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.

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 from 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 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.

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.

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.

David – I accepted most of your stylistically suggestions as they didn’t conflict with other professors requests. However, you had commented that the intro felt long-winded and overly detailed, but I kept this format as-is because it was Paul’s requested structure and format.

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 roots and offering references for more info.

At the beginning of the graph/network term definitions, I added some references.

Figure 7.1

Color ramps in ch 7

3.7 - What is lost when we emphasize the structure in the analysis over the processes?

4.4.6 - how these measures of network structure relate to complexity

4.5 - loss of temporal measures seems problematic, or at least should be more prominent in the discussion

4.6 - linkage between network measures and complexity that needs greater emphasis: These attributes influence the way an urban system’s physical links can structure complex interactions, connections, and dynamics.