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FACSIMILE COVER SHEET

Date: May 5, 1997
Sent by: KLW **Time:** 9:09

To: Jayna Shewak, Project Coordination
Company: CITY OF SCOTTSDALE
Fax No: 994-7781

Regarding: Danny's Car Wash
Our Matter No.: 24072-005
From: Thomas J. Rief
Description: Attached

Message: Jayna, enclosed is a of the Trip Generation Study prepared by Pekala and Associates. Sorry for the delay but, it should be a helpful tool. Thank you very much for your assistance.

NOTE: 12 TOM

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MAY 5 16:08

PEKALA AND ASSOCIATES

Traffic and Transportation Engineering

May 2, 1997

Thomas J. Rief
Beus, Gilbert & Morrill, P.L.L.C.
3200 N. Central Ave., Ste. 1000
Phoenix, Arizona 85012-2417

Re: Traffic Generation Comparison
Danny's Family Car Wash and Quality Restaurant
SWC 74th Street and Shea Boulevard
Scottsdale, Arizona

Dear Mr. Rief:

Pekala and Associates is pleased to submit this traffic generation comparison of a proposed Danny's Family Car Wash facility and a previous restaurant use on the same site. The car wash facility is to be located adjacent to the southwest corner of 74th Street and Shea Boulevard in Scottsdale, Arizona and would replace an existing (currently closed) mexican restaurant use.

Existing and Proposed Land Use Description

As we understand, the existing building that housed the restaurant use has 8,625 square feet of building area with existing parking surrounding the building. The site is bounded by 74th Street on the east, Shea Boulevard on the north, an existing north-south access driveway on the west from Shea Boulevard with an existing restaurant use west of this driveway and an existing east-west driveway from 74th Street that also serves additional retail shopping center use to the south of the study site.

The previous restaurant use on the site was a mexican restaurant that was open for lunch and dinner as well as into the late evening hours.

The proposed development would replace the existing restaurant building and parking with a Danny's Family Car Wash. This facility will provide a staging area for customers upon their arrival, the car wash facility with a waiting room and the staging area for interior cleaning and drying of newly cleaned vehicles. In addition, the staging area for vehicle arrivals will include gasoline pumps. However, these pumps will only be used optionally as part of the car wash operation. It should also be noted that the car wash facility will

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provide garage stalls where motorists can obtain an oil change and lubrication for their vehicles. As part of this service, every vehicle also receives a car wash. The operating hours of the car wash are to be from 8:00 a.m. to 6:00 p.m. Monday through Saturday with slightly shorter hours on Sunday dependent upon demand. No convenience store or separate gasoline sales will be provided as part of the proposed development, although, it should be noted that some of the existing Danny's Family Car Wash facilities do include these services.

Trip Generation Comparison

A comparison of the trip generation characteristics of the previous restaurant use and the proposed car wash facility was made using trip rate data from the February, 1995 Update to the 5th Edition of Trip Generation, published by the Institute of Transportation Engineers for the restaurant use and historical car wash data for a similar Danny's Family Car Wash facility.

For the restaurant facility, the category for a quality restaurant was used with the building square footage as the independent variable. The trip rate data sheets used in the analysis are attached to this report and the results indicate that the restaurant use could generate approximately 800 vehicle trips on a daily basis with only approximately 10 vehicle trips estimated to occur during the a.m. peak hour of the adjacent street traffic and 65 vehicle trips estimated to occur during the p.m. peak hour of the adjacent street traffic. In addition, it was determined that the a.m. peak hour of the restaurant facility could generate approximately 50 vehicle trips and the p.m. peak hour of the restaurant facility could generate approximately 70 vehicle trips.

For the proposed car wash facility, a summary of car wash transactions was provided for an existing Danny's Family Car Wash located at Indian School Road and 43rd Avenue in the City of Phoenix. The data provided included the number of car wash transactions by the day of the week and for each hour that the car wash was open and represented the average number of washes for the first quarter of 1997. This location was selected since it provides only the services that the proposed development will provide and it is also located within a mile of another car wash facility which is a similar situation for the proposed development (existing car wash located near 70th Street and Shea Boulevard).

The car wash transaction data as provided by the owner of the facility is attached for review. From this information, it was determined that the average weekday traffic from the car wash was approximately 510 vehicles based on the average of 255 vehicles washed on an average weekday. In addition, the car wash operator indicated that approximately 20 employees work at the car wash in one shift and that these employees arrive prior to 8:00 a.m. and leave the site after 6:00 p.m. This employee traffic would add approximately

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40 vehicle trips to the estimated daily trip generation for the car wash for a total of 550 vehicle trips per average weekday. The car wash data were reviewed in more detail to determine the traffic generated during the a.m. and p.m. peak hours of the street traffic as well as for the a.m. and p.m. peak hours of the facility. For the a.m. peak hour of the adjacent street traffic, it is estimated that the car wash facility would generate 30 vehicle trips with 50 vehicle trips estimated to occur during the p.m. peak hour of the adjacent street traffic. For the a.m. peak hour of the car wash facility, it is estimated that approximately 60 vehicle trips could be generated with approximately 65 vehicle trips estimated to be generated during the p.m. peak hour of the facility. It should be noted that the a.m. peak hour of the car wash facility was found to occur from 11:00 a.m. to Noon which would be similar to a quality restaurant facility that is open for lunch and dinner only. Also, the p.m. peak hour of the car wash facility was found to occur from Noon to 1:00 p.m. which could also be similar to the peak hour of the restaurant use.

The attached Table 1 provides a side by side comparison of the trip generation for the restaurant and car wash facilities where it can be seen that the car wash facility is estimated to generate less traffic than the restaurant facility on a daily basis and during the p.m. peak hours related to the adjacent street traffic as well as the peak hour of the facility usage. The a.m. peak hour trip estimates for the car wash are higher than a quality restaurant use since the restaurant is not open during the early morning hours.

It should also be noted that both the restaurant use and the car wash use have the ability to capture vehicles that may already be on the adjacent shopping center site or the adjacent roadway system thereby resulting in a reduction of overall vehicle trips on the adjacent streets than shown in Table 1.

Summary and Conclusions

From the results of the analysis contained herein regarding the trip generation comparison of a quality restaurant use and a proposed Danny's Family Car Wash to be located adjacent to the southwest corner of 74th Street and Shea Boulevard in Scottsdale, Arizona, it is estimated that the proposed car wash development will generate approximately 550 vehicle trips on a daily basis compared to an estimate of 800 vehicle trips on a daily basis that could be attributed to a restaurant use on the site. Further more, the proposed car wash development is estimated to generate less trips than a restaurant use on the site during the p.m. peak hours of the facility use and the adjacent street traffic and only slightly more traffic during the a.m. peak hour of the adjacent street traffic due solely to the fact that the restaurant use would not be open in the early morning hours.

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Additionally, from our review of the site plan for the proposed car wash facility, no changes in access to 74th Street or Shea Boulevard are planned and, therefore, the impact on traffic flow conditions at the existing access locations should be less with the car wash facility than with a quality restaurant facility.

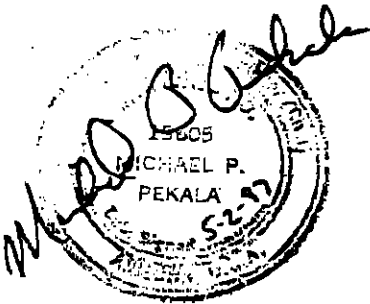
We appreciate the opportunity to provide this report regarding the traffic characteristics of the proposed Danny's Family Car Wash to be located adjacent to the southwest corner of 74th Street and Shea Boulevard and we are available, at your convenience, to discuss our study results and conclusions.

Sincerely,

Pekala and Associates



Michael P. Pekala, P.E.



Quality Restaurant (831)

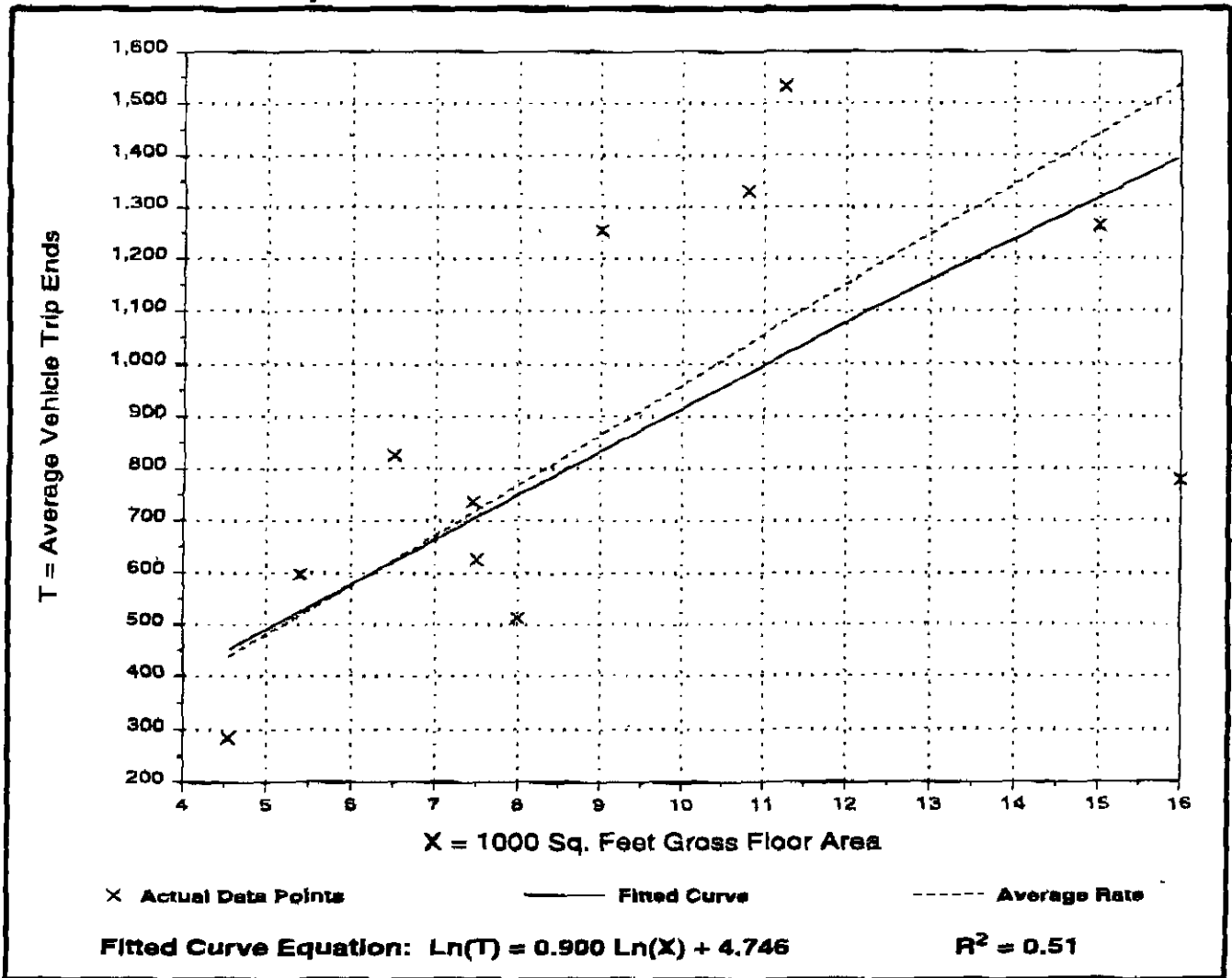
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 11
 Average 1000 Sq. Feet GFA: 9
 Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
95.99	48.56 - 139.33	33.31

Data Plot and Equation



Quality Restaurant (831)

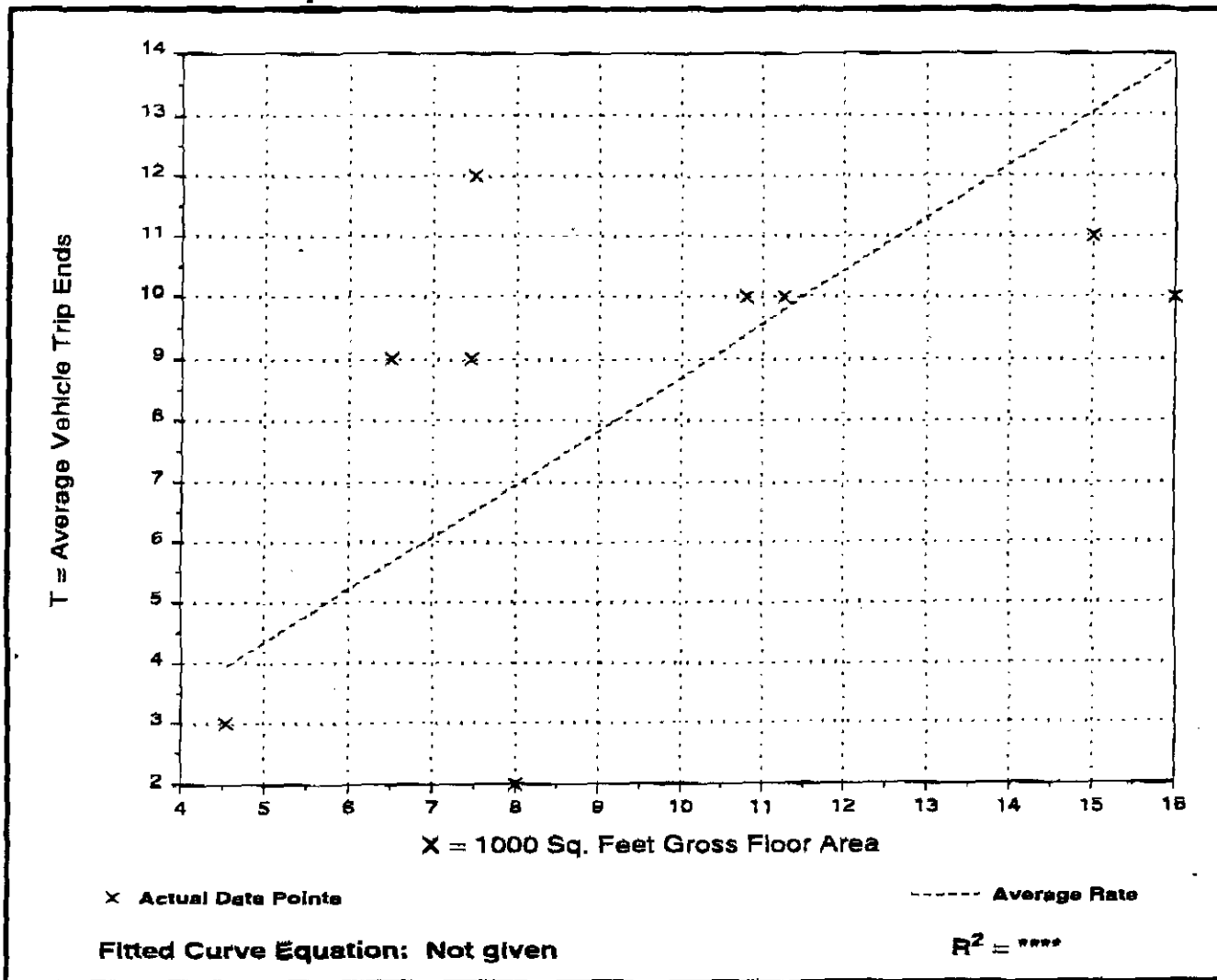
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 9
 Average 1000 Sq. Feet GFA: 10
 Directional Distribution: Not available

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.87	0.25 - 1.60	0.96

Data Plot and Equation



Quality Restaurant (831)

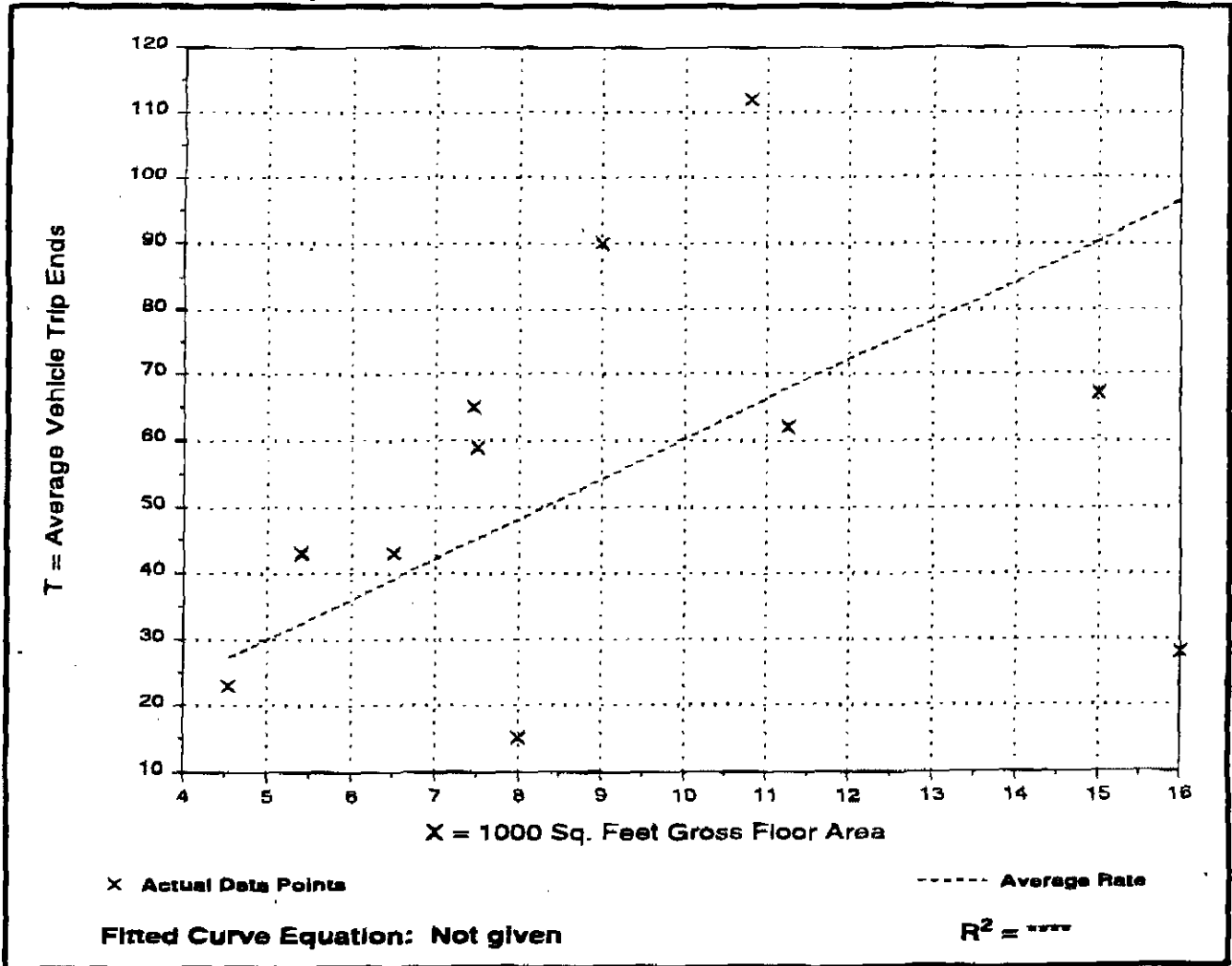
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 12
 Average 1000 Sq. Feet GFA: 9
 Directional Distribution: 82% entering, 18% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
6.02	1.75 - 10.37	3.74

Data Plot and Equation



Quality Restaurant (831)

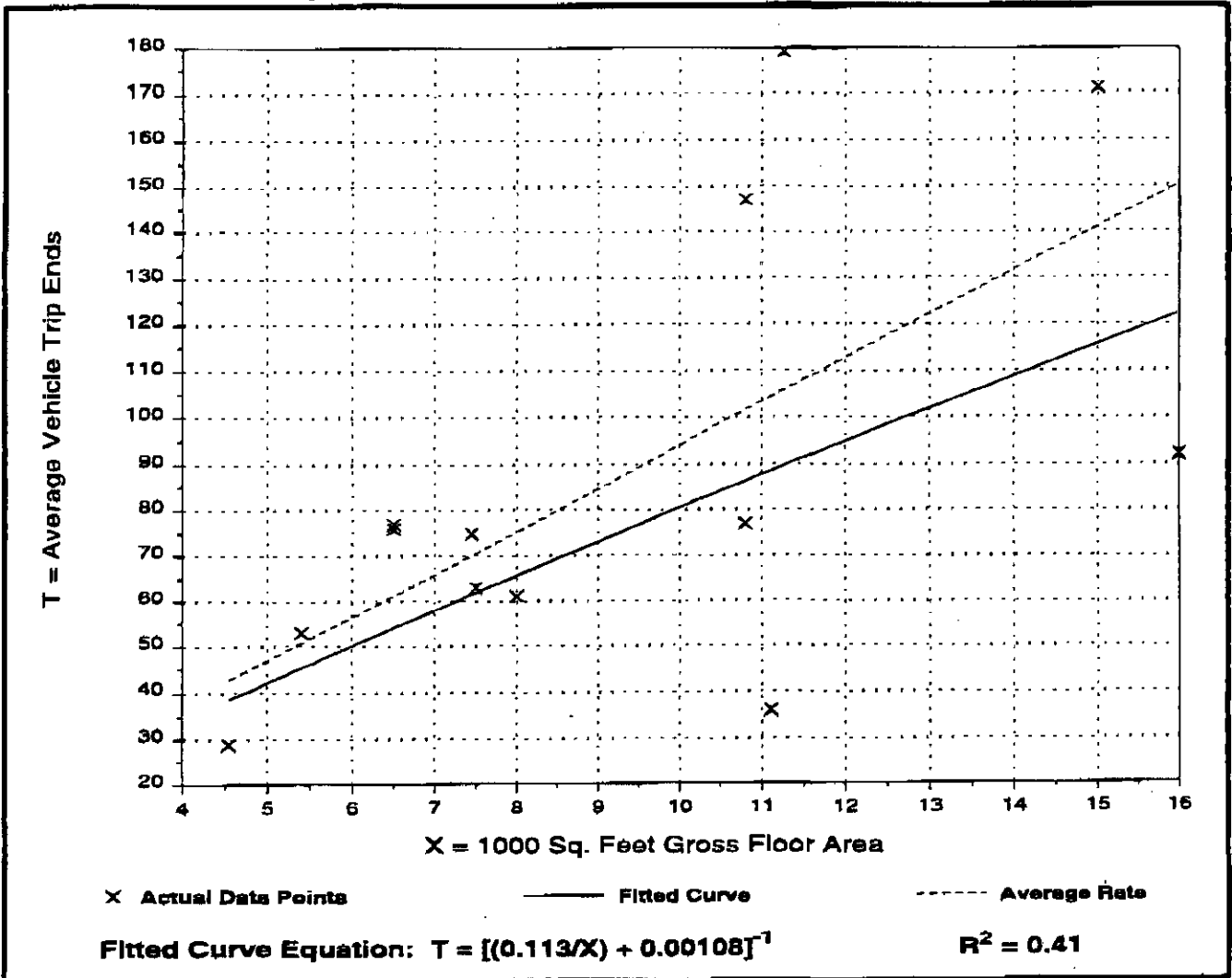
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator**

Number of Studies: 13
Average 1000 Sq. Feet GFA: 9
Directional Distribution: 64% entering, 36% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
9.40	3.24 - 15.89	4.64

Data Plot and Equation



**DANNY'S FAMILY CAROUSEL
INDIAN SCHOOL
FIRST QUARTER, 1997**

FILE:
HOWARDUITSTORY8.WK3

HOUR	SUN	MON	TUE	WED	THUR	FRI	SAT	AVG.	AVG %
8-9	5	11	12	15	14	20	40	17	5.59%
9-10	32	18	17	17	21	32	53	27	8.88%
10-11	34	24	23	24	24	41	61	33	10.86%
11-12	37	29	27	24	31	45	69	37	12.17%
12-1	38	28	26	28	32	49	71	39	12.83%
1-2	35	28	24	25	30	43	71	37	12.17%
2-3	37	22	20	24	25	41	64	33	10.86%
3-4	33	24	20	25	29	42	60	33	10.86%
4-5	24	19	17	23	28	41	52	29	9.54%
5-6	2	13	11	17	16	34	37	19	6.25%
AV. DAILY	277	216	197	222	250	388	578	304	100.00%

AVG WEEK = 2,128
30 DAYS = 9,120

Source: Danny's Family Car Wash

TABLE 1
TRIP GENERATION COMPARISON
DANNY'S FAMILY CAR WASH AND QUALITY RESTAURANT

	RESTAURANT	CAR WASH
Trip Generation Unit	1,000 SFBA*	FACILITY
Size	8.625	1
Daily Trips	800	550
A.M. Peak Hour	10	30
P.M. Peak Hour	65	50
A.M. Peak Hour of Generator	50	60
P.M. Peak Hour of Generator	70	65

* SFBA = Square Feet of Building Area