Reflecting on Your Implementation of Project Management Tools

The project scope narrowed significantly upon onset of data collection. The complexity of elements that contribute to making an urban space active and desirable required selecting fewer stations in order to conduct a more in-depth analysis. For similar reasons, the scope was narrowed by eliminating the comparative analysis of Valley Metro TOD stations to efforts elsewhere. With the quantity of data, complexity of analysis, and timeframe permitted, a comparative analysis did not seem feasible, nor did it seem appropriate given the context dependent nature of TOD. Alternatively, the client requested two auto-oriented “TOD” stations be examined to understand why stations in environments one would not describe as pedestrian-friendly have higher ridership levels compared to other locations. The literature also suggested the need for a greater evaluation of urban design features, as those are commonly put forth as critical elements to attracting pedestrians and cyclists. Walkscore.com provided an objective rating of walkability and bike-ability, and field research was conducted to provide a qualitative assessment of urban design features as well. Finally, the client agreed and confirmed creating station profiles provided a better platform for telling the “story” of interactions than the originally proposed deliverable, which was a pamphlet.

While the revised scope was more appropriate, implementation of the leasing rate analysis proved especially difficult. Data is not easily publically available, and though the researcher has a professional developer contact who assisted in the process, collecting data through a middle-man added unforeseen time to the schedule. The research also attempted to gain insights about affordability in the station areas by analyzing housing affordability, but the varying level of detail of datasets made them incompatible for analysis. Ultimately, these analyses were severely inhibited by the data and were omitted from the project. Despite the changes to the project, I am satisfied with the results and the elements that were evaluated. I think the results provide a strong foundation for additional research moving forward and has contributed to the evolving conversation on land use and transportation planning.

Changes to the scope impacted the GANNT chart in two ways though. First, the literature review took significantly longer to complete than expected. Readings from other academic courses and work continually provided new information to incorporate, and the addition of an urban design element required supplemental literature be reviewed. Second, as mentioned, the leasing rate information for commercial, office, and residential spaces in the station area was incredibly time consuming and produced few results. This was a
frustrating element of the study because it ultimately ended up being omitted; however, the client was accommodating and recognized the challenges in that component of the study. For purposes of the transportation planning realm, Mr. Miller noted that the other elements of the study were more pertinent to the agency’s efforts and extent of influence.

Mr. Miller was updated every two to three weeks, depending on availability. Meetings provided an opportunity to update the client on progress and troubleshoot issues with data or analysis. Additionally, while not key stakeholders in the project, several co-workers regularly provided guidance and input throughout the project. If I were to do this project again, I would request permission from the client to form a small committee to meet formally on a bi-weekly basis. I believe this would have helped me better adhere to the schedule, narrowed my data gathering and analysis efforts, and guided the project more effectively.

As mentioned, communication with developers was less successful. Though a meeting with the ASU Real Estate Developer Program Manager proved productive, I was unable to obtain a list of developer contacts. He did pass along data requests to contacts, but the data materialized late into report writing. While I tried to incorporate this into the project, the Station Profiles took priority and ultimately I omitted this from the study due to time constraints. In retrospect, a longer timeframe and different approach should have been used for this assessment because this element could be a whole market assessment project itself.

Reflecting on You as a Project Manager

While I managed a capstone project for my MUEP degree, the MSUS applied project was significantly more structured. Using the GANNT chart and WBS were helpful tools throughout the study, and having completed the project, I have a much better understanding of why these were required. As it was my first experience with both tools, I believe my attempt at scheduling was satisfactory; however, I know I need a lot of practice to become stronger at more accurately budgeting time to project tasks. Additionally, adaptability was a necessary “soft” skill for the project to execute in a timely manner and still produce valuable results. More specifically, project challenges required managing up and learning how to propose alternatives in the face of data gaps or barriers.

As mentioned, prior to this project I had never held myself or a project to a GANTT chart. It is definitely a powerful tool and I need to continue developing my ability to budget time appropriately. Overall, I struggled slightly to keep myself to the schedule, and I think part of that is due to the nature of doing this project independently, but also not having experience budgeting time in this manner and for a project this complex was a challenge. In particular, I did not foresee the time it was going to take third-parties supporting the project to respond (Mr. Panetta’s contact). Fortunately, aside from the leasing rates, the rest of the data collection process was quite easy. I was especially fortunate to have access to GIS shapefiles, which expedited the data analysis process. Synthesizing the data became frustrating though because there were so many components and I didn’t have a clear framework for analysis until a few weeks before the draft was due.

People were incredibly supportive of the project though and I am tremendously grateful to those who helped dig through the mess to see what story was in the data. The contributions of others reassured me that the work was meaningful and valued. Sometimes
digging for answers to things that seem unsolvable or that are incredibly subjective can be disheartening, but being surrounded by sustainability students helped remind me that this field is constantly trying to chip away at even larger complexities. Notably, this project helped me learn the importance of framing sustainability issues for a project to advance. Valley Metro currently has several expansion projects on the table, as well as various other projects that require a lot of analysis and report writing. However, the client saw value in the proposed project and encouraged me to pursue it. This will undoubtedly be a valuable tool moving forward, not only for getting projects approved, but also for getting others interested and motivated to participate in the project too.

Reflecting on Your Learning About Sustainability Projects

This cross-discipline study worked to question the effectiveness of TOD at achieving its fundamental goal of reducing automobile use and increase transit ridership. The work completed through this project aids in advancing the systems, anticipatory, and strategic competencies for transportation planners and city officials, and to some extent developers. Municipalities are taking it upon themselves to mitigate and adapt to climate change impacts that will affect their communities. As such, city officials and planners need to have anticipatory and systems competencies for understanding the multiple scenarios that could unfold. The findings of this study contribute to the developing cities’ systems thinking of how the built environment impacts economic health, social cohesion, and energy intensive industries such as transportation and land use. Specifically, the study suggests the TOD model currently utilized by cities for creating a path toward a sustainable future requires more anticipatory and systems thinking at the regional and micro level of impact.

Additionally, the recommendations proposed address weaknesses in planning and implementation strategies. In using anticipatory and systems thinking about TOD, cities and planning agencies can enhance their strategic competency to “collectively design and implement interventions, transitions, and transformative governance strategies toward sustainability” (Wiek, Withycombe, & Redman, 2011). Though TOD strategies have some regional element to them, the model overall has opportunities for better addressing primary objectives.

Several courses in the MSUS/MUEP program advanced my perspective and understanding of urban dynamics. Key courses that framed my thinking for the project or provided the skills to complete the analysis include:

1. PUP 576 - GIS Workshop for Planners – This course prepared me with the skills required for conducting spatial data analysis. This made evaluating Census and MAG data significantly easier and more time efficient.
2. PUP 565 - Sustainable Urbanism – This course reviewed New Urbanism concepts and strategies for revitalization suburban environments to make them less auto-dependent. It introduced organizational concepts such as the transect and nodal development, which framed my thinking about Phoenix’s urban context.
3. SOS 532 - Sustainable Urban Dynamics – This course taught me to question business as usual and to think about the larger implications of the solutions we put forth. It inspired my thinking about issues with the current TOD model.
4. PUP 548 - Planning for Sustainable Communities – This course required evaluating the sustainability efforts of a city. The breadth of programs signified the complexity
of evaluating the level of sustainability “success” a city or place is experiencing. The course provided a framework for analysis that influenced the project.

5. PUP 550 - Transportation and the Environment – This class has been especially helpful in advancing my thinking about the relationship between sustainable transportation planning and its relationship with land use planning.

Of the overarching ideals sustainability work attempts to achieve, the work from this project most directly relates to the sustainability principle of reducing societal impacts on the environment. Earth and its inhabitants have atmospheric and temperature threshold above which they cannot survive, and the rapid rate of air pollution and carbon emissions are dramatically effecting ecosystem health. Reducing automobile dependency is an essential step to reducing greenhouse gas emissions and the sheer amount of space required by individuals. TOD is a solution to automobile dependency currently being explored in cities across the U.S., and while this project explored factors supporting transit ridership, TOD should be further explored to look at social equity and local economic impacts. An even more in-depth look at environmental benefits (quantifying emissions saved) should also be explored to gauge the impact of TOD.

Overall, the project has contributed to my career goal of working in transportation planning by providing an opportunity to conduct a study a transportation agency would itself pursue. The project will demonstrate project management skills to future employers and showcase my ability to think holistically, which is crucial for a field that spans urban landscapes.

Reflecting on Your Project’s Accomplishments for Your Client and Stakeholders

Mr. Miller recognized the same failing retail locations along the light rail alignment as I did and we both were interested in understanding why these “high-demand” locations were not attracting/retaining businesses. As the project evolved, we decided to explore certain TOD characteristics and how they interact to support light rail ridership. Being in the transportation industry, it is important to the client that the land use strategies they encourage result in increased ridership. The final deliverable to the client is a series of station area profiles outlining how the different criteria under analysis support transit. Station profiles were submitted to the client on 4/10/17.

TOD is promoted through HDR as a means of increasing transit ridership. However, my project questions the TOD model of development under its current implementation process. TOD projects in the Phoenix context are largely transit-convenient and still auto-accommodating (see report). While a private entity, HDR should support more stringent TOD principles for the government and public agencies it works with. It should provide a more thorough framework for elements contributing to TOD success, as well as metrics for evaluating success. My project can contribute to HDR sustainability goals by providing a foundation for developing a set of valued principles and metrics that comprehensively evaluate the sustainability of TOD locations.

Final Thoughts

My experience at ASU has been a combination of courses at the School of Geographic Sciences and Urban Planning, and School of Sustainability. As my professional career goals
are more strongly tied to urban planning, most my coursework has been facilitated through the MUEP program. The MSUS program has been tremendously important to my personal growth and systems thinking though. Most significantly, the knowledge and skills gained through MSUS help me question and evaluate urban planning principles and objectives. My culminating experience best exemplifies how sustainability frameworks can be used to evaluate and improve planning objectives and implementation strategies. Collectively, these programs have expanded my perspectives and imparted valuable knowledge on the dynamics between the built environment, ecosystems health, social equity, and economic activity.

Finally, my project will be included on my resume in the following manner:

**References**