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No. 13

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THE DEMOGRAPHICS OF SPECIAL EVENTS IN WALLA WALLA

PART II: RESULTS OF A SURVEY AT TOUR OF WALLA WALLA ON APRIL 20, 2008

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WHITMAN COLLEGE

Fall 2008

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The Demographics of Special Events in Walla Walla

Part II: Results of a Survey at TOUR OF WALLA WALLA on April 20, 2008

Editor's note: This piece is a part of a two part series on the surveys that were passed out during special events in Walla Walla. Part I covering THE FEAST was published in Working Paper number 12.

WORKING PAPER No. 13

The Demographics of Special Events in Walla Walla

Part II: Results of a Survey at TOUR OF WALLA WALLA, on April 20, 2008

Karl Storchmann, Keith Cushner, Peter Griffin, Alexander Higgins, Micah Jarnot, Shawn Kelly, Andrew Knox, Johanna Lirman, Christopher Lukes, Michael MacCully, Jesus Reyes, Patricia Robinson, Erik Trefzger, Andrea Wendel and Kimberly Wetter

The TOUR of Walla Walla is a three-day professional bicycle-racing event in Waitsburg and Walla Walla. The first two stages were held in Waitsburg on April 18 and 19, 2008 and the final stage took place in downtown Walla Walla on April 20.

We interviewed active riders, team members and visitors using the attached questionnaire (see appendix). The questionnaire distinguishes between local visitors and visitors from out of town.

(1) Basic Demographics

As reported in Table 10, we interviewed a total of 149 parties, 84 from Walla Walla and 65 from out of town. We also asked each interviewee for his or her party size and computed an average of 7.62 for out-of-town visitors. However, since we covered the TOUR extensively it is likely that we interviewed different members of the same party. Multiplying the number of interviewees with their respective party size yields a total of 500 out-of-town visitors which substantially overestimates the actual numbers. Weighting by party size could, therefore, lead to biased results. In addition, we know from the analysis of the FEAST survey that weighting by group size hardly changes the overall results. Thus, we refrained from any weighting scheme and only refer to the answers from the single interviewee.

The majority of interviewees from Walla Walla were women (51.3%), while most interviewed out-of-town visitors were men (56.9%). Even if these gender relations are not representative, the high fraction of interviewed male visitors certainly reflects the fact that most riders who participated in the TOUR races were male.

Table 10
Basic sample demographics

Number of Parties	
- from Walla Walla	84
- from out of town	65
total	149
Gender (share of female)	
- from Walla Walla	51.3%
- from out of town	43.1%

Table 11
Age and age distribution

	<21	21-30	31-40	41-50	51-60	61-70	70+	average age[1]
local visitors	14.6%	26.8%	14.6%%	15.9%	22.0%	6.1%	0.0%	37.6
from out of town	0.0%	33.9%	24.6%	26.2%	13.9%	1.5%	0.0%	37.5

[1] computed using the mean value of each bracket; 18 for <21 and 75 for 70+.

Table 11 presents the age distribution of local visitors and those from out of town. The average visitor of both groups was 37 years old, i.e., almost 10 years younger than the average FEAST visitor. Similar to the FEAST data, the age distribution of local visitors was substantially more uniform than those of out-of-town visitors.

As already seen at the FEAST event, the most striking distinction between locals and out-of-town visitors was their annual income. While local visitors reported an average annual income of $62,100, out-of-town visitors reported incomes that averaged $98,200 per year. This is some 58% higher than the local figure. However, both groups reported substantially lower incomes than FEAST visitors.

Table 12
Income level and distribution
in $1000 per Year

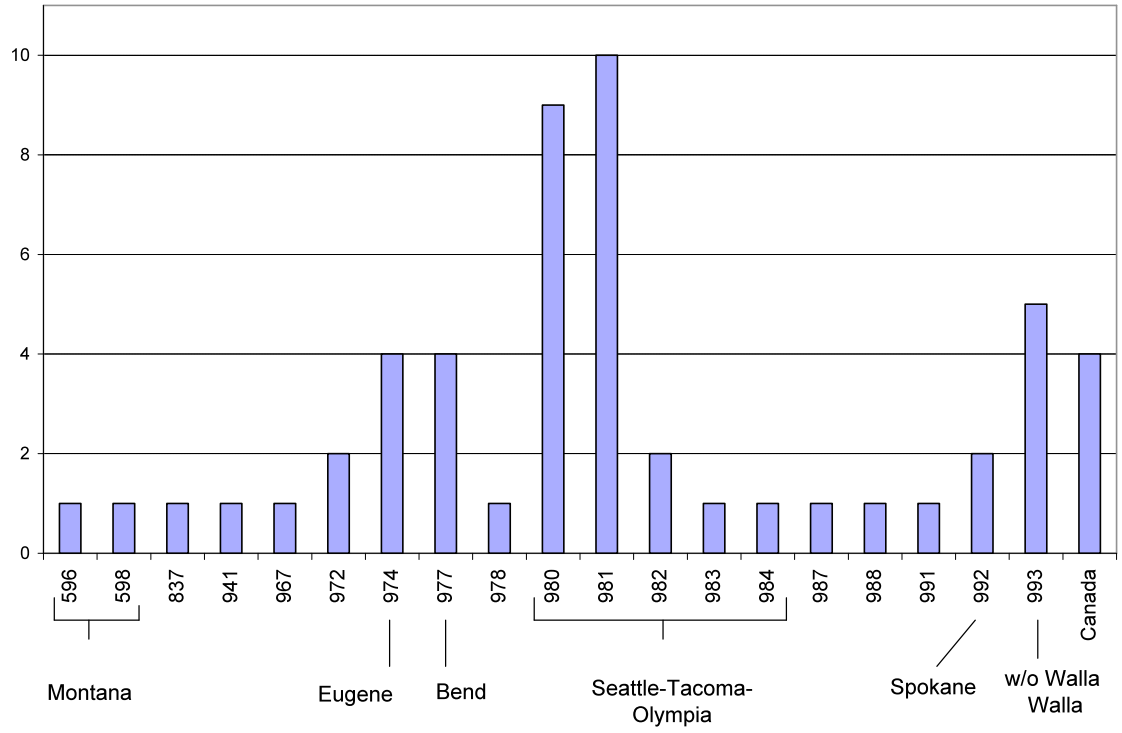
	0-20	20-40	40-60	60-80	80-100	100-150	150-200	200+	average[1]
local visitors (n=80)	32.5%	7.5%	11.3%	13.8%	15.0%	16.3%	2.5%	1.3%	62.1
from out of town (n=59)	8.5%	10.2%	10.2%	13.6%	20.3%	20.3%	8.5%	8.5%	98.2

[1] computed using the mean value of each bracket; $250,000 for $200+.

(2) Where do visitors come from?

As mentioned above, we interviewed 65 out-of-town visitors, 53 of whom provided us with the ZIP code of their home town. As shown in Figure 16, TOUR visitors came from 4 states (WA, OR, MN, ID) and two countries (US and CAN). Most (23 = 43.3%) of these visitors came from the Seattle metropolitan area (including Tacoma and Olympia). Six visitors came from the 993xx ZIP code, excluding Walla Walla (99362); four visitors came from Canada.

Figure 16
Non-Walla Walla TOUR visitors by 3-digit ZIP code
n=52



(3) How did people hear about the TOUR event?

We received a considerable fraction of ambiguous answers to the question "How did you hear about this event". First, many people did not mention how they heard about the TOUR but rather mentioned their function (*racing*, *volunteer* etc.). Second, when mentioning they learned about the TOUR through their racing or bicycle club, it remains unclear what media carried the information (*print media*, *Internet*, *word-of-mouth* etc.). Therefore, the information provided in Table 13 needs to be interpreted with caution.

Overall, most people learned about the FEAST event from a friend or a family member. Similar to the FEAST event, Walla Walla residents receive a large part of their daily information through the local newspaper (31.0%); this is not true for out-of-town visitors.

Some 27.6% of all out-of-town visitors were racing themselves and 20.7% learned about the TOUR through a racing association. Since multiple answers were not possible this adds up to more than 48%. Assuming that most respondents who mentioned *Internet* as their source of information mean the website of their racing association, the bicycle club-related visitor fraction is likely to be higher than 50%. In addition, most people who heard about the event from friends or family members are either racing team members or accompany a participating friend. Overall, we estimate the fraction of out-of-town visitors that is directly related to the race at close to 80%. The racing-related fraction of local visitors, on the other hand, is likely to be only between 15 and 20%.

Table 13
How did people hear about the TOUR event?

	friend, family	racing	racing club[1]	internet	print media	TV/radio	bike store	volunteer sponsor	walked by
local visitors	34.5%	10.3%	0.0%	1.7%	31.0%	1.7%	5.2%	13.8%	8.6%
out of town	31.0%	27.6%	20.7%	5.2%	5.2%	0.0%	0.0%	5.2%	5.2%

[1] including Tour of Walla Walla (TOUR), Washington State Bicycle Association WSBA, Oregon Bicycle Racing Association OBRA. Spokane Bicycle Club.

(4) How did people get to the TOUR event?

Some 33.7% of all local visitors walked to the TOUR, while 53.4% used their cars; 12.8% of all visitors from Walla Walla used their own bicycle. In contrast, almost all (96.9%) out-of-town visitors arrived by car.

Table 14
How did people arrive at the TOUR event?

	on foot	by bicycle	by car	by airplane
Walla Walla residents	33.7%	12.8%	53.4%	0.0%
out of town visitors	0.0%	1.5%	96.9%	1.5%

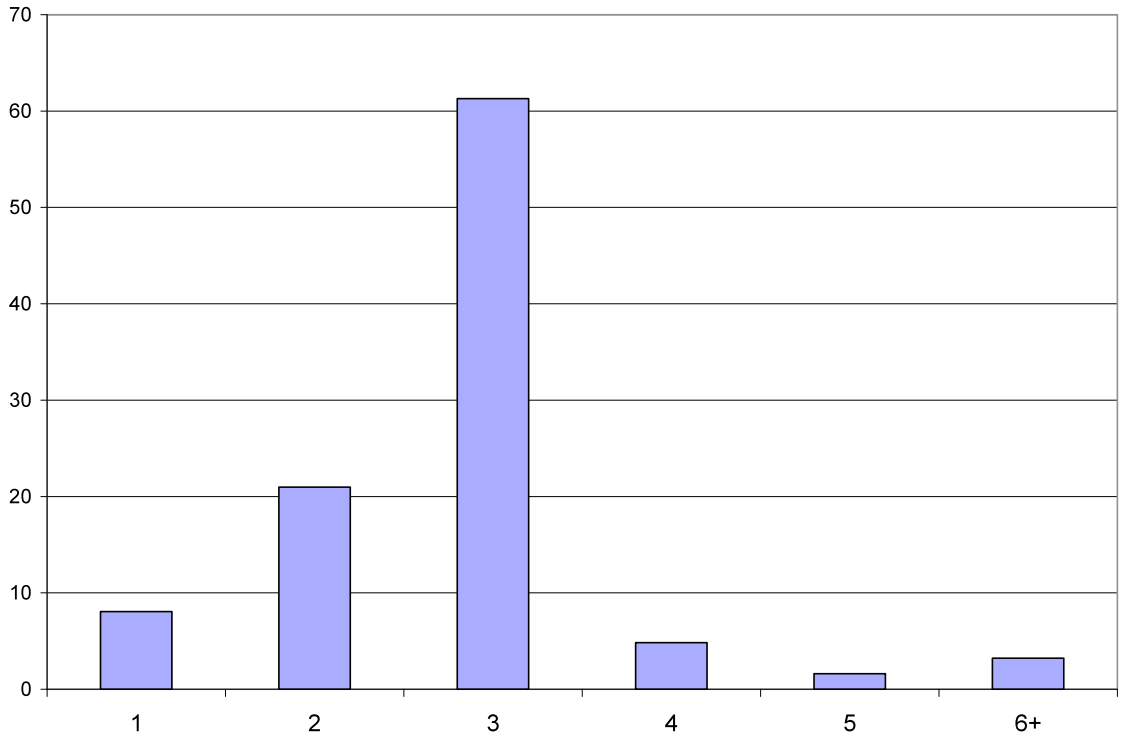
TOUR Visitors from Outside of Walla Walla

(5) How long do out-of-town visitors stay?

Almost all TOUR visitors stayed between 1 and 5 days. There are also 2 outliers who stayed for 10 and 30 days, respectively. Since these outliers stayed with their family, we assume that the TOUR was not the main purpose of their trip to Walla Walla. The average visit lasted 3.25 days (with the outliers) or 2.61 days (without the outliers).

Figure 17 displays the distribution of visit lengths. Accordingly, more than 82% of all visitors stayed in Walla Walla between 2 and 3 days. Of the 5 people that stayed for one day in Walla Walla, only one mentioned a hotel. We assume that the remaining 4 did not stay overnight.

Figure 17
Length of visit in Walla Walla
n=62, in %

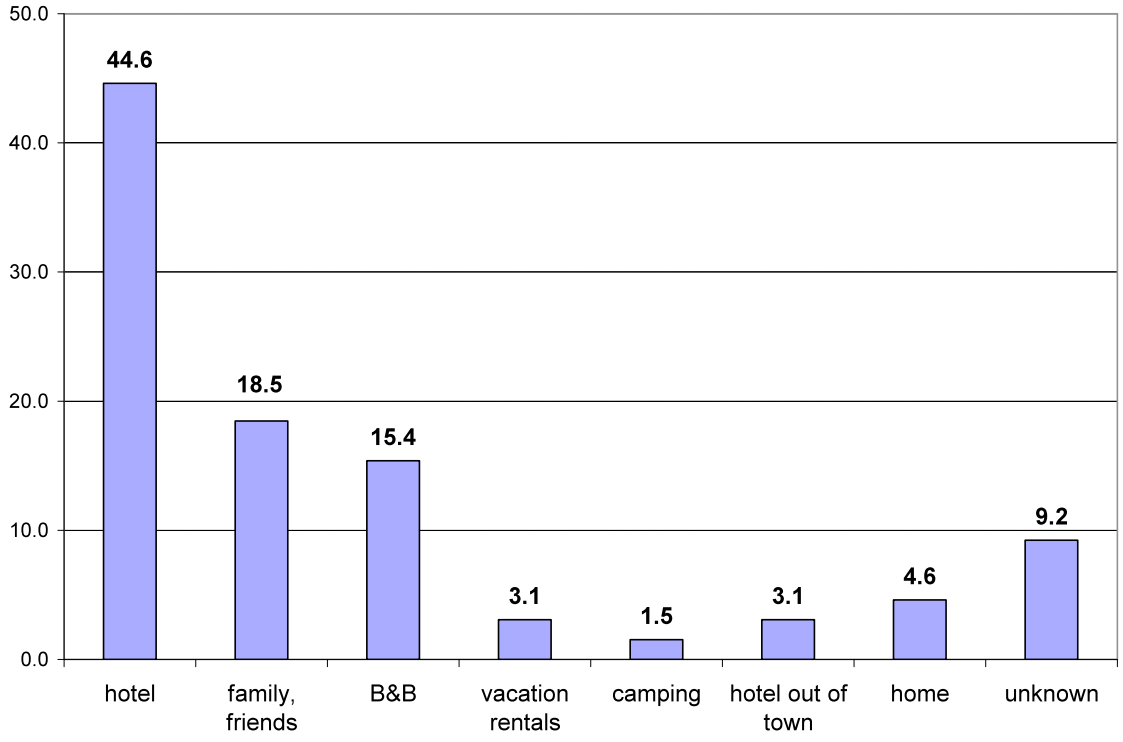


(6) Where do out-of-town visitors stay?

About 45% of all out-of-town TOUR visitors stayed in a hotel, another 15% checked into a Bed & Breakfast; 3% lived in vacation rentals and 1.5% stayed on a campground (Figure 18). Thus, a total of 65% of the visitors buy their accommodation in Walla Walla.

In contrast, about 19% of out-of-town visitors stay with friends or family, 3% prefer hotels out of town and 5% drive back home. The accommodation of 9% of out-of-town TOUR visitors is unknown. However, since almost all of them come from the 993xx ZIP code area, we assume that they drove home too and, therefore, increase the *home* fraction to 14%.

Figure 18
Where do out-of-town visitors stay?
n=65, in %

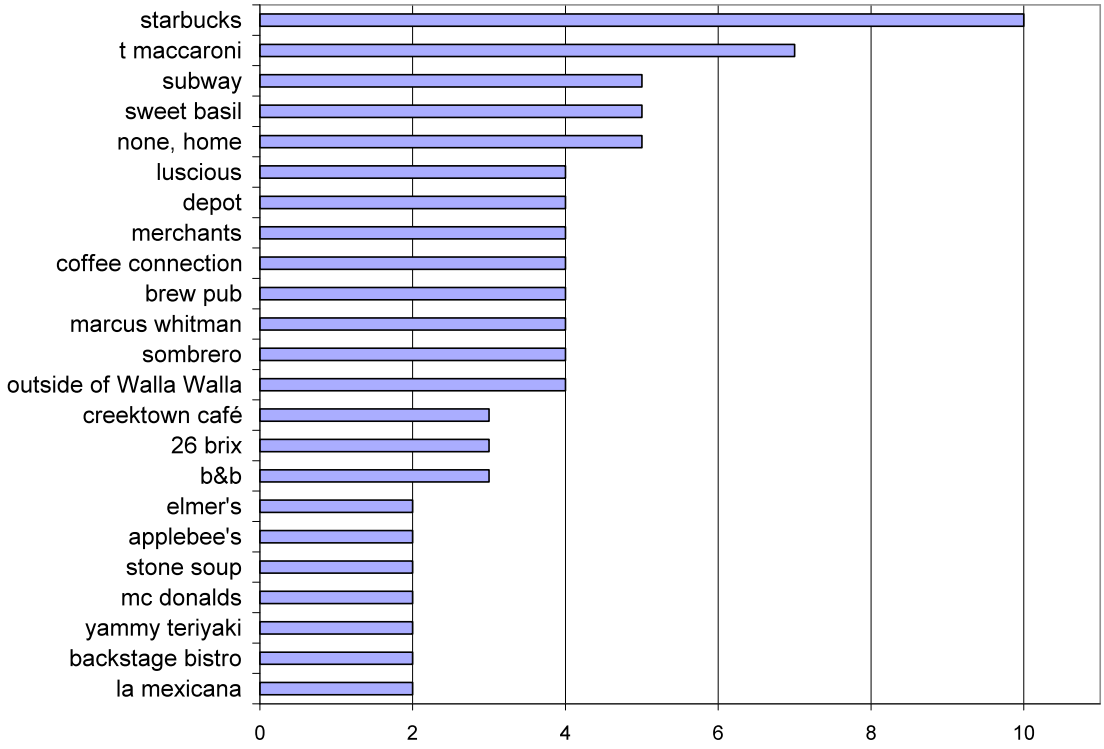


(7) Where do out-of-town TOUR visitors eat?

In response to the question "What restaurant do you eat in?" we received a total of 100 entries (multiple answers were possible). Compared to the answers we obtained from FEAST visitors, TOUR visitors prefer a much wider range of restaurants. While about 40% of the FEAST entries are bundled at 3 restaurants, the top three have only a combined share of 22%. No restaurant has a share of more than 10% of all entries.

In addition to the distribution, the choice of restaurants of TOUR and FEAST visitors is profoundly different. While FEAST visitors prefer high-end restaurants (with respect to price and quality), TOUR visitors favor lower-priced locations. *Whitehouse-Crawford*, the most popular restaurant by far among FEAST visitors, is mentioned only once among TOUR visitors. Instead, *Starbucks*, *T. Maccarone's*, *Subway* and *Sweet Basil* are the most popular establishments. Mexican eateries (*El Sombrero*, *Mexicana*, *Ti Kalli*, *Taco Truck*), not mentioned at all by FEAST visitors, attained a combined share of 8%. Five interviewees explicitly mentioned that they ate at home. The four *outside of Walla Walla* entries are all referring to eating restaurants in Waitsburg.

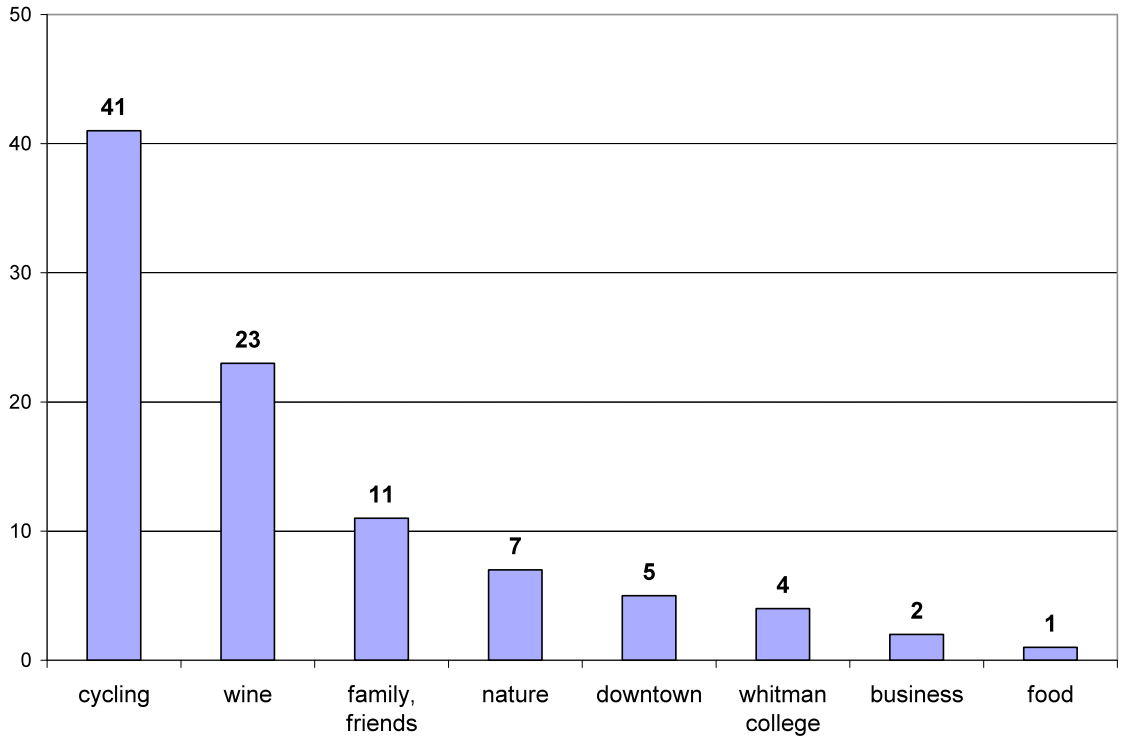
Figure 19
Where do out-of-town visitors eat?
restaurants with at least two entries



(9) What attracts out-of-town visitors?

In response to the question "What attracts you to Walla Walla?" we received 94 entries (multiple answers were possible). Not surprisingly and as shown in Figure 20, almost half of participants are attracted by the bicycle race (41 = 43.6%). However, interests in cycling and wine are not mutually exclusive. In fact, many people mentioned both attractions. In total, the attraction *wine* received 23 entries (24.5%).

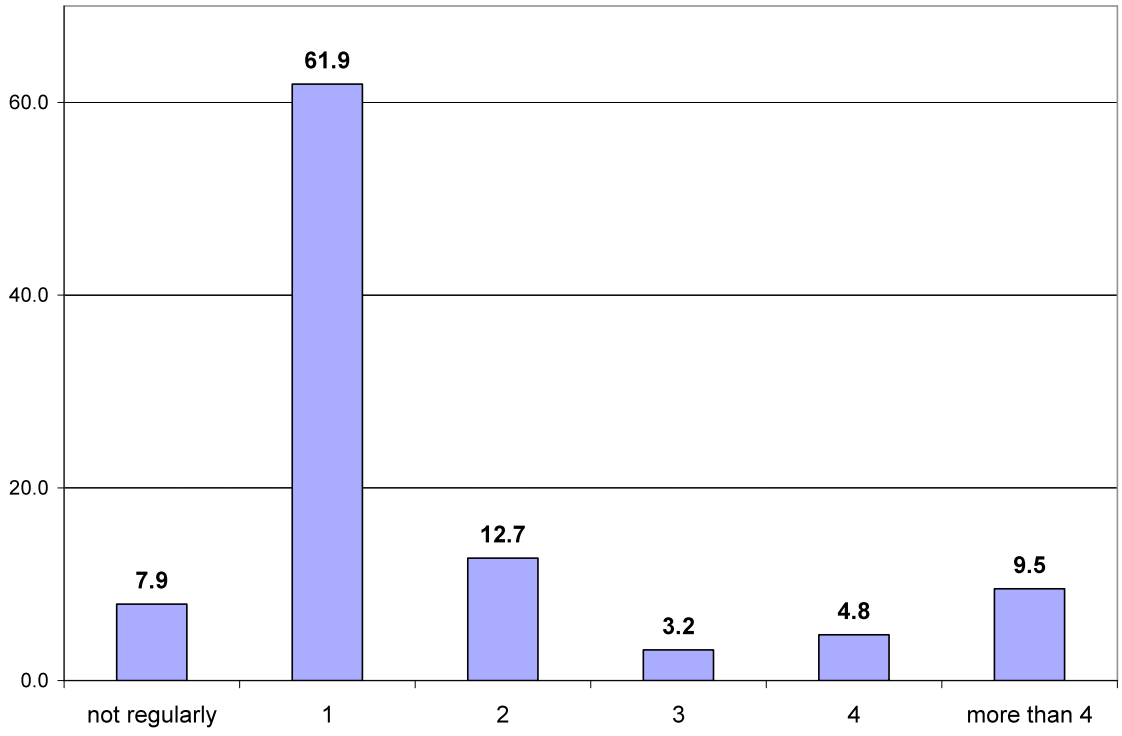
Figure 20
What attracts out-of-town visitors most?
multiple answers possible



(10a) How often do out-of-town visitors visit Walla Walla?

We received 63 answers to the question "How often do you visit Walla Walla?". As reported in Figure 21, approximately 8% of all out-of-town TOUR visitors do not visit Walla Walla regularly and 62% come only once a year. Thus we hypothesize that at least two-thirds of TOUR visits are closely tied to the once-a-year event and do not generate multiple visits.

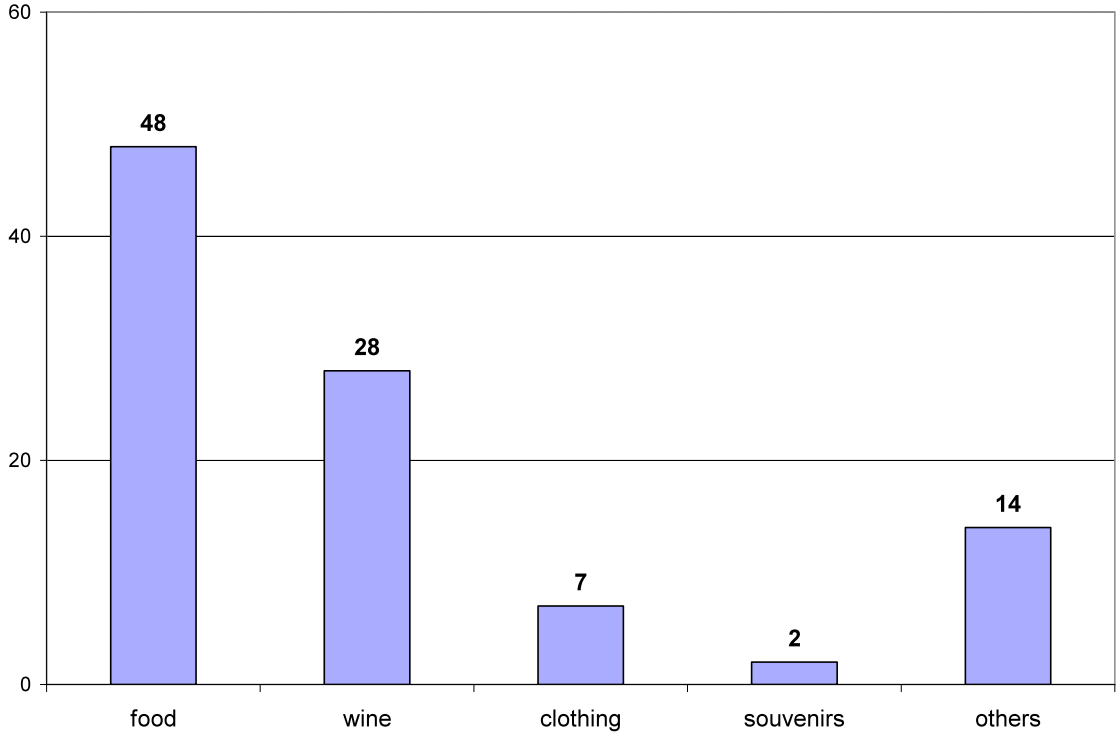
Figure 21
How often do you visit Walla Walla per year?
n=63, in %



(10b) What do out-of-town visitors buy?

We received 99 entries in response to the question "What do you buy in Walla Walla?" (multiple answers were possible). Although *food* accounts for about half of all entries, *wine* still accounts for 28%. *Food* and *wine* combined account for approximately 77% of all entries. In comparison, *clothing*, *souvenirs* and *others* make up only a small fraction of purchases. (Note that *others* is comprised of a heterogeneous bundle of goods such as coffee (3), art (1), car (1), beer (1) and others (9).)

Figure 22
What do out-of-town TOUR visitors buy?
multiple answers possible, n=99



(11) How much do out-of-town visitors spend?

Overall, the average spending of a TOUR visitor from out of town is $354.09 (unadjusted for party size) or $388.23 (adjusted for party size) as in Table 15.

Since the answers to the question "How much money did you spend in Walla Walla this visit?" depend on the length of stay, we calculated average daily expenditures. As shown in Table 15, there is a wide range in daily spending, from $0 to $2000. The average—unadjusted by party size—is equal to $214.83.

However, average daily expenditures may depend on party size because many cost components are quasi-fixed and may be shared (e.g., hotel room, travel by car). Therefore, we also computed an average expenditure that is weighted by party size. Similar to the FEAST analysis, the group size-adjusted average of $108.67 is not very different from the unadjusted average of $126.11. However, in contrast to the FEAST event, we expect to have covered several members of the same group, leading to an overestimation of visitors. Therefore, we will rely on the unadjusted figures.

First, it is apparent that minimum, maximum and average per capita spending of out-of-town TOUR visitors is about half that of FEAST visitors. As we already saw, this pattern is well reflected in the respective restaurant choices.

Table 15
How much do out-of-town visitors spend in Walla Walla?
in $

	min	max	average
average per visitor unadj. by party size	-	-	354.09
average per visitor adj. by party size	-	-	388.23
daily average per visitor unadj. by party size	0	667	126.11
daily average per visitor adj. by party size	0	667	108.67

Second, Figure 23 displays a positive relationship between reported income and average daily spending with a steeper slope (i.e., greater income responsiveness) than observed for the FEAST event. In addition and in contrast to the FEAST analysis, the income variable is statistically significant (and not driven by outliers).

Figure 23
Reported income and average daily spending

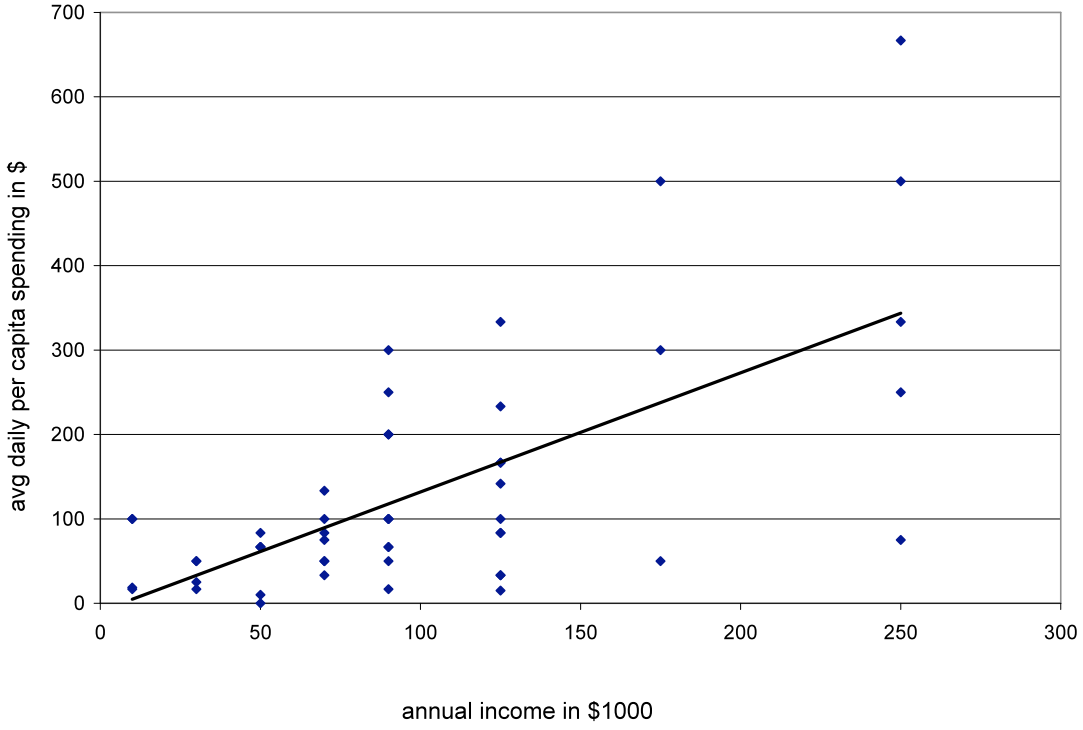


Table 16 shows the results of a few log-linear regressions similar to those reported in Table 7. In column (1) we report the estimates of a log-linear regression of average daily per capita spending on reported annual income. The income coefficient of 0.009 suggests that an increase of income by one unit ($1,000) has a 0.9% impact on average daily spending in Walla Walla. This coefficient is significant at the 0.1% level, i.e., exhibits a very high statistical significance. Even controlling for party size and length of the visit, as shown in column (2), does not alter the significance, thus further adding to the robustness of the estimates. In addition, the length of the stay significantly influences expenditure per day. With each additional day, spending falls by about 4.6%. Group size does not exhibit any significant influence on daily expenditure.

In column (3) we report the same model while also accounting for regional origin of the visitors. However, none of the regional variables is significant at any reasonable level.

Finally, column (4) displays total expenditure as a function of only regional provenance. Thus, the dummy variables for Canada, Seattle and the Walla Walla area (including the Tri-Cities) implicitly capture length of stay and daily per capita spending. The coefficients for Seattle and Walla Walla are positive and negative, respectively, but neither is significant at the 10% level. However, visitors from Canada appear to spend significantly more (about 66% more) than other visitors (significant at the 6.3% level).

Table 7
Determinants of average daily spending

	dependent variable			
	ln(average daily spending)			ln(average total spending)
	(1)	(2)	(3)	(4)
constant	3.56***	3.73***	3.73***	5.39***
	(17.70)	(12.15)	(11.27)	(23.56)
annual income	0.009***	0.008***	0.010***	
	(4.99)	(4.58)	(6.02)	
length of stay		-0.046***	-0.041***	
		(-3.15)	(-3.97)	
party size		0.002	-0.010	
		(0.19)	(-0.51)	
Visitors from				
Walla Walla			-0.699	-1.383
area[1]			(-0.78)	(-1.08)
Seattle-Tacoma			0.097	0.185
			(0.34)	(0.56)
Canada			0.136	0.656+
			(0.40)	(1.91)
R2	0.34	0.37	0.57	0.12
n	50	50	39	42

heteroskedasticity-consistent t-statistics in parentheses. significance levels *** (1%), ** (2%), * (5%), + (6.3%); [1] ZIP code 993xx without 99362 (Walla Walla).

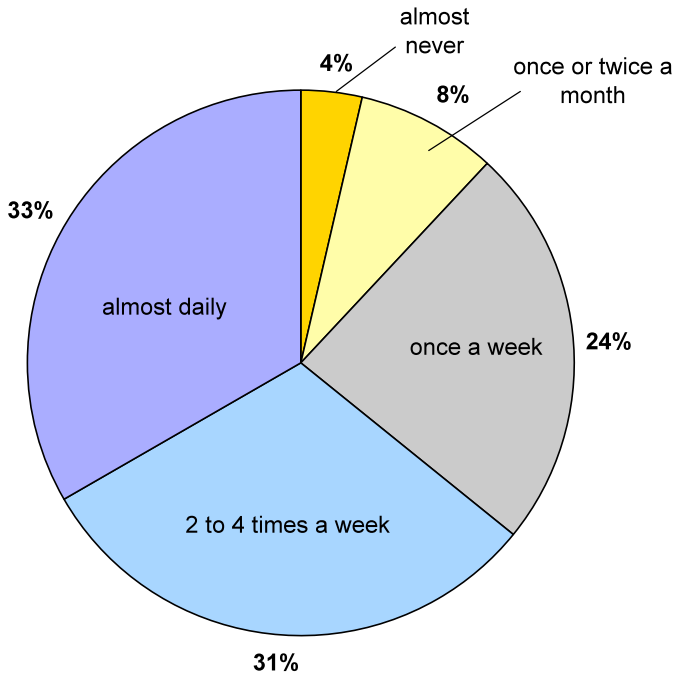
TOUR Visitors from Walla Walla

For all questions concerning visitors from Walla Walla, we did not weight the answers with the respective party size. Since we cannot assume that the person filling out the questionnaire can speak on behalf of the entire party he or she is with, we interpret the answers as personal statements.

(12) How often do you go downtown?

We received 84 answers to this question. As shown in Figure 24, the overwhelming majority of local TOUR visitors visit downtown Walla Walla at least 2-4 times per week. Only 12% of all local visitors are downtown less than once a week. This squares with the results of our FEAST analysis.

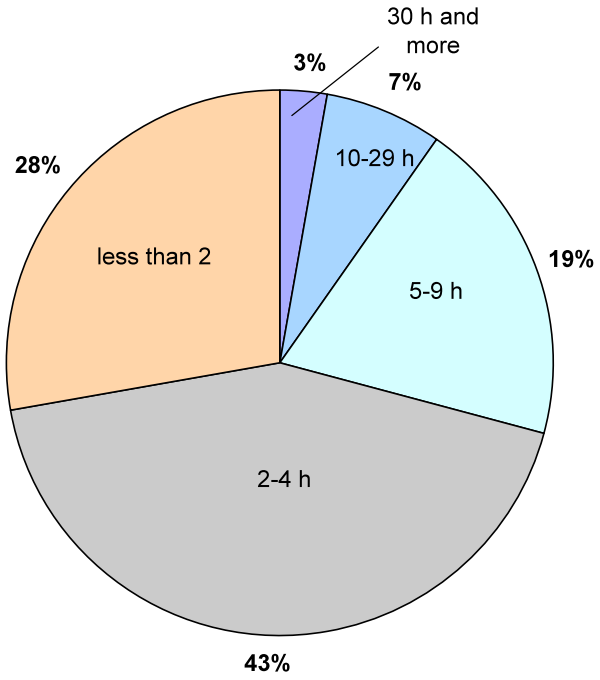
Figure 24
How often do you go downtown?
n=84



(13) How much time per week do you spend downtown?

Given the variance in downtown visits, this question yielded answers ranging from zero to forty hours. Figure 25 summarizes the answers and their distribution. About 10% of all local TOUR visitors spend 10 or more hours per week in downtown Walla Walla (compared to 20% for FEAST visitors). Twenty-eight percent are downtown for less than 2 hours per week (as opposed to 22% for FEAST visitors). Compared to FEAST visitors, TOUR attendees spend significantly less time in downtown Walla Walla.

Figure 25
How much time per week to you spend downtown?
n=72



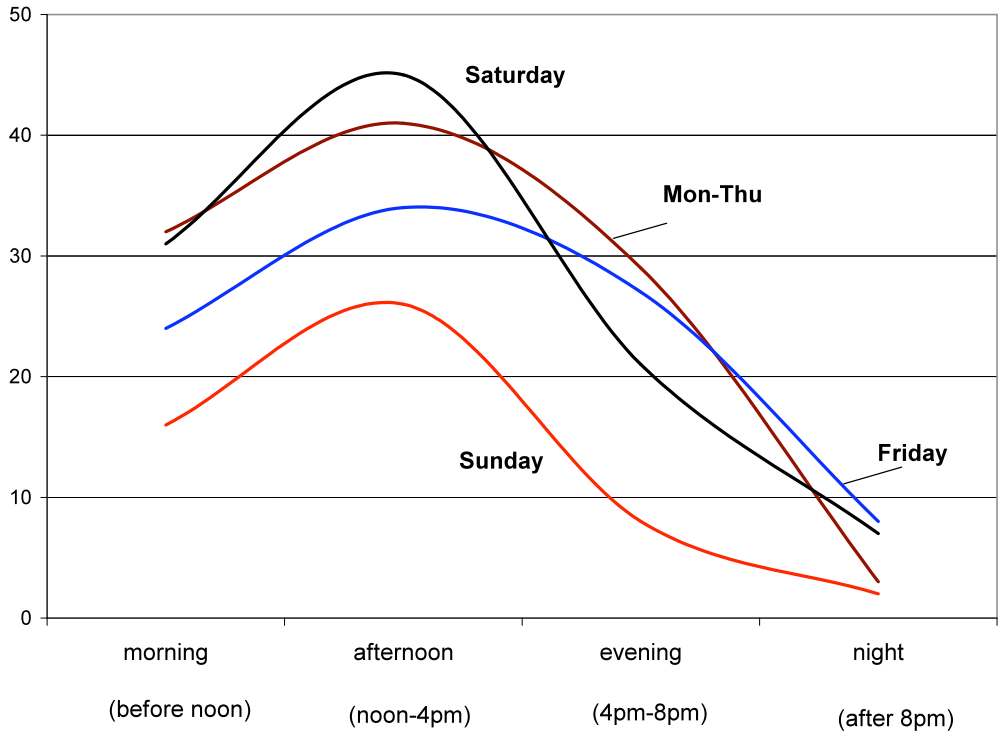
(14) When do you go downtown?

Similar to Figure 10, Figure 26 shows the number of downtown visits as the sum of entries of all interviewees (n=84, multiple answers possible).

Similar to reports from FEAST visitors, the number of downtown visits on Sundays is approximately 50% lower than on weekdays. However, in contrast to our FEAST analysis, Friday and Saturday visits are not more frequent than weekday visits.

Friday's diurnal pattern exhibits the smallest decrease in visits from afternoon to evening and night, which is similar to the FEAST analysis but less pronounced. Fridays also have the highest number of night visits.

Figure 26
When do you go downtown?
n=84, reported entries, multiple entries possible

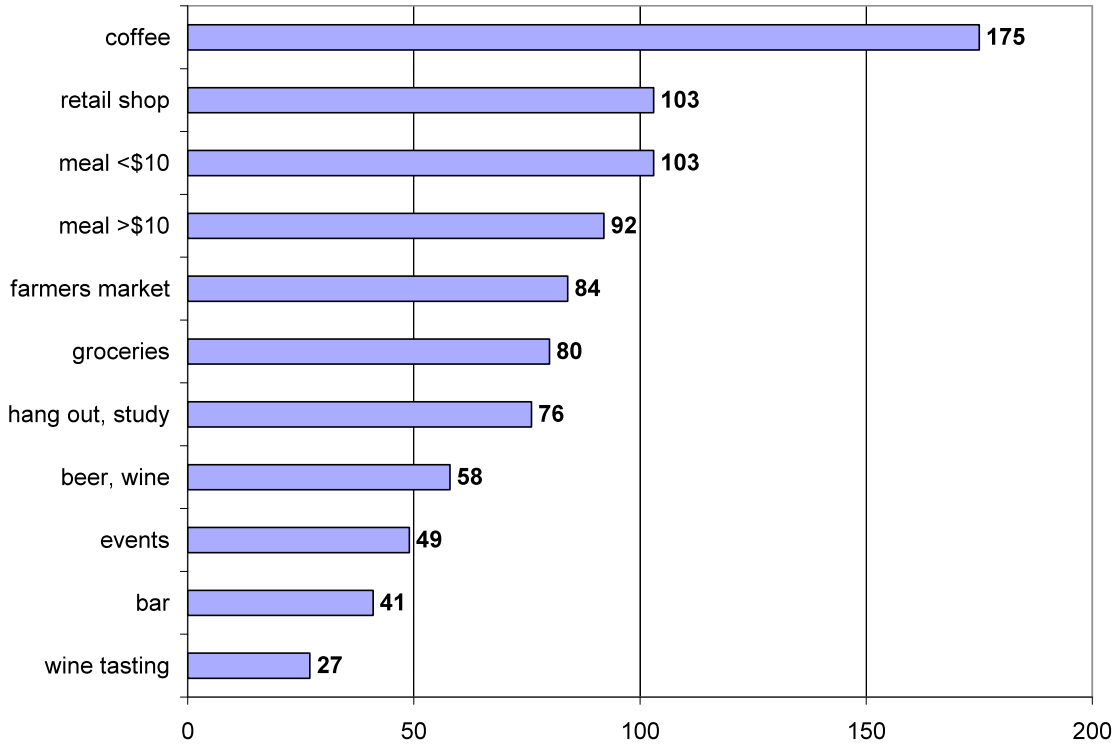


(15) How often do you go downtown for a certain purpose?

Only by a fraction of the people surveyed answered this question. Since it is *a priori* unclear how to assess missing entries we do not compute an average visitation frequency by purpose. However, we assigned weighted frequency values to each purpose and ranked the purposes. In this manner, we assigned 5 points for *daily*, 4 points for *2-4 times per week*, 3 points for *once a week*, 2 points for *1-2 times per month* and 1 point for *once in 6 months*. We treated the entry *almost never* like a missing entry and disregarded it.

As shown in Figure 27, drinking a coffee is by far the most common downtown activity for local TOUR visitors, followed by retail shopping, low-price restaurant visits (<$10) and high-price restaurant visits (>$10). In general, this pattern squares with the reported pattern of FEAST visitors. However local TOUR visitors prefer low-price activities, presumably due to lower age and income (e.g., *meal <$10* is more popular than *meal >$10*).

Figure 27
Downtown visits by purpose
weighted entries



(16) How much money do you spend for what purpose?

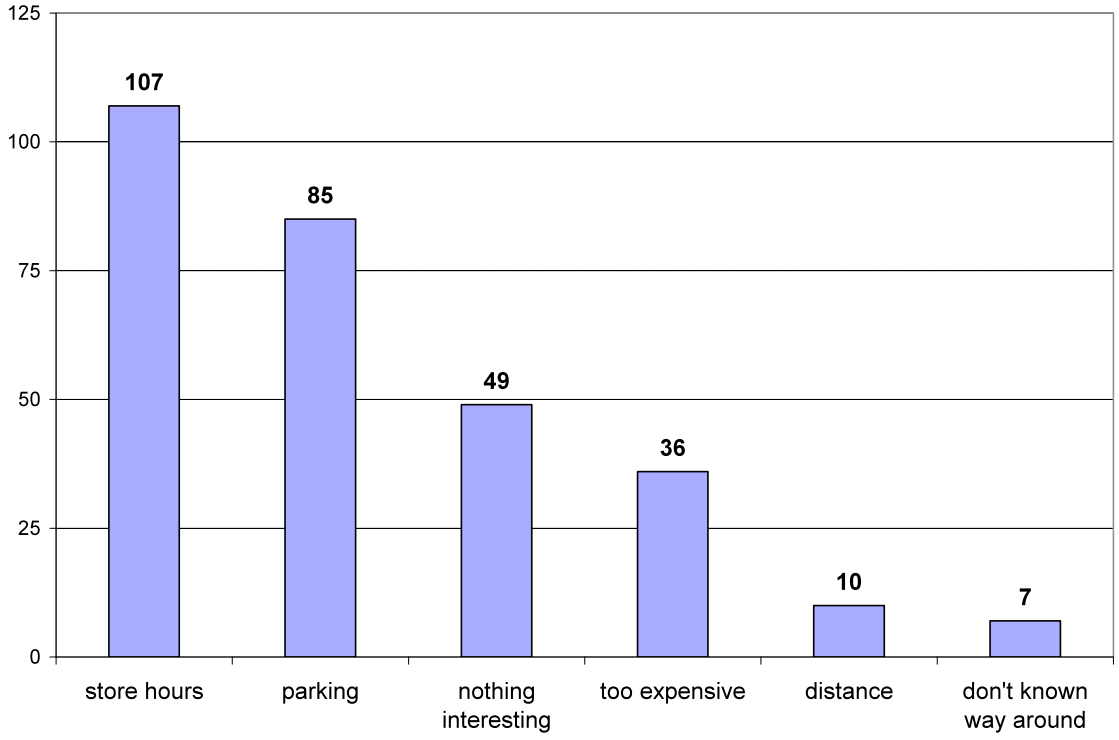
The overwhelming majority of interviewees did not respond to this question. Therefore, we refrain from analyzing the spending patterns of local TOUR visitors and refer to the FEAST analysis.

(17) What deters you from going downtown?

When we asked this question, people could rank their three main deterrents. We weighted the entries linearly and gave the main deterrent 3 points, the second 2 points and the third 1 point.

Figure 28 displays these cumulative points. Accordingly, *store hours* (i.e. too short or inconsistent) is the main deterrent, followed by *parking*. These same two points are also the main deterrents for local FEAST visitors, albeit in reverse order.

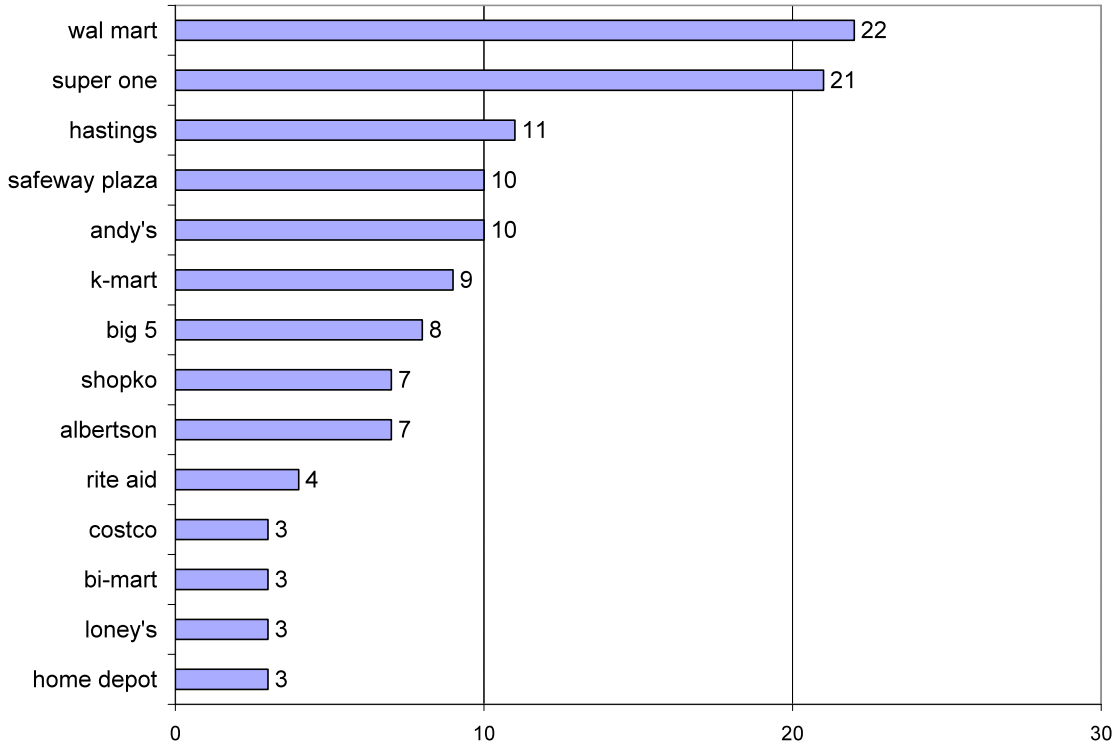
Figure 28
Main deterrents from going downtown



(18) When you shop outside of downtown, where do you typically go?

From the perspective of local TOUR visitors, *Wal-Mart* and *Super One* are by far the most popular shopping destinations outside of downtown Walla Walla. However, similar to the FEAST interviews, this question was answered in an inconsistent way. Of the 79 responding visitors, 15 listed the general category *supermarkets*. Thus, it is likely that the popularity of particular supermarkets (e.g., *Safeway*, *Albertson's* and *Super One*) is substantially underestimated.

Figure 29
Shopping outside of downtown
number of entries



Walla Walla Resident

1. Age:	Under 21	21-30	31-40	41-50	51 -60	61-70	70+
2. Sex:	Male	Female					
3. Annual household income (in thousands of dollars):							
0-20	20-40	40-60	60-80	80-100	100-150	150-200	200+
4. How did you arrive?	on foot	bicycle	car	bus			
5. How did you hear about this event?							

6. How often do you go downtown? Please circle one.

(almost) daily	2-4 times per week	1 time per week	1-2 times per month	(almost) never	Other _____

7. On average, how much time do you spend downtown per week? _____ hours

8. What time of the day do you typically go downtown? Check all boxes that apply.

	Monday-Thursday	Friday	Saturday	Sunday
Morning (before noon)				
Afternoon (12pm-4pm)				
Evening (4-8pm)				
Night (after 8pm)				

9. How often do you go downtown to… Check one box in each row

	(almost) daily	2-4 times per week	1 time per week	1-2 times per month	(almost) never
Shop (groceries)					
Shop (retail)					
Buy beer, wine, or spirits					
Go wine tasting					
Go to a coffee shop					
Eat a meal for < $10					
Eat a meal for > $10					
Go to the Farmer's Market					
Attend events (e.g., concert, parade)					
Go to a bar					
Study or hang out					

10. Which of the following deter you from going downtown? Please rank 1-3 (1= biggest deterrent)

___ Distance
___ Too Expensive
___ Store hours are inconvenient/inconsistent
___ Other: _____
___ Parking too difficult
___ I don't know my way around
___ Nothing interests me

11. When you shop outside of downtown, where do you typically go?
Please list stores below (e.g., Walmart, Big5, Hastings, Supermarkets – except Safeway on Rose)

Visitors from Outside of Walla Walla

1. Where are you from? Please enter the ZIP

2. Age: Under 21 | 21-30 | 31-40 | 40-50 | 51 -60 | 61-70 | 70+

3. Sex: Male | Female

4. What is your annual household income?
0-20k | 20-40k | 40k-60k | 60-80k | 80-100k | 100-150k | 150-200k | 200k+

5. How did you arrive? on foot | bicycle | car | bus | airplane

6. How did you hear about today's event?

7. How big is the party you are here with? enter number

8. How long is your Walla Walla visit? enter number of days

8. Where do you stay? family, friends, name hotel, B&B

9. What restaurants do you eat in? name

9. What attracts you to Walla Walla? (wine, nature, family etc.)

10. **How often do you visit Walla Walla per year?**

11. What do you buy in Walla Walla?
wine | clothing | food | souvenirs | others

12. How much money do you spend in Walla Walla this visit?