

Corrosion of Buried Steel at New and In-Service Infrastructure: Implementing Report Recommendations

National Academy of Sciences Building
2101 Constitution Ave., N.W.
Washington, DC 20418
Room 125

The recent report [Corrosion of Buried Steel at New and In-Service Infrastructure](#) explores the state of knowledge and technical issues regarding the corrosion of steel used for earth applications (e.g., for ground stabilization, pipelines, and infrastructure foundations) in unconsolidated earth or rock in different geologic settings. The report summarizes mechanisms of steel corrosion, assesses the state of practice for characterizing factors in the subsurface environment that influence corrosion and corrosion rates, and assesses the efficacy and uncertainties associated with quantitative, field, and laboratory methods for predicting corrosion. This workshop will explore the recommendations in the report including those related to generating new data on corrosion through collaborative long-term experiments, sharing and managing data, developing new data analytical techniques to inform infrastructure design, construction, and management decisions, and developing decision support systems that guide site characterization and help manage risk. Workshop participants will discuss how such recommendations might be implemented.

May 11, 2023

Objectives

- Review report recommendations
- Consider how recommendations might be implemented and the opportunities and challenges
- Explore cross-sector and interdisciplinary collaborative possibilities and optimizing of resources

9:00–9:15

Introductions, descriptions of session objectives

Allen Marr, Chair, COGGE

9:15–10:15

Synopsis of report recommendations and the reasoning behind them: how did we get here?

Scott Anderson, study committee chair

Susan Burns, study committee member

Gerald Frankel, study committee member

Moderator: Allen Marr

10:15-10:30

Break

10:30-11:45

Study sponsor panel discussion: opportunities related to implementation

Moderator: Scott Anderson

Panel

- *What opportunities arise within your agency/organization from the report recommendations?*
- *How does the current evidence base need to be augmented to inform decisions related to buried steel corrosion? What can be done now? In 5 years? In 25 years?*
- *What can your agency/organization contribute toward multidisciplinary efforts of the type recommended in the report?*

Group discussion

11:45-12:45

Lunch Break

12:45 - 1:20	<p>Case study of a collaborative effort to improve infrastructure decision making: exploring the value proposition</p> <p><i>Sunil Sunha, Virginia Polytechnic Institute and State University</i></p> <p><i>Moderator: Craig Davis</i></p> <p>Q&A and group discussion</p>
1:20 - 1:25	<p>What are the next steps? Instructions for breakout sessions</p> <p><i>Moderator: Allen Marr</i></p>
1:25 - 1:35	<p>Transition to Breakout Rooms</p>
1:35 - 2:20	<p>Breakout 1—Implementing the recommendation</p> <p>Each breakout room will address a different recommendation and consider the following questions:</p> <ul style="list-style-type: none"> • <i>How do you decide what organizations need to be part of the collaboration (i.e., who needs to be part of the conversation)?</i> • <i>What needs to be discussed at the collaboration table?</i> • <i>What kind of entity is best suited to facilitate the collaboration itself?</i> • <i>How do you decide who in your organization needs to be involved?</i>
2:20 – 2:30	<p>Break</p> <p>Opportunity for breakout-session rapporteurs to compile notes</p>
2:30 – 3:05	<p>Breakout 2—Implementing the Recommendation</p> <p>Each breakout room will address a different recommendation and consider the following questions:</p> <ul style="list-style-type: none"> • <i>How do you decide what organizations need to be part of the collaboration (i.e., who needs to be part of the conversation)?</i> • <i>What needs to be discussed at the collaboration table?</i> • <i>What kind of entity is best suited to facilitate the collaboration itself?</i> • <i>How do you decide who in your organization needs to be involved?</i>
3:05 – 3:15	<p>Short Break / Return to Plenary Session</p> <p>Opportunity for breakout-session rapporteur to compile notes</p>
3:15 - 4:15	<p>Reports from Breakout Discussions</p> <p>Rapporteurs from each breakout session will present key points from discussions (10 minutes each)</p>
4:15 – 4:55	<p>Plenary Discussion: Synthesis of Overarching Themes</p> <p><i>Moderator: Susan Burns</i></p> <ul style="list-style-type: none"> • <i>What have been the overarching themes regarding the collaborations needed to implement the recommendations?</i> • <i>What needs to be done to make the collaborations happen?</i> • <i>What are shorter- and longer-term goals related to expanding the needed evidence base (i.e., Recommendation 2 from the report)?</i>

4:55–5:00

Closing Remarks

Allen Marr

5:00

END OF OPEN SESSION

