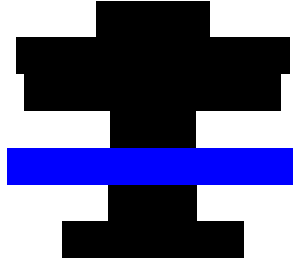


**2007 ITE Student Paper Competition:
Mobility Enhancements for Bay Area Communities**

TOD Recommendations for MacArthur BART Station

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INTRODUCTION

With the increase in traffic congestion, air pollution, and health problems in the United States, transit oriented development has been recognized as a solution that addresses each of these issues and promotes smart growth policies. Transit-oriented development has been defined as “the clustering of homes, jobs, shops, and services in close proximity to rail stations, ferry terminals, or bus stops offering access to frequent, high-quality transit services” [1]. Transit oriented development aims to reduce traffic congestion by encouraging people to walk, bike, and take transit rather than driving. Reducing the number and length of car trips would reduce vehicle emissions, which contribute to air pollution. More and more, urban sprawl has been linked to obesity because car dependency reduces the amount of exercise people get. By encouraging people to walk and bike, transit-oriented development promotes a healthy lifestyle by enabling people to exercise more in their daily lives. The Bay Area has already embraced transit-oriented development, however, there are still more neighborhoods that could benefit from this strategy.

The area around the MacArthur BART station is an ideal location for a transit-oriented development. The station is a major transfer point for three different BART lines. In addition, a bus rapid transit (BRT) corridor being proposed by AC Transit will run down Telegraph Ave. [2], one block from the MacArthur station. While this neighborhood is well served by transit, the housing density is fairly low and the retail mix is not very diverse. The area has an abundance of nail salons, yet there are only two grocery stores within a half mile radius of the BART station and neither are very large. The Temescal

neighborhood a quarter mile north of the station has a diverse retail mix, trees and benches to enhance the sidewalk environment, many community services available and strong community participation. Investment in the area around the MacArthur BART station could bring similar benefits to the MacArthur neighborhood and would complement the already healthy Temescal neighborhood.

An opportunity for development exists on the 460 space parking lot currently located adjacent to the MacArthur station. This parking lot is an ideal location for development because it is close to both the BART station and the proposed BRT line, and it would not cause any displacement of businesses or residents. In addition, investments in the surrounding area could make the neighborhood more vibrant and walkable. The following are transportation and land use recommendations for the station area that promote smart growth policies.

TRANSIT

As mentioned before, a BRT has been proposed for Telegraph Ave. by AC Transit. This project would entail converting two lanes of traffic into bus-only lanes. In addition, the buses would have transit signal priority and level boarding at stations. Major street renovations would be required but in return the project would improve the speed and reliability of buses and would benefit car drivers by taking buses out of the car lanes. This project should be supported because it will improve the speed and reliability of bus service in the area and provide better transit options to Bay Area residents. In addition, this BRT corridor would benefit the neighborhood around the MacArthur BART station

by providing street and landscaping improvements and potentially leading to higher property values.

PARKING

Rather than eliminating all 460 parking spaces, parking can be incorporated into the development of the MacArthur parking lot in innovative ways. For example, a mixed-use parking structure could be built on the existing parking lot which would incorporate both parking and retail. Retail could be located on the ground floor and parking above, accessible by a ramp behind the building. This technique has been used in San Jose, CA [3] and Boulder, CO [4], among other locations. Such structures can provide improved safety beyond traditional parking structures because since the parking lot is not at ground level, it is less accessible to criminals. An added benefit is that having the parking structure on the top of the building, it could act as a buffer to block out some of the noise pollution from the nearby freeway.

Another innovative parking technique that could be implemented is stacked-parking, which uses hydraulic lifts to raise and lower parking compartments so that several cars can be parked on top of each other. Stacked-parking reduces the amount of space required for parking and can be much less expensive than traditional parking structures. This technology is currently being used in various places across the United States, including the Gaia Building in Berkeley, CA [5].

HOUSING

Beyond mixed-use parking structures, mixed-use retail and residential structures can be built on the current location of the parking lot as well. These structures would have ground level retail and mixed-income housing above. Providing mixed-income housing would ensure housing affordability for residents of all income levels, thus promoting equity. In addition to adding new housing, some attention should be paid to improving existing housing in the area. Many residences in the area are run down and some even have boarded-up windows. These buildings should either be renovated or demolished and higher density housing units built in their place.

GOODS AND SERVICES

Transit oriented development should strive to create a healthy retail mix in addition to providing services which would benefit the community. Essential services such as grocery stores, health care, and pharmacies, should be located within walking distance of residents to encourage walking rather than driving trips. In addition, the neighborhood should include youth programs and senior services to benefit the community. These services should be given priority when choosing tenants for the mixed-use retail developments. The neighborhood plan can set a requirement that key essential services are included in the development. The MacArthur neighborhood currently has a strong presence of churches. This presence should be embraced in order to ensure that the existing churches remain a vital part of the community. Effort should be made to renovate churches, while maintaining their character, and improving landscaping around churches.

OPEN SPACE

Mosswood Park lies approximately half a mile from the MacArthur BART station, providing some access to green space for the neighborhood. In addition, the station currently has a plaza with some modern artwork. However, this plaza lies directly below a freeway and the noise levels do not make it an inviting place to hang out. A green plaza located further from the freeway would provide a more pleasant atmosphere in the area and encourage people to walk and use the space. The short stretch of 39th St. which currently connects Telegraph Ave. to the BART parking lot could be converted into such a plaza. This is an ideal location because it would be located right next to the new development, and since the area is currently a street, no buildings would be displaced. This space could serve for community gatherings and even a farmer's market.

LANDSCAPING

As mentioned earlier, the proposed BRT would improve landscaping along Telegraph Ave. In order to improve the walking environment, the landscape along sidewalks should be improved as well. If possible, the sidewalks on Telegraph and in the surroundings areas should be widened, repaired, and lined with trees. In addition, landscaping should be included in the design for the space between the new mixed-use developments. A landscaped pathway leading between the developments should connect the BART station to the plaza at 39th St., promoting pedestrian flow past retail.

CONCLUSION

The recommendations discussed above would promote smart growth policies by increasing housing density, reducing displacement, encouraging social justice and equity, providing open space, creating a more walkable community, incorporating mixed-use, improving transportation efficiencies, and promoting infrastructure investments. In actuality, the potential for a transit-oriented development at the MacArthur BART station as been recognized by residents and the city of Oakland for years. The area is currently slated for development. A joint BART-City of Oakland board selected Aegis Equity Partners and Shea Homes and Bridge Housing Corp. for the project [6]. Hopefully these developers will keep in mind some of the same issues discussed above when planning this project in order to produce a successful transit-oriented development and encourage smart growth.

SOURCES

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