In the intro, provided a clearer sense that the dissertation falls thematically into roughly two parts: first a deep dive into complexity, and then applications. This better helps calibrate expectations.

Revised all chapters to state explicitly that I individually created the software and tools under discussion: OSMnx and Pynamical. This was merely implied previously. Revised and more clearly explained the reasons for developing OSMnx in chapter 5.

Added more thoughts on future urban planning research to the conclusion, including research questions that scholars and planners can ask with OSMnx.

Clarified how I am using the terms density, resilience, and connectedness in chapter 4 for the rest of the dissertation.

Clarified resilience for automobility versus pedestrians in the discussion section of chapter 6 and in the future research section of chapter 8.

Revised all side-by-side visualizations to ensure same scale.

Added a new section 5.4.6 with significantly more “planning storytelling” to connect network visualizations with the practice and decisions of planning and design.

Tables throughout have been revised for readability, including body re-formatting and the inclusion of explicit indicator names/descriptions rather than the less-immediate variable names exported directly out of the computational analysis. Also added clear signposting to the extended discussions and definitions elsewhere in the dissertation of these indicators when they appear in tables. Finally, I briefly recapitulated the interpretations of these indicators in chapter 7’s methodology section, just before they are presented in several tables, for easier reference.

Further explanation of the spatial scales and units of analysis is provided in chapter 7, particularly in 7.4 and 7.8. The importance of scale and what makes each unit of analysis interesting is discussed in chapters 7 and 8. State-level aggregations and their limits are better contextualized in sections 7.5 and 7.6. More discussion of how scale matter is added to 7.8 and the conclusion.

Added new visualizations of street networks to section 7.6 to clearly demonstrate what these places look like and what their density and connectedness look like. Also added 12 new figure-ground visualizations to section 5.4.6 for better illustration.

Added new visualizations to section 7.7 to illustrate the street networks in the different neighborhoods of San Francisco.

Added several paragraphs of new material to section 7.7 to discuss the planning history of certain SF neighborhoods to better illustrate the reasons why their street networks look the way they do, and in turn illuminate the statistics presented with a clearer real-world story.

Add connections to planning – dead-ends, fine-grain, etc.

David – I accepted most of your stylistically suggestions as they didn’t conflict with other professors requests. However, you had commented that the introduction/abstracts felt long-winded and overly detailed, but I kept this format as-is because it was Paul’s requested structure and format (likewise for the tutorial tone in chapter 2).

I added some more critical depth and citations to the Jacobs-planning-complexity stuff. Also gave a fuller picture of the roots of complexity as you suggested in the conclusion of chapter 2, mainly by listing various roots and offering references for more info.

At the beginning of the graph/network term definitions, I added more citations.

In Chapter 6, added discussion and caveats to the effects of bounding boxes on the network – namely peripheral edge effects and artificial centers.

Figures 7.1 and 7.2 were changed from representing urban areas by their shapes to representing them as equal-sized circles, for improved readability

The color ramps throughout chapter 7 were revised to scale from low (pale yellow) to high (dark red) for easier interpretability.

Problems with types I/II/III complexity. First, it was somewhat confusing having this typology at the beginning of the chapter and then having the main typology that the chapter was building toward come at the end. Second, the “type” terminology was a bit vague. Third, as you noted, the whole thing was a bit glossed-over. I have clarified the language referring to this throughout the dissertation. I addressed these issues by explicit calling it a “framework” rather than typology for disambiguation and calling the types “categories” instead. I added additional material throughout chapter 4 to explain the framework more clearly, and to the discussion in chapter 7 to unpack the findings a bit more clearly in its context. Finally, I added better signposting throughout the dissertation when this framework is referred to.

I changed the final section of chapter 3 into a “discussion” section and added some new paragraphs to address this more clearly. I also now talk about this in the discussion of findings in chapter 7, as well as in the intro and conclusion.

What un-answered question does your work help close a specific knowledge gap?

more on how OSMnx be used to probe the complex dimensions of street networks and how this in return will lead to …. XXXX (… to efficiency gains; better road investment or management decisions; more resilience in transportation system designs; safer streets, ????)

additional step to clarify contemporary policy questions and debates