

Critical Parking Distance

It's a nuisance to have to walk a long way from your parking space to your destination.

The major problem with parking in cities is the walking distance. It is always possible to find a place if one is willing to walk far enough. This pattern defines maximum acceptable walking distances, for three types of situations:

1. *Commute-parking*, where a person leaves his car in the morning, walks to work, and returns to it in the evening.

2. *Short-term-parking*, where a person parks for less than 2 hours for

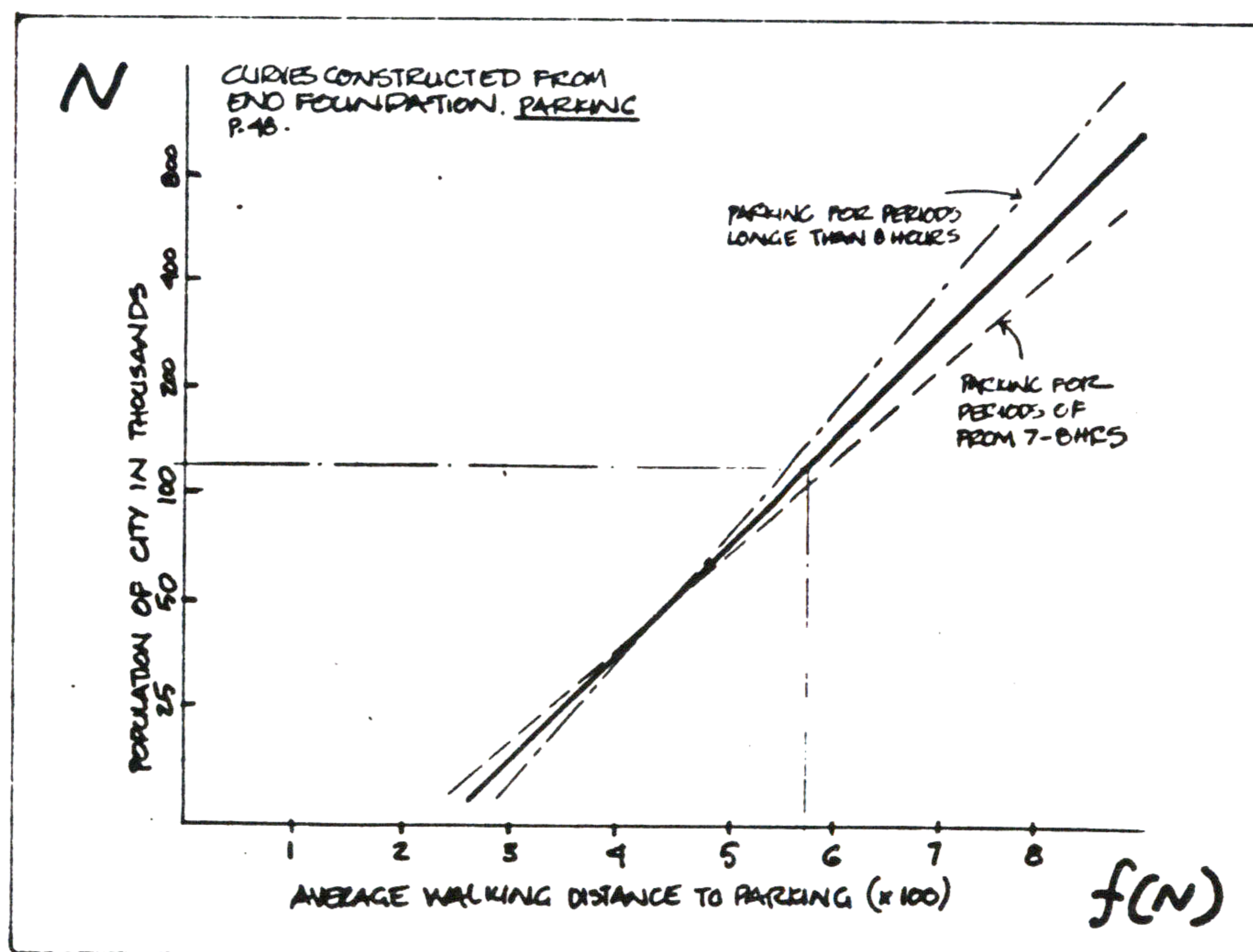
some quick interaction (shopping, paying a bill, delivery, etc.).

3. *Repetitive-use-parking*, where a person uses his car during the day, and may return several times (doctors, inspectors, salesman, etc.).

(continued over)

Therefore: Locate parking areas for different destinations according to the following rules:

1. *For commute parking in a city of population N , make the distance less than $f(N)$ as given by this graph.*



2. *For short-term parking: Make the distance less than 300 feet.*

3. *For repetitive-use-parking:*

If the car is used

once/day

twice/day

four times/day or more

Make the distance less than

330 feet

270 feet

220 feet.

Critical Parking Distance

Problem (continued)

1. *Commute parking.* The data known to us, give no way of estimating the distance at which commute parking becomes a nuisance for commuters. However, it is known that commute parking distance, as it exists at present, varies with city size, because the parking is harder at high densities (see graph below).

These data tell us that in a city of population P , a commuter will usually be able to find a parking space within $f(P)$ feet of his workplace. It is therefore useless to provide commute parking at any distance *greater* than $f(P)$, since he will probably not use it. We may therefore use the graph of $f(P)$ as an upper limit on commuter parking distances.

2. *Short-term-parking.* We suspect that the acceptable walking distance for these trips is much shorter than for commute parking. When you are going shopping or doing business it is only a part of your day, and as soon as your business is completed you want to get on your way as quickly as possible. You may also be carrying parcels which would make a long walk unpleasant. One study made in suburban shopping centers found that people would circulate *in their cars* for as long as five minutes in order to find a parking space within 300 feet of the shopping concourse.¹ Parking areas for short term parking should be located closer than 300' of the destination.

3. *Repetitive-use-parking.* In a questionnaire distributed to workers in the Berkeley City Hall, one of the most frequent complaints was that the parking areas for fleet and permit cars were located too far from the work stations, and that

the walking distance was a severe nuisance for people who use a car as a part of their everyday work, since they often have to come and go many times throughout the day. We may treat trips to and from these cars in the same way as any trip taken within the workplace, and may therefore use the data given in *Proximity Analysis* to determine distances, according to the frequency of the trips.

During the day if the car is used:	Trip is a nuisance if more than:
Once	330 feet
Twice	270 feet
4 times per day or more	220 feet

References

1. Korve, H., Zumwatt, R., *A Study of Shopping Center Walking Distances, Term Paper in Civil Engineering (CE 171, University of California, Berkeley, Spring, 1966).*

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This pattern is tentative. If you have any evidence to support or refute its current formulation, please send it to the Center for Environmental Structure, P.O. Box 5156, Berkeley, California 94705; we will add your comments to the next edition.