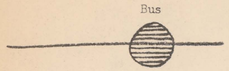
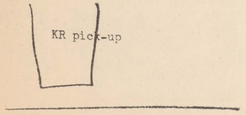
This system deals principally with the walking distance between train and various feeders (64,65,240).(Very few people walk to a suburban station - besides, anyone who has already walked to the station, will not notice 300' more or less, so the position of pedestrian access is unimportant). Passengers transferring to or from feeders, may be arriving by bus, departing by bus, kiss and ride drop-off, kiss and ride pick-up, commuter park and ride, or midday shopper park and ride, or evening park and ride.



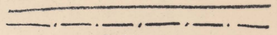
Among the passengers coming into the station by train, those who know the station will know exactly which part of the station they are aiming for and will therefore choose their train seats so as to be closest to this point. Only the stranger is liable to arrive at random, anywhere along the length of the station, and only the stranger, therefore, is likely to be faced by a long walk after he arrives. To reduce the distance these strangers have to walk, since most of them will transfer to a bus, we must minimise the average distance from a passenger placed randomly along the train, to the bus. To achieve this, the bus must be placed at the center of the distribution of incoming passengers (which may or may not correspond exactly to the spatial center of the 700' length - see system 73).

Since the bus must be able to serve the two-car train running late at night, the location of this two-car train must coincide with the center of passenger distribution along a full length train.(222)

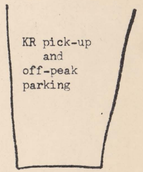


KR pick-up must all be in one area, so that the homecoming commuter knows which part of the station to aim for, because he will be certain that his wife is in that area. If KR pick-up were in more than one area, the wife might be forced by overloaded waiting areas, to park in different areas from day to day.

KR drop-off can equally well be anywhere along the length of the train, provided that it is near some entrance. However, since some people may drive others to the train at off-peak hours, it should be possible to drop a person off near the two-car train. No unocupied cars should be allowed to block the KR drop-off.



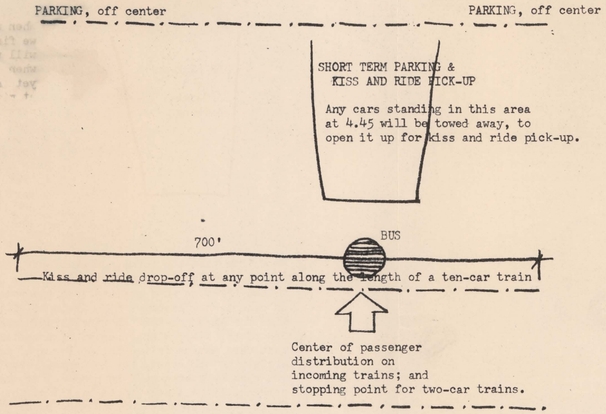
The bulk of parking required is for regular commuters who will park in the morniing and take their cars out at night. Since each commuter will be able to remember where his own car is, and place himself on thee evening train accordingly, it does not matteer where these parking lots are along the lenngth of the train, provided that each car is neaar some stair or escalator along the 700' leength. (The accepted maximum car-to-dwellinng distance is 200'. Any distance greater than tthis will seem irritating to passengers).



When we consider midday parking for shoppers, we find a different situation. Thesee shoppers will want to park in the middle of tthe day, when the commuter spaces are all fulll, and yet they must be near the four-car ttrain, since at midday certain trains will only bbe four cars long. This coincides nicely witth the fact that the KR area is empty exceppt from 5 pm to 6.30 pm when wives collect ttheir husbands from the station. Provided that this KR pick-up area be placed where the four-car train stops, this area can provide sshopper parking.

We notice that the total number of parking spaces required by midday shopppers is very nearly equal to the total number of spaces required by KR pick-upp. To see this, we must realize that the women who come to pick their husbannds up cannot know exactly which train he will be on, and may have to wait scome time for him, and that knowing this themselves, many of them will make use of the 10-15 minute period of uncertainty to do some shopping. We asssume that cars may be in the KR lot for a 15 minute average. Then we find thatt at Cutting Boulevard, for instance, where the peak 5 minute figure is 60 KR cars, 180 parking spaces will be needed. For the same station, the non-commuterr parking, if we assume it to be 15% of the total, is 15% of 1400, namely 2210. These two figures are of the same order of magnitude. More accurate assesssments need to be made for each specific station, but it is clearly possible to design one area which can serve both functions.

To be sure that cars do not stay parked in the KR area beyond 5 pm and sco interfere with the KR pick-up operation, cars still there at 4.45 must bee towed away. This will also ensure that commuters do not use the area, and that it is indeed left free for midday shoppers use. Since the area will againn be empty after 6.30 pm, it also provides a place for night parking (nightt shifts, theater, etc), which will again not conflict with the 4.45 - 6.30 use. Since the two-car trains run at night, this further restricts the positicon of the KR area, and places it where the two-car train stops.



SYSTEM 18

DISTRIBUTION OF FEEDERS

PRELIMINARY

BART
PUBLIC STRUCTURES INCORPORATED
WURSTER BERNARDI & EMMONS
ARCHITECTS SAN FRANCISCO

date: 6-23-64
subject: Feeders
cc:
system no.: 18
drawing no.: 1