

Mega Sporting Goods Stores Trip Generation and Parking Demand Data Collection

University of Nevada, Reno ITE Student Chapter
ITE District 6 – 2009 Data Collection Project



Abstract

The University of Nevada, Reno ITE student chapter (UNITE) collected parking and trip generation for a mega sporting goods store in the Reno-Sparks metropolitan area. The store - Scheels All Sports is a leading retailer of sporting equipments, sportswear and foot wear. The building is around 295,000 square feet with 1013 parking spaces. The store was designed as stand-alone with parking areas isolated from adjacent commercial uses. The site is located at 1200 Scheels Drive, Sparks Nevada, next to freeway I-80 as shown in Figure 1. The store hours were 9:00am to 9:00 pm Monday through Saturday, and 10:00am to 6:00pm for Sundays.

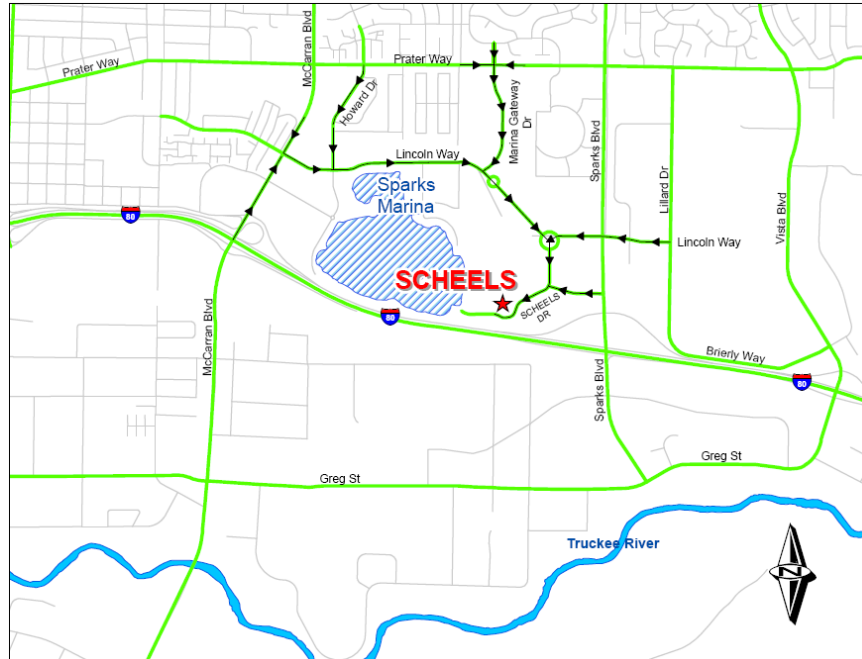


Figure1. Scheels Map

Data was collected on 3 separate days including both weekend and weekdays: Saturday February 21st, Wednesday February 25th and Thursday February 26th 2009. Trip

generations and highest parking demands, were collected for the site. (Trip generation data was collected on vehicles and bicycles only, not pedestrians.) Information was gathered during 7:00am to 7:00pm each day. All data was collected via manual counts by student chapter members, with the observations being conducted in view of the major entry/exit point of the site, which is around the stop sign area shown in Figure 2.



Figure2. Observation Location

All data collected in this study is included in the attached ITE forms and tables. All data was recorded in 15-minute intervals and aggregated to determine hourly demands.

Figure 3 shows the parking demand for the three separate observation days.

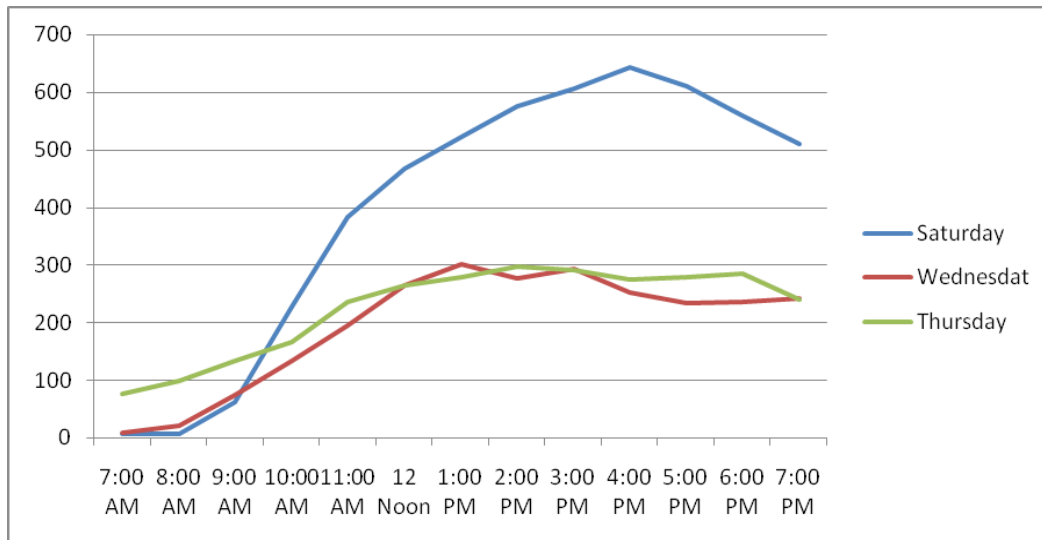


Figure 3. Parking Demand Data

The summary of the data collection is shown in Table 1 and Table 2:

Table 1. Data Summary for the Mega Sporting Goods Store

	Sq. Ft.	# Parking Spaces	# Employees (Range)	Avg. # Trips Daily *	AM Peak Hour Time	Avg. # AM Peak Trips	AM Peak Split % In/% Out	PM Peak Hour Time	Avg. # PM Peak Trips	PM Peak Split % In/% Out	Highest Parking Observed
WEEKDAY	295000	1013	345*	NA	8:00-9:00	73	80%/20%	4:15-5:15	327.5	50%/50%	301
SATURDAY	295000	1013	345*	NA	8:00-9:00	73	88%/12%	3:45-4:45	621	47%/53%	642

Table 2. Trip Rates for the Mega Sporting Goods Store

WEEKDAY			SATURDAY		
Daily Trips* per 1000 Sq. Ft	AM Peak Hour Trips per 1000 Sq. Ft.	PM Peak Hour Trips per 1000 Sq. Ft.	Daily Trips per 1000 Sq. Ft	AM Peak Hour Trips per 1000 Sq. Ft.	PM Peak Hour Trips per 1000 Sq. Ft.
NA	0.247	1.110	NA	0.247	2.105

*The total number of employees in the store is 345(on the payroll), but the number of employees by shift is unavailable.

* Daily rates are not included in the summary, since the store hour is longer than the observation hour.