Abridgment

# What Did You Do for Lunch Today? Midday Activities of Downtown Workers

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Downtown transit circulators are often seen as a way to improve the connections between work locations and shopping opportunities. To evaluate the effectiveness of such services it is necessary to understand the way downtown workers use available services. The results of a survey of the midday travel of downtown workers are discussed and rates for visits to various activities are reported.

One of the benefits of working in a downtown location is the availability of shopping and service opportunities during day-time hours. Downtown workers frequently use their lunch hours to take care of shopping or other personal business activities that otherwise would have required separate trips or a stop after work. In turn, the use of shops and services by downtown workers contributes to the economic vitality of the downtown area.

To facilitate use of downtown businesses by downtown workers, many cities have established or studied transit circulator services. By extending the distance that can easily be covered, the circulators enable downtown businesses to attract customers from a wider area. Similarly, suburban activity complexes consider shuttle services to link employment sites with retail services. The goals are to stimulate shopping activity, make the workplace more desirable and, in some cases, to foster transit use or ridesharing by providing workers with an alternative to their own car for midday travel.

Design and evaluation of both downtown and suburban shuttles require an understanding of the activity patterns of the workers to be served. Unlike home-based trips for which extensive data are available from home interview surveys and the U.S. Census, the trips of interest here are non-home based. Few data are available on the nature of these trips and their generation rates.

#### **DATA COLLECTION**

As part of a study to assess the feasibility of a transit shuttle in the downtown area of Colorado Springs (population approximately 300,000), data were collected on the daytime activity patterns of daytime workers.

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# **Types of Data**

The data collected were of two types: (a) shops and services within the downtown area used during the prior week by workers and (b) trip lengths of pedestrian travel. The former data—activities visited—were collected by a place-of-work survey. This survey also asked where the worker ate lunch the previous day and whether the worker had made any trips out of the workplace on the previous day. The latter data—pedestrian trip lengths—were collected by an intercept survey of a sample of pedestrians on selected block faces within the downtown. Interrupted pedestrians were asked the purpose of their walking trip, how far they had walked to reach the interview location, and how much farther they expected to walk to reach their destination. The survey data were factored by trip length strata to account for the higher probability of intercepting longer trips.

## **Area Characteristics**

The downtown area studied is, overall, about 20 blocks long by 6 blocks wide. The area includes 18,000 workers in almost 6 million ft² of commercial, retail, and government space. A total of 21 percent of the space is devoted to retail and restaurant uses; 26 percent is devoted to government. The majority of activity is concentrated in a core area roughly four blocks by five blocks.

# **FINDINGS**

The results of the employee activity survey are presented in Table 1, which summarizes rates for trips reported by the 452 survey respondents to activities in downtown within walking distance of the workplace, as perceived by the respondent, to activities in the downtown area but beyond walking distance, and trips made during the 7-day period to activities outside the downtown area.

In the survey area, lunch hours are relatively long. A total of 93 percent of the workers reported having 1 hr for lunch. The activity visitation rates must be viewed with this time in mind. In areas in which 30- or 45-min lunch periods are the norm, lower activity rates could be expected.

TABLE 1 DAILY RATES FOR ACTIVITIES VISITED BY DOWNTOWN WORKERS

Activity Visited	In Downtown				
	Walking Distance	Beyond Walking	Total Downtown	Not in Downtown	Total
Fast Food Restaurant	0.13	0.04	0.16	0.03	0.20
Table Restaurant	0.13	0.03	0.16	0.02	0.18
Drug Store	0.10	0.01	0.11	0.03	0.14
Card Shop	0.08	0.00	0.09	0.01	0.10
Casual Food	0.06	0.01	0.07	0.01	0.08
Convenience Store	0.03	0.03	0.06	0.07	0.13
Health Club	0.05	0.01	0.06	0.02	0.08
Book Store	0.05	0.00	0.05	0.01	0.06
Women's Clothing	0.04	0.00	0.05	0.03	0.07
Library	0.03	0.00	0.04	0.01	0.05
Variety Store	0.02	0.01	0.04	0.03	0.06
Other	0.03	0.01	0.03	0.02	0.0
Medical/Dental	0.02	0.01	0.03	0.02	0.05
Child Care	0.01	0.02	0.03	0.04	0.07
Dry Cleaner	0.01	0.01	0.02	0.03	0.05
Department Store	0.01	0.01	0.02	0.05	0.0
Printer/Copy Center	0.02	0.00	0.02	0.00	0.03
Specialty Items	0.02	0.00	0.02	0.01	0.03
Shoe Repair	0.02	0.00	0.02	0.00	0.02
Travel Agent	0.01	0.00	0.01	0.01	0.02
Hardware	0.00	0.01	0.01	0.02	0.04
Camera/Photo.	0.01	0.00	0.01	0.00	0.0
Children's Clothing	0.00	0.01	0.01	0.01	0.02
Men's Clothing	0.01	0.00	0.01	0.01	0.0
Computers etc.	0.00	0.00	0.00	0.00	0.0
Electronics	0.00	0.00	0.00	0.00	0.00
Furn./Appliance	0.00	0.00	0.00	0.01	0.0
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Total	1.10	0.25	1.35	0.53	1.88

## Trips out of Building

In the downtown area studied, 60 percent of the workers reported leaving the building in which their workplace was located at least once during the day. Hooper (1) reports the incidence of midday out-of-building travel ranging from 42 percent to 50 percent for a sample of diverse office activity complexes in suburban locations. Hooper, however, did not determine the length of lunch periods, so a direct comparison of trip rates may not be valid. A survey by the authors of workers in a corridor outside New York City that includes both suburban office parks and a traditional downtown found daytime trips away from the workplace to be 39 percent for office park employees and 58 percent for downtown employees. These data are summarized below:

Survey	Proportion of Workers Making at Least One Trip out of Building (%)
Downtown Colorado Springs	60
Suburban N.Y.—downtown	58
—office park	39
Hooper (1)—suburban centers	42-58

These data suggest that when opportunities for daytime activities are available, workers will use these facilities. When the activities are in a walking environment, about 60 percent of workers will travel outside the building, compared with only about 40 percent when walking is not an easy option.

The reported data on activities within the downtown visited away from the office showed 3,055 trips over a 5-day working period by the workers in the sample, yielding a rate of 1.35 activities visited per day per worker. Of these, 1.10 visits were to places within walking distance of the workplace, as defined by the respondent.

The most frequently visited activity type is food related—0.316 visits per employee per day for the combination of fast food restaurants, table service restaurants, and casual food (e.g., ice cream). On average, each downtown worker buys a meal or other food every third day.

#### **Lunch Patterns**

Lunchtime patterns are slightly different from overall midday travel patterns. In the downtown area under study, 29 percent of the workers left their buildings for lunch. In the New York area studies, the rates were 30 percent in the downtown sites and 26 percent in the office park sites. Hooper (1), in contrast, reports rates for lunch outside the building of 31 percent to 52 percent, with a mean of 40 percent (Table 2).

The suburban Baltimore site included some single buildings with very large employment. The office facilities were more "scattered-site" than multibuilding complexes. These data suggest that, where nearby lunch opportunities are available outside the building, about one-quarter to one-third of workers will leave the building of their workplace for lunch.

#### Other Activities

As seen in Figure 1 and Table 1, the most frequently visited non-food activity in downtown is banking, with 0.21 visits per employee per day. Expressed another way, each downtown worker visits a bank just over once each week.

The rates for other retail and service activities are shown in the tables and figures. Of interest are card shops in the downtown, visited at least once in the previous week by over 40 percent of the surveyed workers. Table 1 also documents the use of downtown versus non-downtown retail outlets by downtown workers. Drugstores, health clubs, and bookstores all have much higher rates for downtown. Many retail (women's clothes, men's clothes) stores have similar rates downtown and outside downtown.

Also of interest is the relationship between visits by downtown workers to downtown activities compared with their reported rates of visits to non-downtown activities. Total visits to all types of activities, both within and outside the downtown, were reported to average 1.88 per worker per day. Of these, 1.35 or 72 percent were to downtown sites. Employees working in downtown accomplished a majority of their errands during their time downtown. Those activities with higher rates for visits outside downtown were to such locations as hardware stores, appliance dealers, department stores, and convenience stores. Each of these activities has a strong au-

TABLE 2 LUNCHTIME ACTIVITY OF WORKERS

	Did Not Eat Lunch	Ale Lunch In Building	Ate Lunch Outside Building
Downtown of Colorado Springs	5%	66%	29%
Suburban NY Downlown	6%	64%	30%
Office Park	8%	66%	26%
Hooper (1) Suburban Centers	7%	53%	40%
Suburban Baltimore (2)	5%	79%	16%

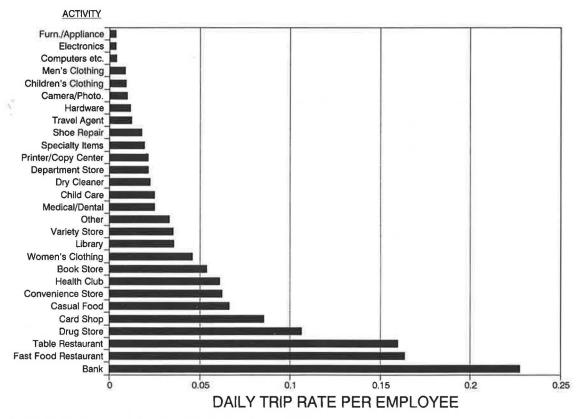


FIGURE 1 Employee trip rates: trips to downtown activities.

tomobile orientation, primarily because of the nature of the retail products.

## TRIP LENGTHS

The length of walking trips in the downtown area was quite short. Over 50 percent were two blocks or less. By purpose, the 50th percentile walk trip lengths were as follows:

Purpose	Length (blocks,
Work related	2.8
Shop	2.2
Personal business	1.0
Eat meal	1.0

Only 10 percent of the walk trips were more than six blocks long. Most people can walk six blocks in about 12 to 15 min, illustrating the importance of frequent service if a downtown shuttle service is to be attractive to a significant portion of the target market.

## CONCLUSION

Workers in downtown areas do make substantial use of the shopping and service opportunities that are available. Although the bulk of activity is for routine day-to-day needs (e.g., food and banking), workers also use many other types of shops if they are available and easily accessible. The bulk of midday trips are short—two to three blocks—taking 5 to 8 min of walking time. To achieve the synergistic effects of having working and shopping locations in a common area,

they must be in close proximity and linked by a frequent, convenient transit service. Although this finding is based on a study of downtown workers, a comparison with other studies indicates that it is likely that similar patterns may hold for workers in suburban activity complexes. The differences between rates for downtown and suburban centers may be strongly influenced by the available opportunities and the length of time available for lunch. These findings suggest (a) that the economic vitality of downtown areas is strengthened by having a mix of both office and retail uses and (b) that noontime traffic in suburban complexes can be reduced by providing retail opportunities within walking distance of workplaces.

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