The Implementation and Effects of Priority Development Areas

September 2017

The National Center for Sustainable Transportation Undergraduate Fellowship Report

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Acknowledgments
This study was funded by a grant from the National Center for Sustainable Transportation (NCST), supported by USDOT through the University Transportation Centers program. The authors would like to thank the NCST and USDOT for their support of university-based research in transportation, and especially for the funding provided in support of this project. I would like to thank Professor Debbie Niemeier for guiding me throughout this project as well as Johanna Heyer and Ben White for giving me feedback on my maps.
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Introduction

The San Francisco Bay Area is home to over 7 million people and to one of the largest economies in the world (1). Such a high population calls for major housing developments and needs for efficient transportation. However, there are many issues regarding the implementation of housing and transportation plans since there are many discrepancies involving sustainability, equity, and safety in these plans. In order to address this issue of housing and transportation, the California Legislature passed AB 363, a bill that would create the Metropolitan Transportation Committee (MTC), which would overlook the various transportation planning and projects running throughout the Bay Area (2). Currently, MTC covers a wide range of tasks regarding mobility and sustainability in the Bay Area, including launching a number of initiatives to deliver a smooth-functioning, well-maintained transportation system and addressing concerns about climate change and the environment. A major goal MTC commits to is adopting a long range plan to guide transportation and housing in the Bay Area counties for the next 25 years. This plan included public input, census data and forecasts of housing and population numbers for the area. In order to properly implement this plan, MTC has partnered with a number of regional transportation-related agencies including the Association of Bay Area Governments (ABAG) and numerous Congestion Management Agencies (CMAs).

County CMAs are in charge of monitoring approved congestion management plans for their respective counties as well as overseeing and implementing transportation sales tax measures that voters approved. CMAs focus on improving the efficiency of a county’s transportation system by addressing the congestion and environmental concerns of a given area. A major program that CMAs also administer is the One Bay Area Grant which targets funding to Priority Development Areas and rewards cities and counties that approve new housing construction and accept allocations through the Regional Housing Need Allocation Process (RHNA).

CMAs and MTC also oversee Priority Development Areas (PDAs) which are locally designated areas within existing communities that provide infill development opportunities and are easily accessible to transit, jobs, shopping and services. PDAs are expected to accommodate 78 percent of new housing production and 62 percent of employment growth in the Bay Area through the year 2040. As a result, the region’s big cities — San Jose, San Francisco and Oakland in particular — are expected to get bigger, while smaller cities, single-family neighborhoods and rural areas retain their scale and character.

CMAs are also expected to adopt long-range countywide transportation plans for the next 25 years, detailing how they will fulfill the goals set by the MTC and the expectations of the residents in their respective counties. Long-range plans are expected to reference other sources.
of influence, such as Community-Based Transportation Plans (CBTPs), which gather public feedback on the current transportation systems in their communities and what improvements/goals can be made. These long range plans vary in content, but typically detail the future transportation and housing plans for the next 25 years of each county. The purpose of this study is to analyze how accurate and transparent these long range plans are for the public and whether or not they follow the guidelines set forth for them.

**Methodology**

For the sake of this study, I was in charge of compiling data from the long range plans of the nine CMAs. There were over 140 variables I analyzed in these plans despite the fact that some of these plans failed to address them. After compiling the data, I created different GIS maps to relate the spreadsheet to the different areas and forecasts present on the maps. The GIS maps also have all of the PDAs in Bay Area and the job and housing information for each PDA. The GIS maps also has information from the excel spreadsheet I created and census data for each of the counties.

**Spreadsheet Data**

From the 9 long range plans released by the various Bay Area CMAs, I was able to extrapolate data regarding each of the counties’ long range goals, connection to Community-Based Transportation Plans, and how much these plans complied with the key requirements of the MTC guidelines for Countywide Transportation Plans. While most of these plans were already finalized either in 2016 or 2015, the Marin plan is still in draft form so some of the data from Marin may not be accurate. Most of the plans followed the MTC guidelines to a certain extent, but never fully. The main purpose of analyzing the long range plans was to see how well the different counties followed the MTC guidelines and whether or not the funding and legislation was adequately implemented.

**ArcGIS**

After recording data for the main spreadsheet, I created GIS maps illustrating the relationship between the PDAs in the Bay Area and the different variables found from the spreadsheet I made and the forecasts provided from the MTC. I researched the shapefiles online and compiled various maps showcasing the data and areas affected by these variables.

**Maps**

The following maps were made with shapefiles provided from the MTC and various datasets that were provided by ABAG, the US Census and from the CMA data set I created.
Figure 1. Job Growth in PDAs relative to Total Hispanic Population

Figure 2. Job Growth in PDAs relative to Total Asian Population
In Figure 1, we can see a pattern between the total hispanic population in each county and the job growth for the PDAs in those counties. Counties with higher percentages of hispanics tend to have lower job growth compared to counties with lower percentages of hispanics. Looking closely at the different counties by case, Napa illustrates the disparity between job growth and the total Hispanic population since Napa is known for mainly farming businesses, which are typically supported through a largely Hispanic workforce. Job growth in the agricultural sector is increasing at a slower rate compared to the bustling financial and technology sector, which is typically found in the San Francisco, San Mateo and Santa Clara counties. In these counties, we see that some PDAs were projected to have over 50,000 new jobs. However, Figure 1 also shows that some of these areas, especially San Francisco, have relatively small percentages of Hispanics.

In Figure 2, the trend of job growth in PDAs positively correlates to the total Asian population, where we see an almost exact pattern of PDAs with higher job growth tending to have higher percentages of Asians. This can also be linked to the fact that many of the financial and professional jobs in the Bay Area are largely employed by white or Asian individuals.

An interesting note to include is that according to PolicyLink, hispanic and Asian communities are the fastest growing communities in the Bay Area, and yet Hispanic and Black communities are the most disadvantaged communities when it comes to access to higher-opportunity jobs (3). This aligns to what is depicted in the map, in that the areas with more Asians are positively affected by the job growth seen in PDAs, while hispanics are not.

Figure 3. Total Housing Availability for Agricultural Jobs
These two maps were inspired from my trip to Monterey county last year where I and a group of other students toured multiple agricultural businesses. During this trip, I noticed that almost all of the companies there emphasized how they needed the housing situation in Monterey county to be more favorable towards migrant workers. All of these businesses pointed out that the reason why it was so hard to get any workers to come was simply because none of the workers could afford to stay for the season they needed to be there. In some extreme cases, workers would try to pile as many as 20-30 people in one house. I decided to see if this reasoning occurs in the Bay Area as well through these maps.

Figures 3 and 4 illustrate the difference in housing availability relative to the different jobs available in each PDA. The total housing units available for financial and professional jobs follow a positive trend, with more housing units available for PDAs in counties with many financial and professional jobs. However, the opposite occurs with agricultural and natural resource jobs since there are less housing units available for PDAs with more agricultural and natural resource jobs. The situation that occurred in Monterey county is almost exactly reflected through this data, as we can see that most of the PDAs with more agricultural and natural resource job growth will not have as many total housing units available for future workers. Instead, the Bay Area will continue to cater more towards Silicon Valley’s needs of financial and professional job growth by providing housing for PDAs in places like Alameda and Santa Clara county.
Figure 5. Spatial Distribution of PDAs based on Median Income

Figure 5 depicts the spread of PDAs based off of median household income. It clearly shows how the higher the median household income is for an area, the more PDAs will be shown in a given county. This map also clearly shows a correlation of how the wealthier a county is, the more PDAs it will have. Based off of the CMA spreadsheet I compiled, Marin and San Francisco were the 2 counties that followed the MTC guidelines the most and coincidentally on this graph, are some of the more affluent areas on the map.

Conclusion

Although the spreadsheet and GIS map are still being altered with new data, there are still various conclusions to be made. Based off of the 9 long range plans released by the various Bay Area CMAs, we can conclude that none of these maps completely complied with the key requirements of the MTC guidelines for Countywide Transportation Plans. Instead, most of these plans followed the guidelines only to a certain extent and were not as transparent as they could have been.

With regards to the GIS maps, different conclusions can be made as to how the implementation of the PDAs affected the counties. From Figures 1 and 2, we can see a pattern between the total hispanic and total Asian populations and the job growth for the PDAs in those counties. Because the Bay Area has a largely technology and financial-focused economy, many of the PDAs located near the heart of Silicon Valley tend to have higher job growth. Due to this trend in job growth, we also see how this shift in job
growth positively affects the total Asian population, but negatively affects the Hispanic population since a majority of the agricultural and natural resource jobs are taken up by Hispanics.

Next, in figure 3 and 4, the difference in housing availability relative to the different jobs available in each PDA were analyzed to see if they supported the reasoning I saw in Monterey county for housing for agricultural workers. The situation in Monterey described how because of the lack of affordable housing available to workers, the farms suffered from a huge shortage in workers. On the other hand, financial and professional jobs were positively affected by the housing availability in PDAs, since almost all of the PDAs with high amounts of financial and professional jobs had the most housing available. The situation that occurred in Monterey county is almost exactly reflected through this data, as we can see that the agricultural jobs were the least supported in terms of housing on the map while financial and professional jobs were the most positively affected by the trend.

Finally, in figure 5, the spread of PDAs based off of median household income clearly indicates how the higher the median household income is for an area, the more PDAs will be shown in a given county. This map also indicated a clearer correlation in MTC guideline completion and PDA distribution across the counties. Typically, the counties that followed the MTC guidelines the most were some of the more affluent areas on the map and hence had more PDAs then counties who did not follow the guidelines as well.
References