questions to get insight and feedback from the visiting professional.</td>
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<tr>
<td>6:30 PM – 7:30 PM</td>
<td>Visiting professional lecture to Student Chapter and other interested students</td>
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Student Chapter Visit Planning Committee

Lead Organizer(s):

- Jill Pederson, Co-President, jill.pederson@gmail.com

Visiting Professional Lecture Overview

Lecture Abstract

Dana opened her presentation to the University of Victoria EERI Student Chapter with an overview of the initial steps involved in developing effective solutions for public issues, before transitioning to more specific resiliency planning priorities and case studies. Within these case studies Dana discussed several historic problems that have occurred in the Bay Area, and provided a background on the solution production. These issues included the risk rising tides pose to waterfront property, the risk earthquakes pose to outdated structural designs (particularly those with higher risk of experiencing a soft-storey effect), as well as others. In discussing the key issues that face urban and resiliency planners in the Bay Area, Dana provided students with an appreciation of the research and study that is required prior to a solution being implemented; this, coupled with explanations of the resulting programs and government guidelines/regulations, led students to the conclusion that wide-spread
policy and engineering solutions require a team of committed problem-solvers to meet the needs of the various parties involved. The figures below show some of the key topics, as mentioned above, that were included in Dana’s presentation.

Figure 1: Joint Platform Development Slide

Figure 2: Regional Considerations Slide
Professional Bio

Dana works in San Francisco as a Resilience Planner for the Association of Bay Area Governments, where she is able to manage projects related to resilient community design. Dana’s recent work includes a Soft Story Retrofit Program Development Policy Guidance Document, as well as a Stronger Housing, Safer Communities project, along with other planning projects in and around the Bay Area. Her expertise in developing resilient and effective solutions for clients with diverse priorities speaks to her ability to navigate difficult design problems with clear communication and respect for all parties.

SUPPLEMENTAL ACTIVITIES

Guest Lecture to CIVE 411: Resilient Smart Cities

In the afternoon, Dana attended and spoke to a class of 4th year civil engineering undergraduate students regarding building resilience and the broader regional context of urban planning solutions. She specifically analyzed a case study on her past work with EERI in Mexico City to provide students with the context behind high-level hazard and resilience assessments.

Informal Career Chat with Undergraduate Students

Prior to Dana’s lecture she was able to take time to hear and discuss any career-related questions from UVic undergraduate students. This was a valuable time for these students to hear responses to their detailed questions from an industry professional, who can draw on her past years of experience in both managerial and technical roles.
RESULTS, FEEDBACK AND LESSONS LEARNED

A key challenge that we faced in the organization of this visit was the difficulty in promoting and encouraging attendance of a virtual visit to students outside the active members of the Student Chapter. We also made attempts to secure meetings with Dana for other student groups on campus that would have found her industry experience valuable to discuss, but these did not come to fruition due to a variety of reasons (schedule conflicts, etc.). For the students that were able to tune into Dana’s visit, the experience was extremely valuable and we hope to have more experiences like this one (though hopefully in-person!) in the future. For these future visits we would be particularly interested in hearing from professionals with a background in structural or earthquake engineering, as we have students who hope to pursue these fields after graduation. Our goals for future visits would include the following:

- Providing the professional with a wider variety of activities throughout the day
- Exponentially increasing the awareness and attendance of interested students
- Creating in-person networking opportunities for students

ACKNOWLEDGEMENTS

The University of Victoria EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring and promoting the virtual visit of Dana Brechwald through their Friedman Family Visiting Professional Program program.

We also would like to extend our thanks to our moderator, Preetish Kakoty, who graciously took time out of his busy graduate schedule to tune in and assist in the technical aspect of Dana’s presentation.

Lastly, we would like to thank Dana for virtually visiting our young student chapter! We were thrilled to host her as our first Friedman Family Visiting Professional, and look forward to working with more professionals in the future.

LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

- Appendix A: Social Media Post/Promotion for Dana’s FFVP Lecture
- Appendix B: Additional Photos from Dana’s FFVP Lecture
Hey there!

This Thursday (April 1st, 6:30-7:30pm PST), in partnership with the Earthquake Engineering Research Institute, UVic Seismic will be hosting Dana Brechwald for a guest lecture on resilient cities and urban planning! Dana is a resilience planner in San Francisco, with experience in risk management and disaster recovery planning. You can read her full bio here: http://www.resilientbayarea.org/danabrechwald.

Please share this event with your friends! All attendees should take 5 minutes to pre-register on the FFVP website. Once registered you'll be able to log in on April 1 and can join the lecture by clicking on the "My Lecture" page. Currently, if you try you will see a waiting/countdown screen but you’ll be able to join at 6:30pm on 4/1.

We are looking forward to providing our club members and any others interested with this opportunity to interact with an industry professional 😊

Hope to see you there!

Bringing About a Stronger, Safer Bay for Everyone to Enjoy

RESILIENTBAYAREA.ORG
Dana Brechwald — Bay Area: Resilient By Design Challenge
Dana Brechwald is a Resilience Planner at the Association of Bay Ar...
Stronger Housing, Safer Communities

- Analyzes risk to housing and socially vulnerable communities from earthquakes and flood
- Provides extensive planning and policy strategies for existing housing and areas of planned housing

Soft Story Mitigation Program Considerations

- Which buildings should be targeted? Just the worst?
- What degree of mitigation should be required? Life safety or beyond? Can all buildings reach life safety?
- How should the program be phased?
- What are the impacts to building owners and tenants? Who might be disproportionately impacted?
- Does the city need 100% compliance to reach functional recovery?
- How do you apply engineering standards to functional recovery standards?