

**Open Call for Research Concepts
A Rolling Invitation to Academic Researchers
Transportation Pooled Fund Study Number 5(566)**



Overview

The Connected Corridor Advancement Initiative (CCAI) is a Transportation Pooled Fund Study (TPF-5(566)) with a mission to achieve consistent multi-state corridor operations and a vision to collaboratively deploy a national, federated roadway digital infrastructure at scale. CCAI is working towards the achievement of three overarching goals by 2030. Details about these three goals and the entire business plan are available on the CCAI website at <https://ccaiusa.org>.

CCAI is pleased to release this Open Call for Research Concepts and invites eligible academic institutions to submit research concepts and ideas on a rolling basis. CCAI is interested in engaging the academic community to identify emerging research, technologies, methods, and areas of inquiry that could advance CCAI's mission, support its strategic and tactical use cases, or identify new opportunities relevant to multi-state corridor operations and roadway digital infrastructure.

CCAI encourages researchers to bring forward ideas at varying stages of maturity. Concepts do not need to represent completed research or an existing CCAI project. CCAI is particularly interested in ideas that could benefit from engagement with transportation practitioners, access to a multi-state operational environment, collaboration across disciplines or institutions, or opportunities to translate research into practical transportation applications.

This invitation is open to colleges, universities, and other degree-granting academic institutions located within CCAI member states. Collaborative and multi-institution submissions are encouraged and may include academic institutions, researchers, industry partners, nonprofit organizations, or other participants located outside CCAI member states. All submissions must be led by an eligible academic institution located within a CCAI member state.

CCAI intends to use information submitted in response to this open call for planning, research, market awareness, and development of Corridor Connect capabilities and potential future industry opportunities. As shown on the diagram on the next page, Corridor Connect is a data translation and quality assessment platform that federates data from a range of sources and makes it possible to disseminate it in a variety of standard formats. Respondents should avoid submitting trade secrets, potential agreements, deals, draft contracts, or memorandum of understandings, or other sensitive proprietary information that is not necessary to evaluate the proposed capability. Any information identified by a respondent as confidential or proprietary should be clearly marked as such. CCAI and its



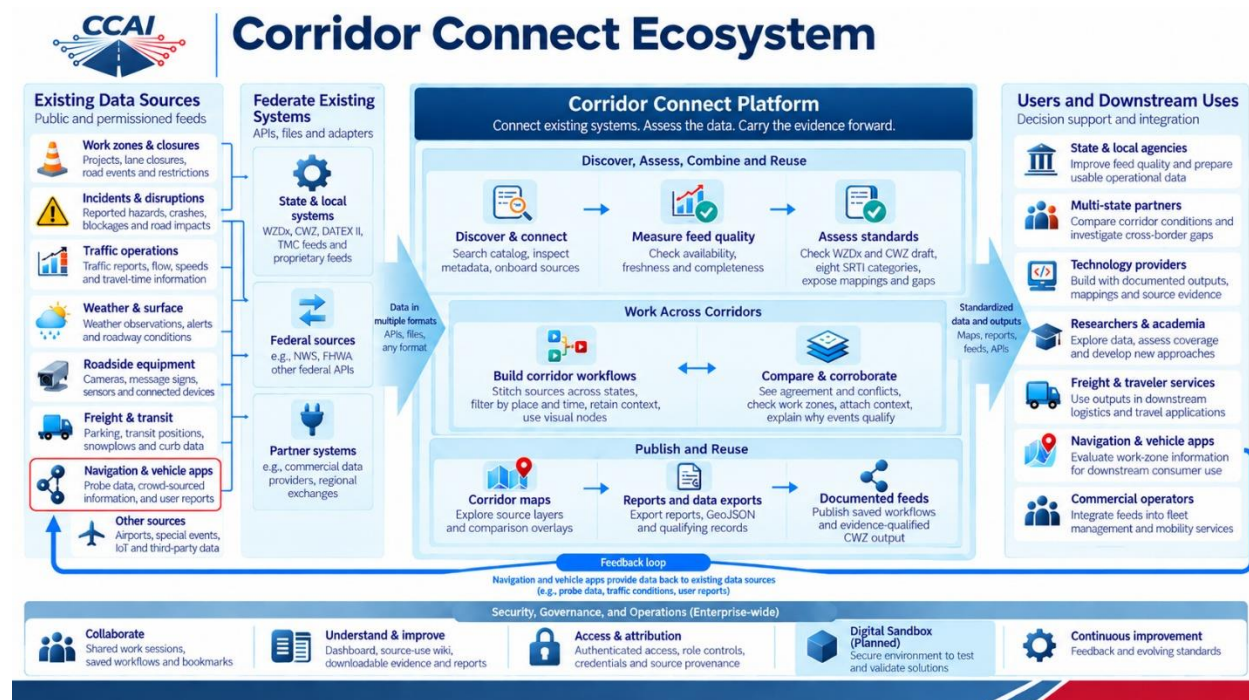
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member agencies will handle submitted information in accordance with applicable laws, policies, and public records requirements and cannot guarantee that information submitted in response to this RFI will be exempt from disclosure.

RFI responses should not be construed as intent by CCAI or any CCAI member to procure any services or products from any respondent. Acceptance of RFI responses as part of this invitation is not a procurement.

Information obtained through this open call and subsequent presentations may also be used by CCAI to improve member awareness of emerging technologies and capabilities, understand market trends and technology maturity, identify areas of industry activity aligned with CCAI strategic and tactical use cases, and inform future CCAI research, planning, and program activities.

Responses should be submitted to Eric Rensel at ericrensel@renselconsulting.com.



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Response Requirements

Each response will consist of two parts. Part 1 will be a written response, no more than 10 pages in length. Part 2 will be a recorded presentation with the CCAI administrative support team for a research concept discussion.

Part 1 – Written Response (10-Page Maximum)

Written responses should address the topics below and should not exceed 10 pages. Respondents are encouraged to be concise and may provide shorter responses when appropriate. CCAI is primarily interested in understanding the respondent's capabilities, relevant experience, alignment with CCAI use cases, and potential contribution to the Corridor Connect ecosystem rather than receiving extensive marketing materials.

1. Academic Institution and Research Team

Responses should include a short description of the leading respondent, any partner respondents, and why the team is working together.

2. Research Concept or Opportunity

Responses should clearly indicate what question, problem, analytics, relevant information, hypothesis, or opportunity the team proposes to investigate. This section should also clearly identify which part of the Corridor Connect Ecosystem benefits from the results of the investigation and how CCAI members and their transportation customers could benefit from the outcomes.

3. Data governance, security, and control

Each response must provide a concise description of where data is processed/stored, who retains ownership, whether the academic partner obtains reuse rights, how access is controlled, and whether member data can be removed or migrated upon termination.

4. CCAI Use Case Alignment

Identify the CCAI strategic and/or tactical use cases that the proposed research supports. Respondents may identify more than one use case. For each use-case selected, briefly describe how the proposed research outcomes contribute to the desired use case capability or outcome. Respondents may also identify an emerging use innovative case or capability not currently represented in the published CCAI use cases.

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5. Collaboration Model

Each response should describe what access or participation from CCAI members would make the research possible or more valuable. It should also describe any known limitations to university owned data, systems, or policies that would limit research effectiveness.

6. Research Maturity

Each response should describe whether the proposal is a new research concept, ongoing research, previously funded research that could be extended, a prototype that needs validation or mature research ready for operational demonstration. Each response should also describe how successful research effort could transition into practical application.

Part 2 – 60-minute Research Concept Discussion

Respondents will be invited to meet with members of the CCAI administrative support team to record a presentation and discussion about the proposal. The research team should plan to provide a 30 to 40-minute presentation that builds on the written submission and answers three questions:

- What are you trying to learn?
- Why does it matter to CCAI?
- What could CCAI uniquely contribute to the research?

The administrative support team will ask any follow-up questions from the written response and engage with the research team in an exploratory dialog. Members of the administrative support team are not authorized to make purchases on behalf of CCAI or enter into any agreement of any type. Exploratory questions asked by the administrative support team should not be construed as interest or a commitment to purchase any services or products from the respondent.