Parking Management



Port Authority's Values:

Growth, Accessibility, Efficiency

Overview

As of September 2021, Port Authority's parkand-ride network is comprised of 51 park-and-ride locations throughout its service area. Except for the South Hills Village Garage, there are no charges for using the park-and-ride facilities. A modest fee of \$2 per day or \$22 per month is charged to these garage users. Many of the Port Authority's park-and-ride locations reach their maximum capacity early during the morning peak and remain full throughout the day. This creates a challenge for commuters attempting to find parking as it creates uncertainty in their commute. An effective parking management program may create a more predictable experience for its commuters.

Parking management can also include the efficient use of Port Authority property for car storage, ensuring that park-and-ride facilities are only located where they are most appropriate and that efforts are being made to reduce car trips to access transit through transportation demand management.

Analysis

Parking management refers to strategies that result in more efficient use of parking resources. Strategies can vary widely, but most have modest impacts on individuals. However, the modest individual impacts can reduce parking demand by 5% to 15%. Simple strategies Port Authority could implement to manage parking demand include implementing a small fee for parking in its lots like the modest fee changed for the South Hills Village Garage. The fee could be adjusted over time to manage demand. The revenue from

that fee could be dedicated to sustaining parking facilities. That fee could be waived or significantly reduced for monthly transit pass holders. A second strategy includes parking enforcement to ensure users of the park-and-ride facilities are actual users of the transit system and not individuals searching for alternatives to other available parking facilities.

The implementation of a parking fee may slightly increase the overall cost of a transit trip. However, the increased predictability of parking availability should result in a benefit that outweighs the costs. Mechanisms to collect the fee might include monthly passes, daily meters, or parking lot attendants. Each of these has its own benefits and challenges. Monthly passes require the lowest initial capital expenses to implement, though, they require active enforcement.

Port Authority received funding through PennDOT's Transportation System Management & Operations program to implement a mobile app in the future to relay real-time parking space availability at 19 of its park-and-ride facilities. At three of the lots, roadside variable message signs will be utilized. At NEXTransit meetings, project staff have discussed evaluating park-and-ride facilities to determine if maintaining the park-and-ride function is the best use of the property or if greater ridership could be generated through development on the property.

Parking management also includes the efficient use of Port Authority-owned land for car storage. The Transit-Oriented Development (TOD) Guidelines categorized each of Port Authority's fixed guideway



(busway and light rail transit) stations into different typologies based on the characteristics of the surrounding area. One distinguishing factor between these typologies is their suitability for park-and-ride facilities. Some typologies, such as Suburban Development, were suitable for park-and-rides while others, such as Urban Mixed Use, were only suitable for park-and-rides if located at the end of a line. Still others, such as Downtown, were not suitable for park-andrides at all. When assessing existing facilities through the Station Improvement Program or other planning efforts, it is important to evaluate whether an existing park-and-ride is the most efficient use of Port Authority property at a given location.

Parking management can also mean using transportation demand management (TDM) interventions to reduce the number of people who drive to a given parking facility or development. TDM practices include providing employees, residents, and/or visitors with incentives to make transportation choices that reduce congestion and demand for limited parking. These can include programs like free or reduced-price transit passes, prioritizing spaces for car or vanpool vehicles, and providing amenities such as showers and lockers for bike commuters. TOD by definition is development that is close to high-quality transit, thus reducing the need for car trips and parking. TDM practices at TOD near Port Authority stations can be used to reduce the number of people who drive to the site, resulting in an increase in ridership generated by the TOD in guestion. Finally, as mentioned in the TOD guidelines, a reduction in cardependent travel is a major goal of our program. One way to accomplish this is to build less parking for developments near transit. Municipal zoning codes can be a major barrier to accomplishing this goal. Zoning

codes often require an overabundance of parking spaces and do not consider a given development's proximity to transit. Amending zoning codes to require less parking can both encourage transit use and make the project more financially feasible.

Peer Examples

Philadelphia's SEPTA

Southeastern Pennsylvania Transportation Authority (SEPTA) owns permitted lots for weekdays and weekends that can only be accessed by permit-holders, but SEPTA also offers parking facilities for non-permitted commuters at most of their Regional Rail and transit stations. The parking fee on weekdays for most stations is \$1, except for two of their more popular stations, at \$2. Two transportation centers and a garage have their own individual rates, along with municipal lots located near stations. Most SEPTA lots have daily use spaces that are striped and numbered and riders can deposit coins in a slot box located near the platform. On weekends, the parking is free at Regional Rail daily use lots.

Washington, DC's WMATA

Washington, DC's Metro operates parking facilities at 44 Metrorail stations and offers reserved parking for permit-holders at 35 rail stations until 10 am on weekdays. After that time, all unoccupied spaces are available for public use. Permit-holders must pay a daily fee each time they park, in addition to their monthly reserved parking fee of \$45-\$65.

Seattle's Sound Transit

Sound Transit reserves some parking spots at their busiest park-and-ride facilities for carpool and single-occupant vehicle parking permit holders, only on weekday mornings. Carpool parking permits are free of charge to groups of two or more transit riders who regularly drive together to use public transit. Permit-holders have exclusive access to the reserved parking spots from 4am-8am or 4am-9am, depending



on location. The number of spots reserved for permit-holders varies by facility and month and based on the number of permits issued but will never exceed 50% of the transit parking for a given location. The remaining unpermitted parking spots remain available for the public on a first-come, first-served basis.

San Francisco, CA (Bay Area Rapid Transit)

The Bay Area Rapid Transit (BART) system began nearly 50 years ago as a regional rail rapid transit system designed around an extensive network of park-and-ride facilities to provide station access in suburban locations. Since Bay Area Rapid Transit's transit-oriented development program was established 30 years ago, BART's role has evolved in response to the changing needs of the communities it serves, as well as giving greater weight to driving alternative parking at the station. At some stations, BART is looking to replace the park-and-ride lots with transit-oriented development jointly with station area access improvements. BART recognizes that the parkand-ride lots allow Bay area residents living farther from stations to easily patronize the system, however, because driving alone requires vehicle storage in the station area, it is the least efficient and most costly means of access to BART stations. It costs more than \$1 per day per space in operating costs such as cleaning, maintenance, and enforcement, with capital costs being even greater, including the opportunity costs of devoting land to parking that could otherwise be used for revenue and rider-generating development.

San Francisco Transportation Demand Management (TDM) Program

The TDM Program's main purpose is to reduce vehicle miles traveled (VMT) that is generated by new development in the City and County of San Francisco by providing TDM measures. These include providing bicycle parking and amenities, subsidized transit passes, and carshare and vanpool programs to and from the developments.

The TDM program applies to all new residential developments containing at least 10 dwelling units or bedrooms and new commercial developments that span 10,000 square feet or more.

Level of Effort for Implementation: Low

 Port Authority already owns many of the park-and-ride locations and could implement parking management with an internal policy.

Resources

Southeastern Pennsylvania Transportation
Authority
Washington Metropolitan Area Transit
Authority
Sound Transit
San Francisco Bay Area Rapid Transit

