Response to Reviewer 1

[Mobility data] does not seem to be the expertise of the list of Prospective Participants…the core of the proposal seems to be a methodological contribution (specifically, the analysis of big data and AI in the food domain), for which the Project Editor does not appear to have a demonstrated expertise in. Discussion is not provided on how the Potential Project Participants will fill in this gap.

To provide additional context, the initial research team received a grant from NIFA to purchase mobility big data from 2019-2025 and develop a network of researchers interested in using this data to food systems questions. Two of the collaborators (Dr. Suining He and Dr. Dongjin Song) are computer scientists with experience using mobility data, and they will be cleaning and reorganizing the data into a format usable by non-data science experts (including creating csv files and GIS feature classes). They will also collaborate on machine learning and AI applications. We now mention this in the "Methods" section and provide additional detail in Appendix E.

The project proposal uses a lot of buzzwords without describing how it plans to actually implement analysis… I would like to see significantly more discussion over how the assembled team plans to implement the proposed research.

We originally wanted to keep the descriptions general to ensure that potential collaborators with different research questions or proposed methods would see this as a viable project in which to participate. We have clarified the objectives and provided specific descriptions of proposed projects and analytical techniques in the Methods section. We hope this alleviates your concern about the lack of a clear methodological plan.

Response to Reviewer 2

Proposal's flow was choppy and moved too abruptly between discussion of data challenges, innovation in methods, issues to be considered and no clear examples of findings and outcomes that would address specific policy or issue debates currently occurring.

We have revised the proposal for improved clarity. We have now created more general objectives and then provided examples in the Methodology section. This includes better making clear the policy implications of our findings. Specifically, objective two addresses concerns about the impact of COVID, and objective three addresses policies concerned with increasing food access and siting local food establishments.

If the proposal is refined to nest a few key industry dynamics (location of businesses, supply chains), and then new data or method innovations to inform each of those, and then a couple current issues influenced by those behaviors (equity, local), that would flow better and be better integrated. Plus, it may give a better idea of what interdisciplinary sciences and members you would have involved (since none appear to be listed).

Because a key element of this proposal is to encourage interdisciplinary collaboration among scholars and stakeholders, we have revised the proposal to clarify this. First, we now have more general objectives that can apply to various researchers. In the Methods section, we detail examples of issues and approaches that could be covered. Second, in both Appendix E and the start of the Methods

section, we make clear that interested researchers are from several disciplines and detail the role they would play in the research.

Overall, this feels like it is too speculative in what you hope might be found, without a clear connection to previous work of members and how it will elevate the literature already cited in these areas.

We intended to keep the proposal general so that researchers from various disciplines could apply the mobility data to their questions and methods. However, to make the scope of potential work clearer, we now have broader objectives and include specific examples in the Methods section.

Response to Reviewer 3

There is great potential for significant outputs and outcomes, however the outcomes could be strengthened with greater emphasis on outreach beyond the academic community.

We have clarified that the goal is to conduct stakeholder-driven research and present findings that various audiences can understand. Specifically, we provide the example of a sub-state analysis of a marketing program proposed by the leader of that initiative and include more examples of the outreach we would conduct through the symposium.