

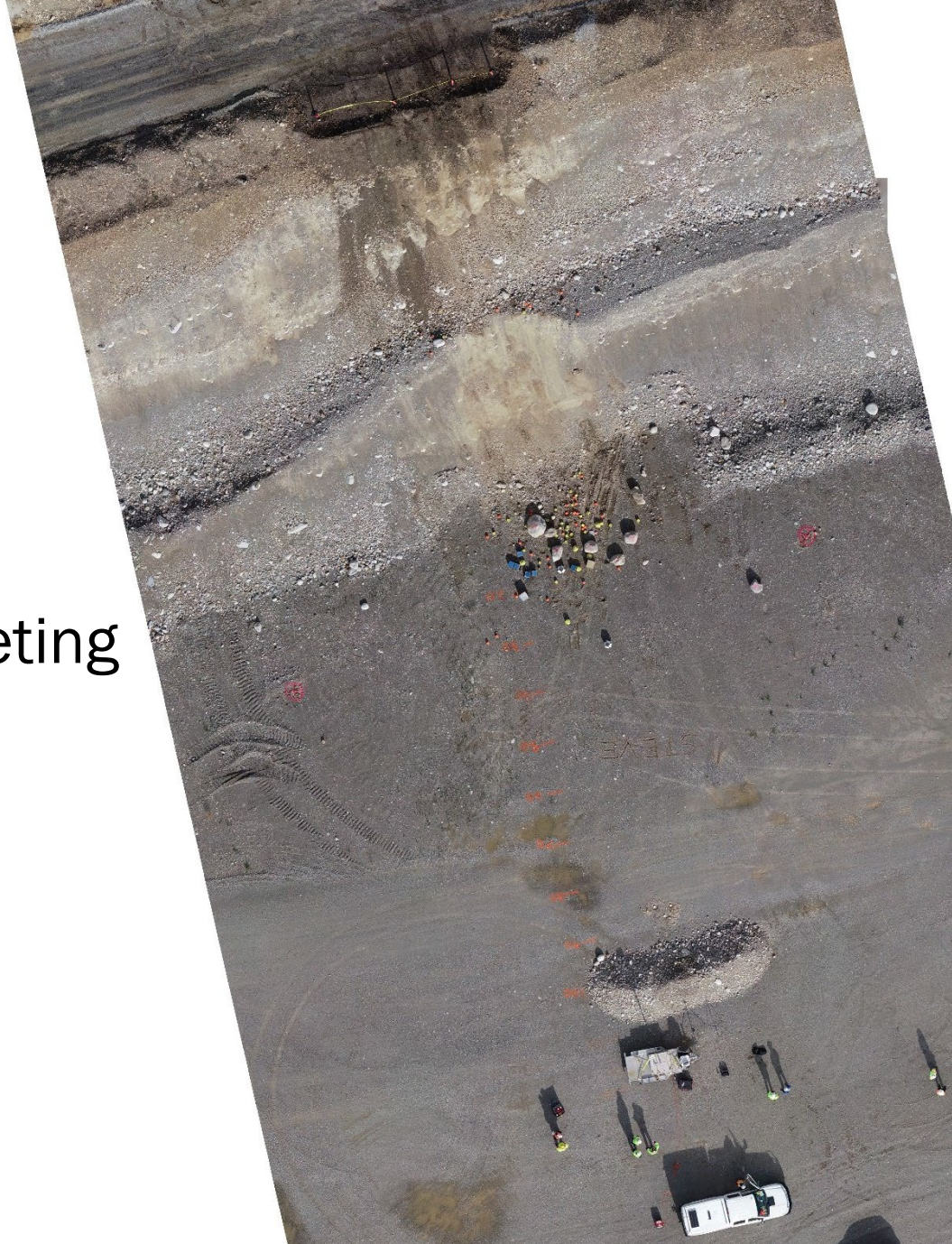
Mine Slope & Subsidence Monitoring Partnership

Kickoff Meeting, June 12, 2024



Meeting Agenda

- Introduction to partnership
- Brief review of partnership charter
- Review plan for initial full partnership meeting
- Call for presenters
- Call for presentation reviewers
- Q&A



Introduction to Partnership

Mining Project: Highwall Safety: Rockfall Catchment Design and Slope Performance Monitoring at Surface Mines and Quarries

[Print](#)

Keywords: [Benches](#) [Open pit mining](#) [Slope design](#) [Slopes](#)

Principal Investigators	Sean Warren - Request information Josef Bourgeois - Request information
Start Date	10/1/2021
Objective	This project intends to increase the safety of open pit mines through (1) improving upon or developing new rockfall catch bench design guidelines to aid design engineers in matching rockfall catch bench performance to acceptable risk criteria specific to unique mining situations; and (2) improving slope performance monitoring capabilities at open pit and quarry sites by expanding on slope monitoring radar alarm/notification setting guidelines, working with vendors on improvements to existing monitoring technologies and improving/expanding their use in surface mines and quarries.
Topic Areas	Ground Control Overview Ground Monitoring

https://www.cdc.gov/niosh/mining/researchprogram/projects/project_highwallsafety.html

Mining Project: Unconventional Monitoring and Design for Mine Stability in Sedimentary Rock

[Print](#)

Keywords: [Ground stability](#)

Principal Investigator	Heather Lawson - Request information
Start Date	10/1/2020
Objective	To provide improved tools for the assessment of ground-failure-related hazards in underground softrock mines.
Topic Areas	Geologic Characterization Ground Monitoring

https://www.cdc.gov/niosh/mining/researchprogram/projects/project_unconventionalmonitoring.html

Partnership Charter

Purpose

- Investigates the use of existing stability/subsidence monitoring technologies used in the mining and quarry industries and evaluate the potential for early instability detection design.
- Mission of facilitating the sharing of best practices with regards to the use of these technologies in order to conduct and disseminate impactful research that benefits the mining industry as a whole.

This partnership is neither constituted to carry out negotiated rulemaking; nor to function as a federal advisory committee

This partnership is led by the NIOSH Mining Program, with support from the MSHA Mine Waste & Geotechnical Engineering Division as well as the Roof Control Division

Partnership Charter

Goals

- Work toward solutions to issues related to successfully implement proper slope/subsidence monitoring technology at mine sites
 - Develop and support best practices related to effective use of the technology
 - Build relationships
 - Identify related monitoring applications in projects and share work openly
 - Identify training needs and opportunities
 - Foster collaboration between members
 - Evaluate the success of the partnership on a regular basis

Partnership Composition

- Researchers/engineers within the federal government, universities, and private sector that work to measure slope movement and ground subsidence

Plan for Initial Full Partnership Meeting

- Timing: Considering late September to early October 2024
- Duration:
 - One-to-two-day seminar with talks from speakers representing private industry, government, and academia
 - Dependent on how many presenters volunteer
- Tentative Agenda Breakdown:
 - Morning dedicated to slope monitoring
 - Afternoon dedicated to subsidence monitoring

Past meetings

- February 27, 2024 - [Topic Selection Meeting](#)
- September 20-21, 2023 - Partnership meeting - [Agenda and presentations](#) - [Minutes](#)
- February 28, 2023 - [Agenda-setting meeting](#) for the upcoming full partnership meeting. Held during the [2023 SME Annual Conference and Expo](#) .
- September 14-15, 2022 - Partnership meeting - [Agenda and presentations](#) - [Minutes](#)
- April 27, 2022 - Virtual meeting to discuss agenda ideas for the August or September 2022 partnership meeting
- August 17-18, 2021 - Partnership meeting - [Agenda and presentations](#) - [Minutes](#)
- May 11, 2021 - Virtual meeting to discuss agenda ideas for the August 2021 partnership meeting
- October 8-9, 2020 - Partnership meeting - [Agenda and presentations](#) - [Minutes](#)

Day 2 – September 21, 2023

Time (PDT)	Topic	Speaker	Affiliation
8:00am	Welcome	Joel Haight	Univ of Pittsburgh
8:05	Barriers to automation in the US - NIOSH contract update	Kray Luxbacher	University of Arizona
Panel Discussions			
8:35	Workforce considerations	Ravitha Sukumaran Denise Baker Peta Chirgwin	Immersive Technology NIOSH Chameleon Mettle
9:20	Automation in small mines	Libby Pritchard Zach Ellis Douglas Duesing	NSSGA Epiroc FORT Robotics

Call for Presenters / Presentation Reviewers



- What do you want out of this partnership?
- What kinds of presentations/information would you like to see?

Questions

Contacts...

Josef Bourgeois

jbougeois@hntb.com

Sean Warren

NIOSH SMRD

yox4@cdc.gov

Nicole Evanek

NIOSH PMRD

kri5@cdc.gov