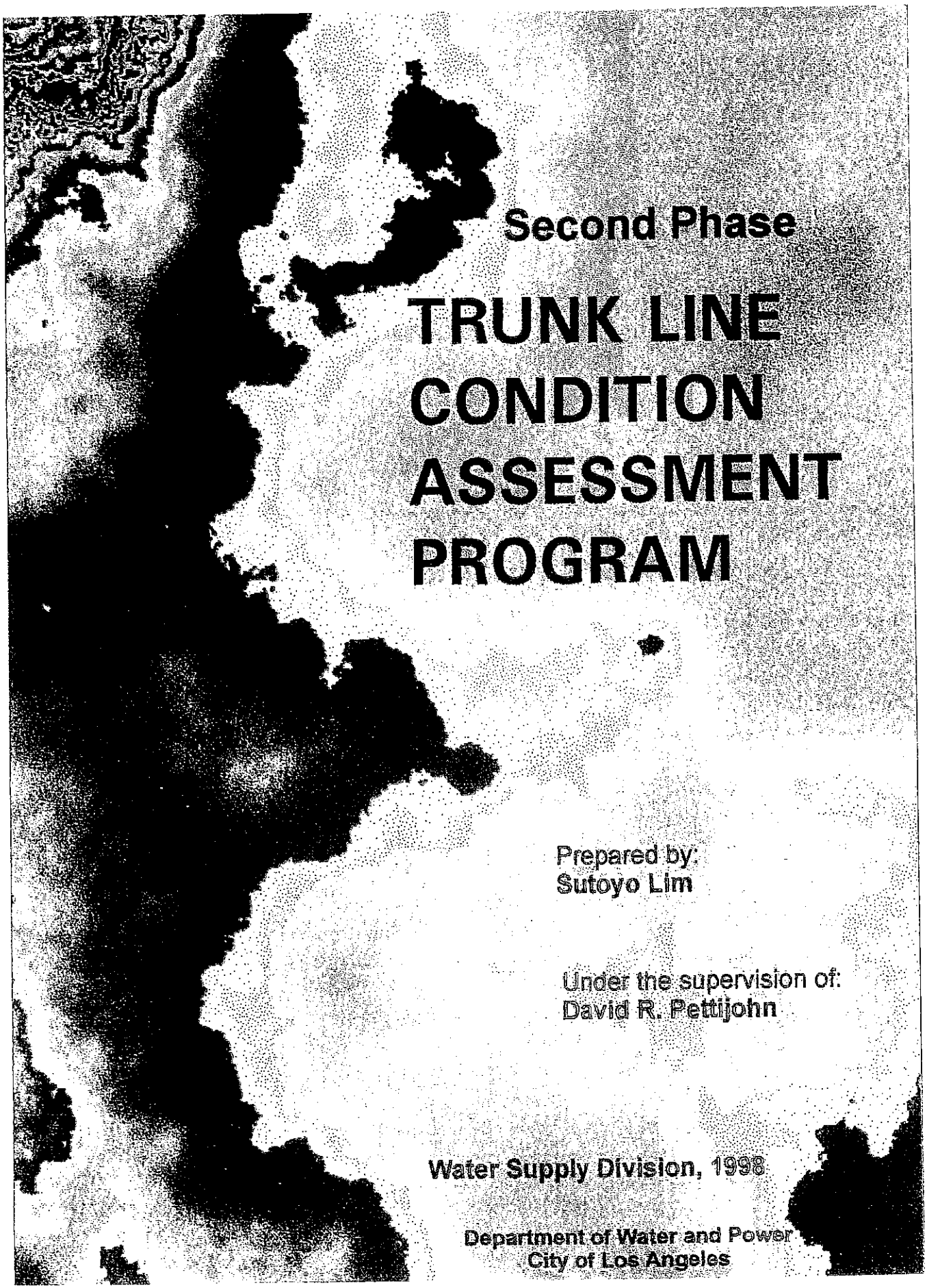

Second Phase

TRUNK LINE CONDITION ASSESSMENT PROGRAM

Prepared by:
Sutoyo Lim

Under the supervision of:
David R. Pettijohn

Water Supply Division, 1998

Department of Water and Power
City of Los Angeles

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Table of Contents

Section 1 - Overview

Objective

The purpose of the Trunk Line Condition Assessment Program (TCAP) is **to develop a priority list** of at-risk trunk lines to help plan and prioritize the replacement of trunk lines. The trunk line in the worst condition is given priority No. 1.

This report covers the **second phase of the TCAP**, which addresses **non-riveted steel trunk lines** 30 inches or larger in diameter, installed before January 1, 1941. The first phase of the TCAP addressed riveted steel trunk lines.

Background

The Los Angeles Department of Water and Power operates and maintains 280 miles of trunk lines. Trunk lines are supply pipelines 30 inches or larger in diameter, and form the major arteries for water supply. They transport a large amount of water and assure a reliable supply for potable uses and fire fighting.

There are 138 miles of steel trunk lines installed in 1940 or before (65 miles riveted and 73 miles non-riveted). Many of these trunk lines are deteriorating and approaching the end of their useful life. The likelihood of significant breaks, costs associated with making repairs, payments for damage to public and private property, and exposing the public to a safety hazard are increasing over time.

Methodology

Consistent with the first phase, the second phase TCAP uses the Expert Choice Version 9.0 software to analyze the trunk lines. The Expert Choice program is based on the Analytical Hierarchical Process, a methodology for decision making.

Factors considered in the analysis are:

- **Damage potential** Damage potential to property, loss of life, and repair costs.
- **Service/Source** Effects on services to either locally or other zones when a break occurs at a trunk line.
- **Leaks and Stress** Historic record of leaks per city block and internal pressure related stress on trunk lines.
- **Corrosiveness of the soil surrounding the trunk line**
- **Age of the trunk line**
- **Age of the trunk line's cement mortar lining**

Priority List and Recommendation

The methodology used is the same as what was used in the first phase TCAP. This facilitates comparison of ranking scores between the TCAP phases. The second phase TCAP provides a list of trunk line segments along with the ranking scores (See Appendix A). Based on the ranking scores, we recommend that the first 50 trunk line segments in the priority list (206,105 feet or 39 miles) be replaced.

Section 2 - TCAP Methodology

Analytical Hierarchy Process

The Analytic Hierarchy Process (AHP) is a decision making tool that incorporates both qualitative and quantitative aspects of a problem. It includes both judgement (subjective) and factual (objective) data in the decision making process. The AHP helps decision makers structure the important components of a problem into a hierarchical structure. This structure then uses pairwise comparisons and rankings to evaluate a problem.

Criteria Selection

In the first phase of TCAP, the former Water Operating and Water Engineering Design Divisions participated in picking the criteria by which trunk lines would be judged. These Divisions also ranked the relative importance of the selected criteria using the AHP/EC "pairwise comparison" process. In this process, the participants completed a questionnaire (See Figure A) comparing and rating the importance for each criterion. Then, a model was constructed using EC (See Figure B). Expert Choice did the calculations and ensured that all comparisons were within acceptable consistency.

Criteria used in the TCAP model are:

- **Damage potential** (Priority = 0.285)
- **Service/Source** (Priority = 0.287)
- **Leaks and Stress** (Priority = 0.241)
- **Corrosiveness of the soil surrounding the trunk line** (Priority = 0.109)
- **Age of the trunk line** (Priority = 0.043)
- **Age of the trunk line's cement mortar lining** (Priority = 0.036)

Figure A

QUESTIONNAIRE

PAIRWISE COMPARISON

Goal: Prioritize pipelines segments for capital expenditures

Compare the relative IMPORTANCE with respect to : GOAL

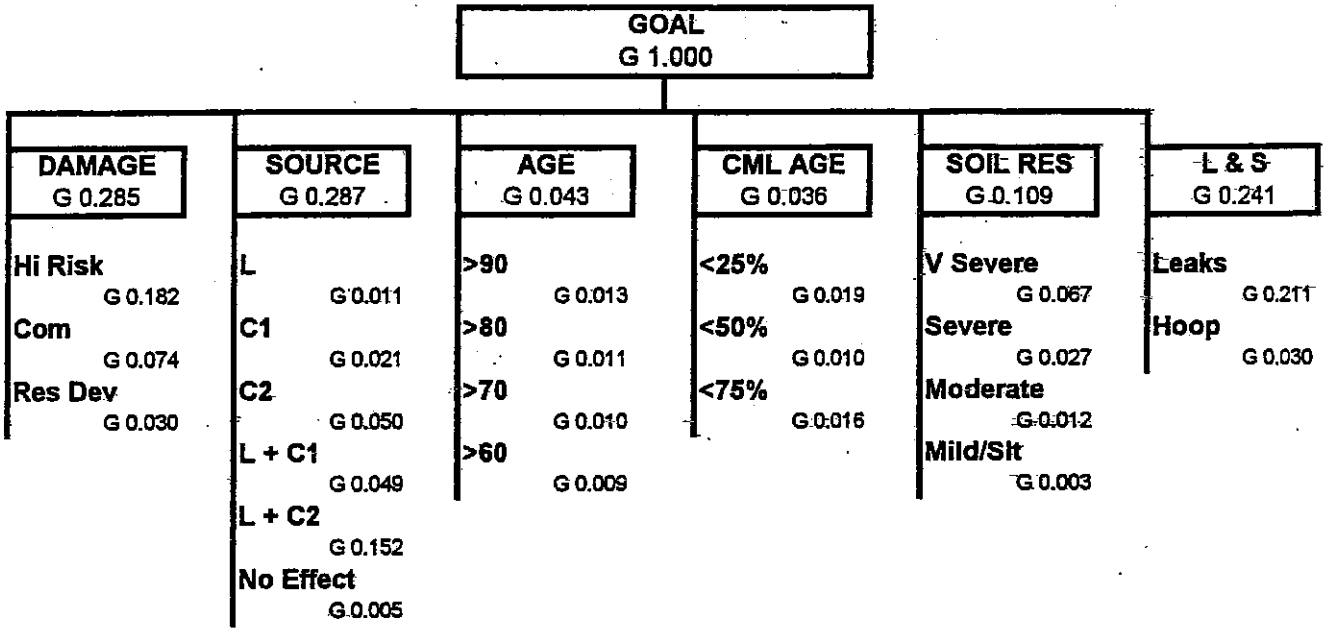
Circle one number percomparison below using the scale:
1 = EQUAL 3 = MODERATE 5 = STRONG 7 = VERY STRONG 9 = EXTREME

1	Damage	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Source
2	Damage	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Age
3	Damage	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Cml Age
4	Damage	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Soil Res.
5	Damage	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	L & S
6	Source	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Age
7	Source	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Cml Age
8	Source	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Soil Res.
9	Source	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	L & S
10	Age	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Cml Age
11	Age	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Soil Res.
12	Age	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	L & S
13	Cml Age	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	Soil Res.
14	Cml Age	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	L & S
15	Soil Res.	9 8 7 6 5 4 3 2 1 2 3 4 5 6 7 8 9	L & S

Age:	Age of pipes in years
Cml Age:	Age of cement lining expressed as % of age of pipe; Low % = worse condition
Damage:	Potential for damage to property, loss of life, and repair costs
L & S	Leaks and hoop stress
Soil Res.:	Soil resistivity
Source:	Cannot serve area either locally and/or in other zones till 7th day

Figure B

PRIORITIZING PIPELINE SEGMENTS FOR CAPITAL EXPENDITURES



<25%	The cement lining age is less than 25% of the pipe age
<50%	The cement lining age is less than 50% of the pipe age
<75%	The cement lining age is less than 75% of the pipe age
>60	Installed in the period of 1928 through 1940
>70	Installed in the period of 1918 through 1927
>80	Installed in the period of 1908 through 1917
>90	Installed before 1908
Age	Age of pipes in years
C1	Major outage in one or two service zones
C2	Major outages in more than two service zones
Cml Age	Age of cement lining expressed as % of age of pipe; Low % = worse condition
Com	Commercial development
Damage	Potential to damage to property, loss of life, and repair costs
Hi Risk	Unusual/important/high risk development
Hoop	Hoop stress in segment
L	Minor outage in one service zone (local outage)
L + C1	Minor outages in one service zone, and one or two other service zones experience outages, minor or major
L + C2	Minor outages in one service zone, and more than two other service zones experience outages, minor or major
L & S	Leaks and Hoop stress
Leaks	Leaks per block segment along the line
Mild/Slt	Resistivity is 5500 ohm cm or more
Moderate	Resistivity is 2500 ohm cm or more, but less than 5500 ohm cm
No Effect	No effect to customers
Res	Residential development
Severe	Resistivity is 1000 ohm cm or more, but less than 2500 ohm cm
Soil Res	Soil resistivity
Source	Cannot serve area either locally and/or other zones till 4th day
V Severe	Resistivity is less than 1000 ohm cm

G	**Global priority: Priority relative to goal**
	The goal is to prioritize pipeline segments for capital expenditures.

Rating (Expert Choice Score)

A trunk line consists of city block segments (CBS). A CBS is a segment of a trunk line in a city block or a segment with more or less the same length as adjacent blocks.

Each CBS is rated against each of the six criteria above. By selecting the proper "intensity", an Expert Choice Score (EC score) is produced for each segment. For example, rating intensities for the Soil Resistivity (Corrosiveness) criterion are Very Severe, Severe, Moderate, and Mild/Slight. For the Damage Potential the rating intensities are High Risk, Commercial, and Residential Development. The priorities for the rating intensities are then derived from the pairwise comparison process (See Figure B). The rating intensities are prioritized from worst condition to best condition, with the highest EC scores signifying the worst condition trunk lines.

Figure C shows how the EC score for Coronado Trunk Line was developed. Each CBS is rated against each criterion. For example, the Temple St. segment has ratings: COM (Commercial development) for DAMAGE potential, C1 (Major outage in one or two service zones) for Source, etc. Based on the rating intensities, the total EC score for segment Temple St. is 0.314. Detail of analysis for each trunk line is in Appendix B.

Significant Length

City block segments (CBS) in a continuous portion of a trunk line are grouped into one or more *significant segments*. A *significant segment* consists of one or more CBS. If a continuous portion of a trunk line consists of four or more CBS, each *significant segment* must consist of four or more continuous CBS. If a continuous portion of a trunk line consists of three or fewer CBS, there will be only one *significant segment*.

Significant segments in a continuous portion of a trunk line belong to either one of two sets. The first of the sets has the tendency of having an average EC score above the average EC score of the trunk line, the second set has the tendency of having an average EC score below the average EC score of all trunk line.

In the set that has the tendency of having an average EC score above the average EC score of the trunk line, a *significant segment* has the following properties:

- Average EC score is greater than or equal to the average EC score of the trunk line, or 50 percent the CBS in a *significant segment* have EC scores greater than or equal to the average EC score of the trunk line
- No continuous CBS of four or more segments with an average EC score less than the average EC score of the trunk line
- The last CBS adjoining to another *significant segment* that has the tendency of having an EC score less than the trunk line average should have an EC score greater than or equal to the average EC score of the trunk line.

Figure C

CORONADO TRUNK LINE - EXPERT CHOICE

Alternatives	TOTAL	DAMAGE	SOURCE	AGE	CML AGE	SOIL RES	L&S - LEAKS	HOOP
		0.2852	0.2867	0.043	0.0356	0.1087	0.2107	0.0301
Temple St.	0.314	COM	C1	>60	<50%	V SEVERE	0	<15,000
Plata St.	0.314	COM	C1	>60	<50%	V SEVERE	0	<15,000
London St.	0.245	RES DEV	C1	>60	<50%	V SEVERE	0	<15,000
Bellevue Ave.	0.324	COM	C1	>60	<50%	V SEVERE	>1	<15,000
Kent St.	0.314	COM	C1	>60	<50%	V SEVERE	0	<15,000
Marathon St.	0.314	COM	C1	>60	<50%	V SEVERE	0	<15,000
Coronado St.	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Benton Way	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Occidental Blvd.	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Sunset Blvd.	0.405	HI RISK	C1	>60	<50%	MODERATE	>1	<15,000
Reservoir St.	0.447	HI RISK	C1	>60	<50%	MODERATE	>5	<15,000
Silver Lake Blvd	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Berkeley Ave.	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Rendal Pl.	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000
Silver Lake Blvd.	0.314	COM	C1	>60	<50%	V SEVERE	0	<15,000
Swan Pl.	0.483	HI RISK	C1	>60	<50%	V SEVERE	0	<15,000

For legend, see Figure B

- The adjoining CBS in an adjoining *significant segment* that has the tendency of having an EC score less than the trunk line average should have an EC score less than the average EC scores of the trunk line

The length of a *significant segment* is a **significant length**.

Section 3 – Second Phase TCAP Results

Summary

The second phase TCAP provides a list of trunk line segments along with the ranking scores (See Figure A) and recommends that the first 50 trunk line segments in the priority list (206,105 feet or 39 miles) be replaced.

In addition to prioritizing the trunk lines, the second phase TCAP also observed the following facts:

- Soil Corrosiveness
  - * 27 % of the trunk lines are in very severely corrosive soil (<1000 Ohms cm)
  - * 46 % are in severely corrosive soil (<2500 Ohms cm)
  - * 22 % are in moderately corrosive soil (<5500 Ohms cm)
  - * 5 % in mildly corrosive soil (>=5500 Ohms cm)
- Leaks
  - * 49 out of 695 city block segments leaked
  - * 43 out of 695 city block segments leaked prior to cement lining
  - * 9 out of 695 city block segments leaked after cement lining
  - * 2 out of the 9 city block segments that leaked after cement lining had no leaks prior to cement lining

Maps

Two maps are included to help visualize the result of the second phase TCAP study. The map in Appendix C shows the locations of the trunk lines studied, and those trunk lines with higher priorities. The map in Appendix D shows the location of the trunk line segments in severely corrosive soil, those city block segments that have 3 or more leaks.

Analysis Detail of Each Trunk Line

Analysis detail provides more detail information for each city block segment (CBS) of all the trunk lines studied (See Appendix B). For each trunk line, it includes the location of the CBS, diameters, lengths, Expert Choice scores, *Significant lengths*, and graphs.

Appendix A

TCAP PHASE II PRIORITY LIST

No.	Trunk Line	Street	From	To	Diameter (in)	Length (ft)	Cumulative Length (ft)	ECSL**
1	36"-FRANKLIN	Franklin Av.	Garfield Pl.	Kenmore Av.	36	4,080	4,080	0.495
2	TEMPLE	Temple St.	Benton Way	Westlake Av.	30	3,055	7,135	0.464
3	TEMPLE	Temple St./Glendale Blvd.	Westlake Av.	Colton St.	30	3,180	10,315	0.460
4	HARBOR	Western Av.	75th St.	74th St.	36	330	10,645	0.458
5	HARBOR	Western Av.	120th St.	96th St.	31.4	7,750	18,395	0.458
6	CORONADO	Sunset Blvd./Silver Lake Blvd./Berkeley Ave./Rendal Pl./Effie St./West Silver Lk Dr.	Coronado St.	Van Pelt Pl.	40	5,855	24,250	0.455
7	STONE CANYON	Overland Av.	National Pl.	National Blv.	36	280	24,530	0.454
8	STONE CANYON	Overland Av.	National Blv.	Coventry Pl.	36	715	25,245	0.454
9	HARBOR	Normandie Av.	219th St.	Fransisco St.	31.4	8,015	33,260	0.453
10	DE SOTO	Canoga Av./Victory Blvd	Oxnard St.	De Soto Av.	36	6,140	39,400	0.451
11	HOLLYWOOD OUTLET	Washington Blvd.	Raymond Av.	Arapahoe St.	30	3,845	43,245	0.450
12	36"-FRANKLIN	Franklin Av.	Argyle Av.	Beachwood Dr.	36	1,200	44,445	0.442
13	FRANKLIN INLET	Coldwater Canyon Av.	Van Noord Av.	Oeste Av.	51 & 60	1,650	46,095	0.437
14	HASKELL	Noble Av.	Burbank Blvd.	Camarillo St.	60	5,290	51,385	0.425
15	HASKELL	LAR Complex/Haskell Av.	LAR Outlet Line (N214,850 E143,240)	Tulsa St.	60	5,090	56,475	0.420
16	HASKELL	Vanowen St./Noble Av.	Peach Av.	Archwood St.	60	2,305	58,780	0.417
17	HOLLYWOOD OUTLET	Cahuenga Blvd.	Odin St.	Hollywood Blvd.	40 & 36	3,650	62,430	0.417
18	ROSCOE	Hayvenhurst Av./Roscoe Blvd.	Roscoes Blvd.	Haskell Av.	48 & 52	4,785	67,215	0.412
19	STONE CANYON	Hilgard Av.	Warner Av.	Sunset Blv.	36	3,510	70,725	0.412
20	VANOWEN	Vanowen St.	Noble Av.	Van Nuys Blvd.	48	4,020	74,745	0.407
21	GRANADA	LAR Complex	Penstock 93"		36	170	74,915	0.406

TCAP PHASE II PRIORITY LIST

No.	Trunk Line	Street	From	To	Diameter (in)	Length (ft)	Cumulative Length (ft)	ECSL**
22	HAYVENHURST	Hayvenhurst PL./Hayvenhurst Av.	Roscoe Blvd.	Plummer St.	54	7,805	82,720	0.406
23	LA25 54"	LAR Complex	LA25 99" (N221,790 E139,540)		54	630	83,350	0.405
24	HARBOR	Normandie Av.	Fransisco St.	Rosecrans Av.	31.4	19,030	102,380	0.402
25	SUNSET WEST	Sunset Blv.	Stone Canyon Rd.	south of Mary Mount Pl.	36	730	103,110	0.400
26	HASKELL	Haskell Av.	Roscoe Blvd.	Vose St.	60	8,365	111,475	0.398
27	VANOWEN	Vanowen St.	Calhoun Av.	Sunnyslope Av.	48	4,655	116,130	0.396
28	36"-FRANKLIN	Franklin Av.	Beachwood Dr.	Garfield Pl.	36	3,205	119,335	0.394
29	RIVERSIDE	Glendale Blvd./Fletcher Dr.	Silver Ridge Ave.	Riverside Dr.	40	1,300	120,635	0.394
30	RIVERSIDE	Riverside Dr.	Clearwater St.	Gleneden St.	40	1,020	121,655	0.393
31	HOLLYWOOD OUTLET	Arden Blvd/Freemont Pl./Eighth St./Gramercy Pl.	Third St.	Pico Blvd.	36	11,035	132,690	0.392
32	HOLLYWOOD OUTLET	Washington Blvd.	Gramercy Pl.	Raymond Av.	30	4,735	137,425	0.391
33	30"-COLDWATER CANYON	Coldwater Canyon Av.	Ventura Blvd.	Moorpark St.	30	1,840	139,265	0.391
34	HARBOR	Normandie Av.	Lomita Blvd.	219th St.	31.4	11,690	150,955	0.390
35	HOLLYWOOD OUTLET	Washington Blvd.	Arapahoe St.	S. Figueroa St.	30	4,375	155,330	0.388
36	SOMMA	Bellagio WaySunset Blv.VeteranAv.Montana Av.	Bellagio Rd.	Sepulveda Blvd.	36 & 30	5,015	160,345	0.388
37	VANOWEN	Vanowen St.	Babcock Av.	Morella Av.	48	4,930	165,275	0.384
38	30" No.39352 East	LAR Complex	54" N0.40245 LA25 MWD Connection		30	100	165375	0.382
39	30" No.39352 West	LAR Complex	54" N0.40245 LA25 MWD Connection		30	75	165,450	0.382
40	HASKELL	Haskell Av.	Devonshire st.	Parthenia St.	60	10,605	176,055	0.373
41	HOLLYWOOD INLET	Tujunga Av.		Sarah St.	51	570	176,625	0.373
42	HOLLYWOOD INLET	Easement	N173.32		51	740	177,365	0.373
43	RIVERSIDE	Riverside Dr.	Newell St	Avenue Nineteen	40	1,430	178,795	0.372
44	HOLLYWOOD INLET	Easement	N175.96		51	690	179,485	0.358

TCAP PHASE II PRIORITY LIST

No.	Trunk Line	Street	From	To	Diameter (in)	Length (ft)	Cumulative Length (ft)	ECSL**
45	STONE CANYON	Sepulveda Blvd.	Bankfield Av.	Slauson Av.	36	1,515	181,000	0.347
46	HOLLYWOOD OUTLET	Cahuenga Blvd./Melrose Ave./Rossmore Ave./Arden Pl/Arden Blvd	Hollywood Blvd	Third St.	36	11,360	192,360	0.329
47	STONE CANYON	Sepulveda Blvd./Jefferson Blvd.	Slauson Av.	Hazelton Av.	36	4,935	197,295	0.328
48	HOLLYWOOD INLET	Radford Ave./Easement	Calvert St.		51	2,135	199,430	0.327
49	ELYSIAN OUTLET	Elysian Reservoir	N141.04-E218.3		40	1,265	200,695	0.315
50	STONE CANYON OUTLET	Stone Canyon Rd.	Lower Stone Canyon Reservoir outlet structure	Somma Way	60	5,410	206,105	0.313
51	CORONADO	Coronado St.	Temple St.	Sunset Blvd.	40	3,020	209,125	0.304
52	SOMMA	Somma Way/Easement/Chantilly Rd./Chalon Rd./Tarcuto Way	Stone Canyon Rd.	Bellagio Rd.	36	7,075	216,200	0.302
53	HOLLYWOOD OUTLET	Outlet tower/Deep Dell Dr./Holly Dr./Granada Dr./Odin St.	Hollywood Dam	Cahuenga Blvd.	5 & 45 & 4	2,700	218,900	0.292
54	43RD STREET	43rd St.	Figueroa St.	McKinley Av.	30	6,315	225,215	0.286
55	HASKELL	Noble Av.	Archwood St.	Burbank Blvd.	60	7,650	232,865	0.286
56	EIGHT STREET	Eighth St.	Gramercy Pl.	Western Av.	36	1,250	234,115	0.270
57	STONE CANYON	Sepulveda Blvd.	Century Blv.	Bankfield Av.	36	13,400	247,515	0.270
58	HARBOR	Vermont Av./Normandie Av.	Anaheim St	Lomita Blvd.	31.4	5,750	253,265	0.264
59	STONE CANYON	Jefferson Blv./Overland Av.	Hazelton Av.	National Pl.	36	11,590	264,855	0.261
60	VANOWEN	Vanowen St.	Van Nuys Blvd.	Calhoun Av.	48	2,010	266,865	0.254
61	VANOWEN	Vanowen St.	Sunnyslope Av.	Babcock Av.	48	5,990	272,855	0.253
62	STONE CANYON	Century Blvd.	Western Av.	Sepulveda Blvd.	36	25,710	298,565	0.248
63	HASKELL	Haskell Av.	Parthenia St.	Roscoe Blvd.	60	3,020	301,585	0.247
64	HASKELL	Haskell Av.	Tulsa St.	Devonshire st.	60	3,925	305,510	0.247
65	HASKELL	Haskell Av./Vanowen St.	Vose St.	Peach Av.	60	3,955	309,465	0.247
66	HARBOR	Normandie Av./135th St./Halldale Av./Western Av.	Rosecrans Av.	120th St.	31.4	10,760	320,225	0.242
67	HOLLYWOOD INLET	Elmer Ave.	Landale St.	Bluffside Dr.	51	5,940	326,165	0.238

TCAP PHASE II PRIORITY LIST

No.	Trunk Line	Street	From	To	Diameter (in)	Length (ft)	Cumulative Length (ft)	ECSL**
68	HASKELL	Noble Av.	Camarillo St.	Kester Av.	60	3,270	329,435	0.237
69	HOLLYWOOD OUTLET	Gramercy Pl.	Pico Blvd.	Washington Blvd.	36	2,620	332,055	0.229
70	PICKFORD	Pickford St.	Cloverdale Ave.	S. Longwood Av.	30	2,535	334,590	0.227
71	43RD STREET	43rd St.	Walton Av.	Figueroa St.	30	3,685	338,275	0.224
72	43RD STREET	43rd St./Ascot Av./43rd Pl./Compton Av.	McKinley Av.	Vernon Av.	30	4,585	342,860	0.219
73	HOLLYWOOD INLET	Morella Ave./Archwood St./Radford Ave.	Vanowen St.	Calvert St.	51	5,295	348,155	0.210
74	TERRA BELLA	Easement	Montague St.		30	605	348,760	0.209
75	43RD STREET	41st Pl./Raymond Av./43rd St.	Western Av.	Walton Av.	30	5,270	354,030	0.192
76	STONE CANYON	Overland Av./Easement/Putney Rd./Manning Av./Lindbrook Dr./Warner Av.	Coventry Pl.	Warner Av.	36	16,605	370,635	0.184
77	RIVERSIDE	Silver Lake reservoir	N149.3-E207.9		72	390	371,025	0.168
78	VNPS#1 DISCHARGE	LAR Complex	54" No.40245 LA25		36	160	371,185	0.168
79	STONE CANYON	Stone Canyon Rd.	Sunset Blv.	South of Stone Cyn. Reservoir	36	11,560	382,745	0.153
80	UPPER HOLLYWOOD RESERVOIR OUTLET	Upper Hollywood Reservoir/Lower Hollywood Reservoir	Upper Tower	Dam	45	3,660	386,405	0.150
							Average ECSL =	**0.340**

Notes:

** ECSL = Expert Choice Score of Significant Length
The higher the ECSL, the worse the condition of the trunk line is.

Appendix B

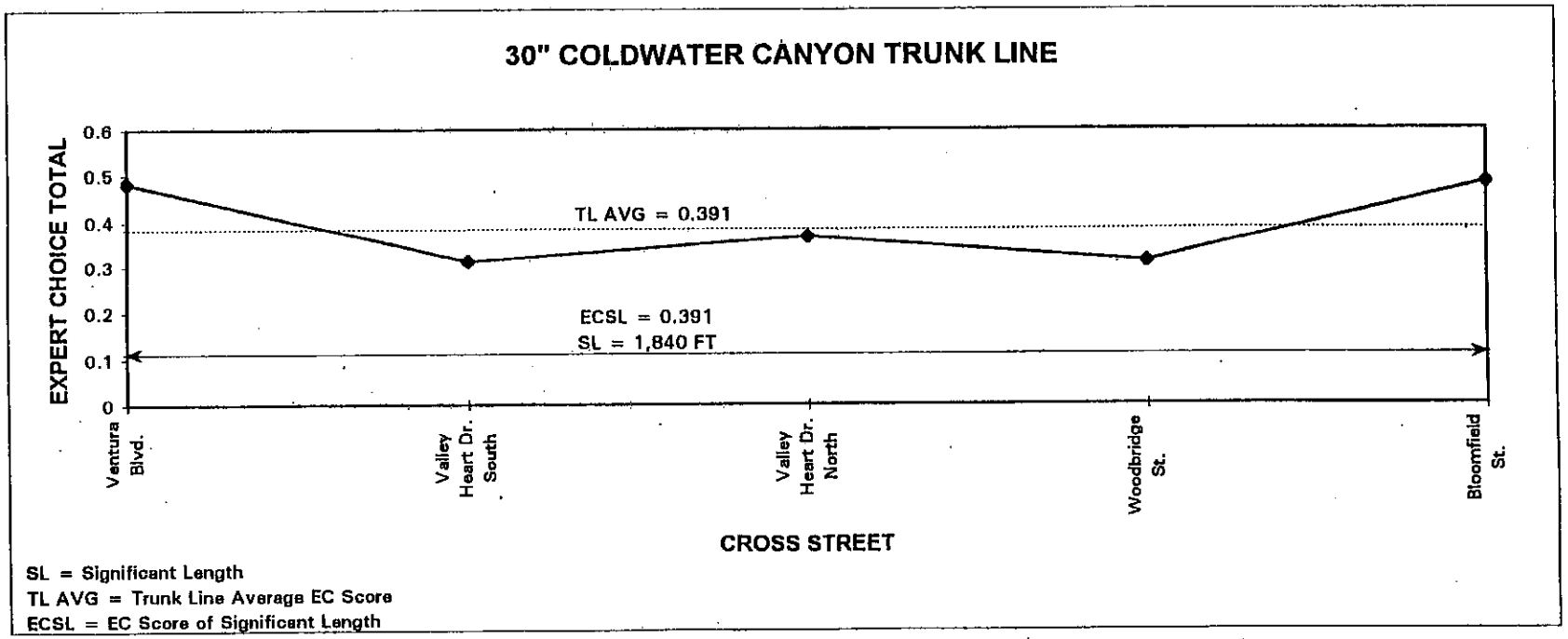
TCAP PHASE II ANALYSIS DETAIL

Analysis detail provides information for each block-segment in a trunk line.
Trunk lines have been organized in an alphabetical order of the name of the trunk lines

30" COLDWATER CANYON TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Coldwater Canyon Av.	Ventura Blvd.	30	N 1000	1000	430	0.482		
Coldwater Canyon Av.	Valley Heart Dr. South	30	N 1430	1430	260	0.312		
Coldwater Canyon Av.	Valley Heart Dr. North	30	N 1690	1690	370	0.365		
Coldwater Canyon Av.	Woodbridge St.	30	N 2060	2060	400	0.312		
Coldwater Canyon Av.	Bloomfield St.	30	N 2460	2460	380	0.482	0.391	1840

AVERAGE (TL AVG) = 0.391



30" No.39352 East Line

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
LAR Complex	54" NO.40245 LA25 MWD Connection	30	N 1000	1000	100	0.382

AVERAGE (TL AVG) = 0.382

Significant Length = 100 feet

30" No.39352 West Line

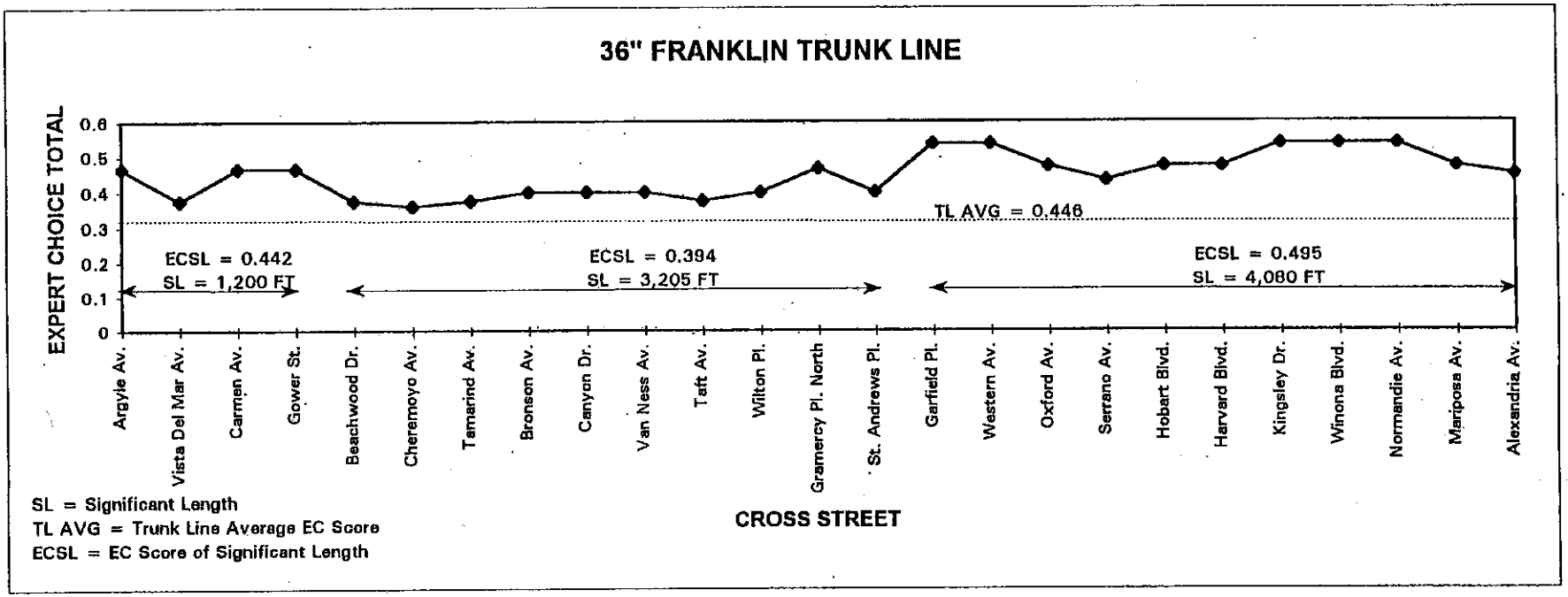
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
LAR Complex	54" NO.40245 LA25 MWD Connection	30	N 1000	1000	75	0.382

AVERAGE (TL AVG) = 0.382

Significant Length = 75 feet

36" FRANKLIN TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Franklin Av.	Argyle Av.	36	E 1000	1000	375	0.464		
Franklin Av.	Vista Del Mar Av.	36	E 1375	1375	315	0.375		
Franklin Av.	Carmen Av.	36	E 1690	1690	170	0.464		
Franklin Av.	Gower St.	36	E 1860	1860	340	0.464	0.442	1200
Franklin Av.	Beachwood Dr.	36	E 2200	2200	250	0.375		
Franklin Av.	Cheremoyo Av.	36	E 2450	2450	370	0.36		
Franklin Av.	Tamarind Av.	36	E 2820	2820	370	0.375		
Franklin Av.	Bronson Av.	36	E 3190	3190	330	0.399		
Franklin Av.	Canyon Dr.	36	E 3520	3520	335	0.399		
Franklin Av.	Van Ness Av.	36	E 3855	3855	335	0.399		
Franklin Av.	Taft Av.	36	E 4190	4190	330	0.375		
Franklin Av.	Wilton Pl.	36	E 4520	4520	320	0.399		
Franklin Av.	Gramercy Pl. North	36	E 4840	4840	320	0.464		
Franklin Av.	St. Andrews Pl.	36	E 5160	5160	245	0.399	0.394	3205
Franklin Av.	Garfield Pl.	36	E 5405	5405	430	0.536		
Franklin Av.	Western Av.	36	E 5835	5835	340	0.536		
Franklin Av.	Oxford Av.	36	E 6175	6175	320	0.471		
Franklin Av.	Serrano Av.	36	E 6495	6495	335	0.431		
Franklin Av.	Hobart Blvd.	36	E 6830	6830	300	0.471		
Franklin Av.	Harvard Blvd.	36	E 7130	7130	460	0.471		
Franklin Av.	Kingsley Dr.	36	E 7590	7590	450	0.536		
Franklin Av.	Winona Blvd.	36	E 8040	8040	445	0.536		
Franklin Av.	Normandie Av.	36	E 8485	8485	330	0.536		
Franklin Av.	Mariposa Av.	36	E 8815	8815	335	0.471		
Franklin Av.	Alexandria Av.	36	E 9150	9150	335	0.447	0.495	4080
				AVERAGE (TL AVG) =		**0.446**		


36" FRANKLIN TRUNK LINE
EXPERT CHOICE TOTAL
0.6
0.5
0.4
0.3
0.2
0.1
0
TL AVG = 0.446
ECSL = 0.442
SL = 1,200 FT
ECSL = 0.394
SL = 3,205 FT
ECSL = 0.495
SL = 4,080 FT
Argyle Av.
Vista Del Mar Av.
Carmen Av.
Gower St.
Beachwood Dr.
Cheremoyo Av.
Tamarind Av.
Bronson Av.
Canyon Dr.
Van Ness Av.
Taft Av.
Wilton Pl.
Gramercy Pl. North
St. Andrews Pl.
Garfield Pl.
Western Av.
Oxford Av.
Serrano Av.
Hobart Blvd.
Harvard Blvd.
Kingsley Dr.
Winona Blvd.
Normandie Av.
Mariposa Av.
Alexandria Av.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

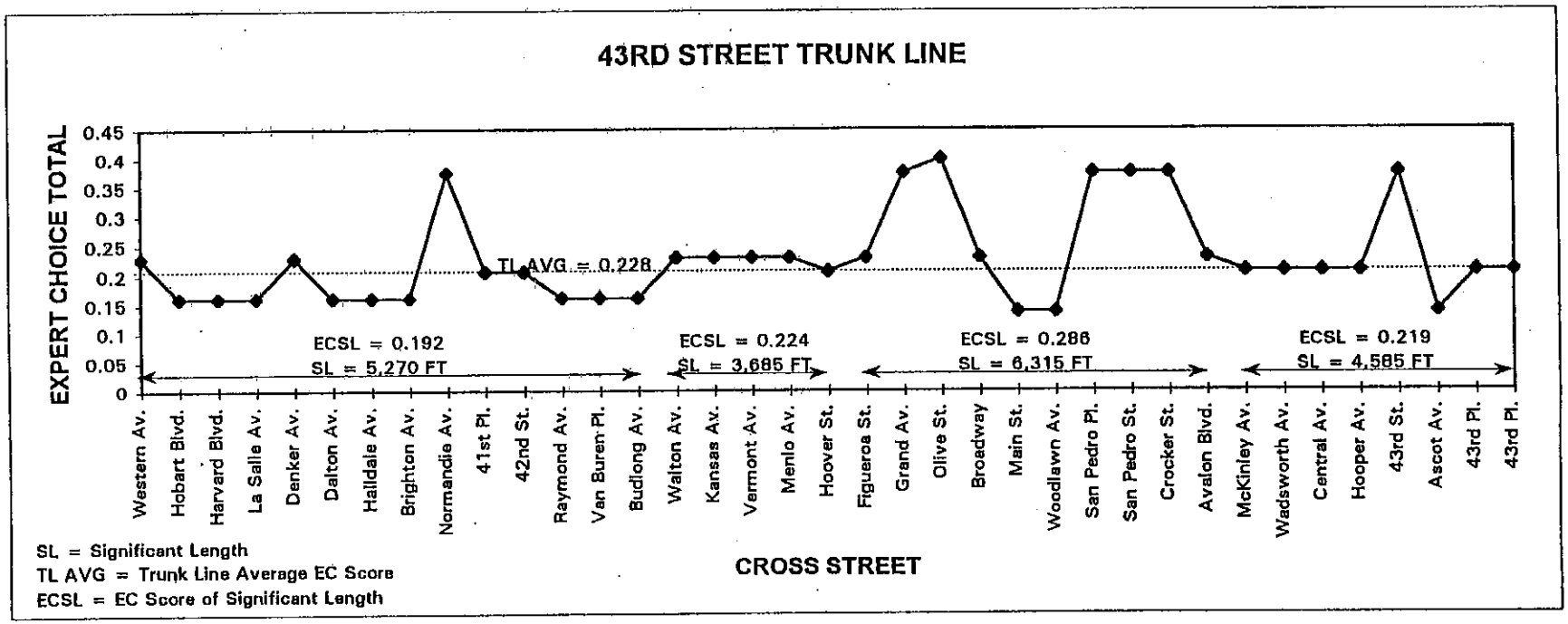
43RD STREET TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
41st Pl.	Western Av.	30	E 1000	1000	350	0.229		
41st Pl.	Hobart Blvd.	30	E 1350	1350	320	0.161		
41st Pl.	Harvard Blvd.	30	E 1670	1670	320	0.161		
41st Pl.	La Salle Av.	30	E 1990	1990	350	0.161		
41st Pl.	Denker Av.	30	E 2340	2340	330	0.229		
41st Pl.	Dalton Av.	30	E 2670	2670	340	0.161		
41st Pl.	Halldale Av.	30	E 3010	3010	325	0.161		
41st Pl.	Brighton Av.	30	E 3335	3335	320	0.161		
41st Pl.	Normandie Av.	30	E 3655	3655	675	0.375		
Raymond Av.	41st Pl.	30	S 4330	4330	320	0.206		
Raymond Av.	42nd St.	30	S 4650	4650	650	0.206		
43rd St.	Raymond Av.	30	E 5300	5300	320	0.161		
43rd St.	Van Buren Pl.	30	E 5620	5620	325	0.161		
43rd St.	Budlong Av.	30	E 5945	5945	325	0.161	0.192	5270
43rd St.	Walton Av.	30	E 6270	6270	330	0.229		
43rd St.	Kansas Av.	30	E 6600	6600	650	0.229		
43rd St.	Vermont Av.	30	E 7250	7250	480	0.229		
43rd St.	Menlo Av.	30	E 7730	7730	865	0.229		
43rd St.	Hoover St.	30	E 8595	8595	1360	0.206	0.224	3685

43RD STREET TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
43rd St.	Figueroa St.	30	E 9955	9955	360	0.229		
43rd St.	Grand Av.	30	E 10315	10315	330	0.375		
43rd St.	Olive St.	30	E 10645	10645	335	0.399		
43rd St.	Broadway	30	E 10980	10980	1320	0.229		
43rd St.	Main St.	30	E 12300	12300	360	0.137		
43rd St.	Woodlawn Av.	30	E 12660	12660	410	0.137		
43rd St.	San Pedro Pl.	30	E 13070	13070	550	0.375		
43rd St.	San Pedro St.	30	E 13620	13620	340	0.375		
43rd St.	Crocker St.	30	E 13960	13960	990	0.375		
43rd St.	Avalon Blvd.	30	E 14950	14950	1320	0.229	0.286	6315
43rd St.	McKinley Av.	30	E 16270	16270	635	0.206		
43rd St.	Wadsworth Av.	30	E 16905	16905	685	0.206		
43rd St.	Central Av.	30	E 17590	17590	1320	0.206		
43rd St.	Hooper Av.	30	E 18910	18910	700	0.206		
Ascot Av	43rd St.	30	S 19610	19610	210	0.375		
43rd Pl.	Ascot Av.	30	E 19820	19820	765	0.137		
Compton Av.	43rd Pl.	30	E 20585	20585	90	0.206		
Compton Av.	43rd Pl.	30	E 21025	21025	180	0.206	0.219	4585

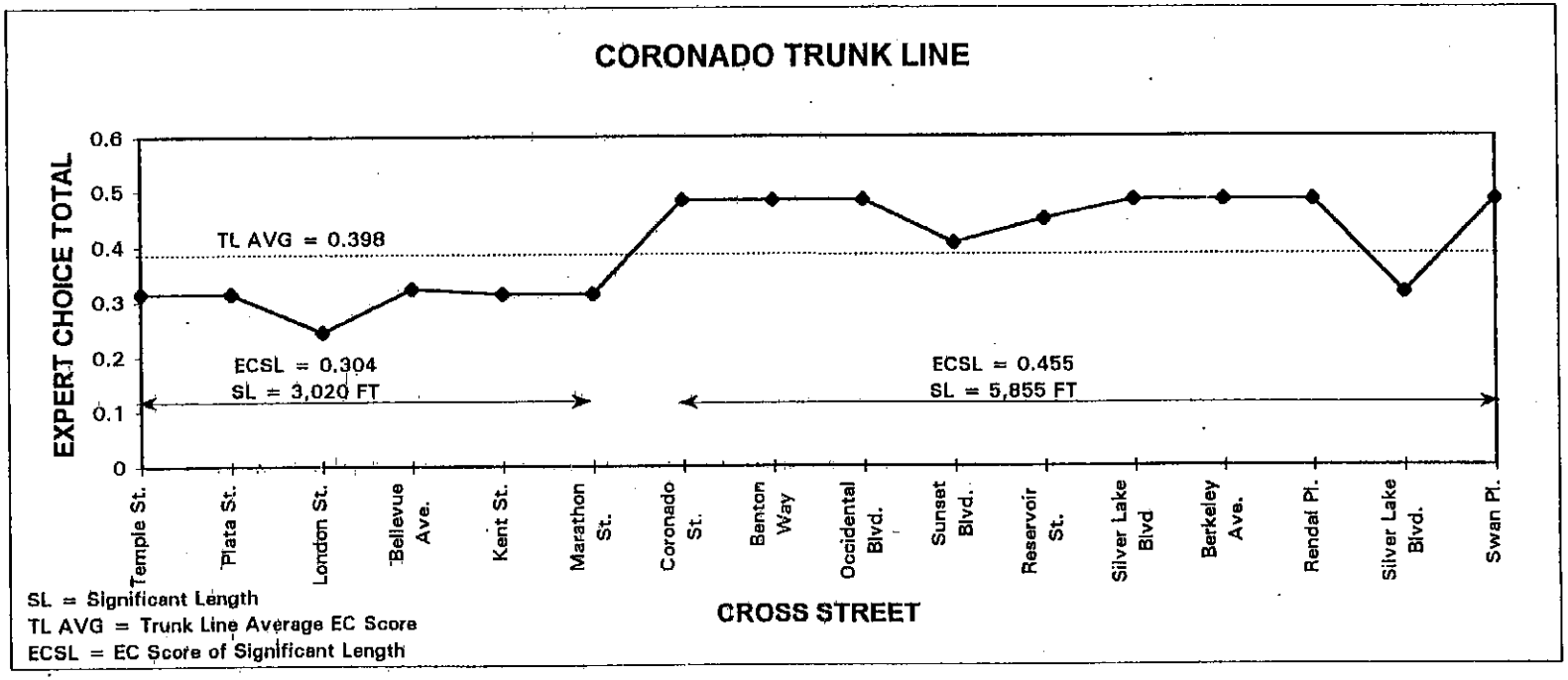
AVERAGE (TL AVG) = 0.228


43RD STREET TRUNK LINE
EXPERT CHOICE TOTAL
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.228
ECSL = 0.192
SL = 5,270 FT
ECSL = 0.224
SL = 3,685 FT
ECSL = 0.286
SL = 6,315 FT
ECSL = 0.219
SL = 4,585 FT
Western Av.
Hobart Blvd.
Harvard Blvd.
La Salle Av.
Denker Av.
Dalton Av.
Halldale Av.
Brighton Av.
Normandie Av.
41st Pl.
42nd St.
Raymond Av.
Van Buren Pl.
Budlong Av.
Walton Av.
Kansas Av.
Vermont Av.
Menlo Av.
Hoover St.
Figueroa St.
Grand Av.
Olive St.
Broadway
Main St.
Woodlawn Av.
San Pedro Pl.
San Pedro St.
Crocker St.
Avalon Blvd.
McKinley Av.
Wadsworth Av.
Central Av.
Hooper Av.
43rd St.
Ascot Av.
43rd Pl.
43rd Pl.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

CORONADO TRUNK LINE

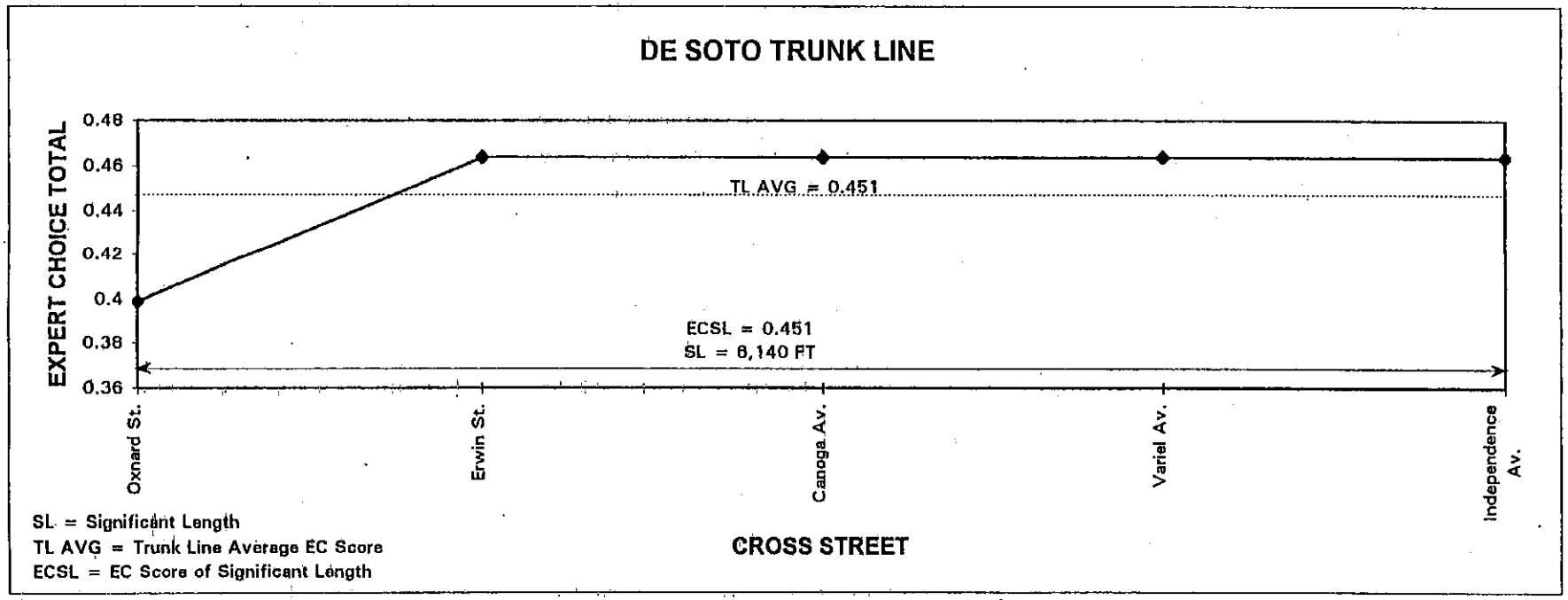
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Coronado St.	Temple St.	40	N 1000	1040	440	0.314		
Coronado St.	Plata St.	40	N 1480	1480	310	0.314		
Coronado St.	London St.	40	N 1790	1790	435	0.245		
Coronado St.	Bellevue Ave.	40	N 2225	2225	660	0.324		
Coronado St.	Kent St.	40	N 2885	2885	610	0.314		
Coronado St.	Marathon St.	40	N 3495	3495	565	0.314	0.304	3020
Sunset Blvd.	Coronado St.	40	N 4060	4060	530	0.483		
Sunset Blvd.	Benton Way	40	N 4590	4590	750	0.483		
Sunset Blvd.	Occidental Blvd.	40	N 5340	5340	490	0.483		
Silver Lake Blvd.	Sunset Blvd.	40	N 5830	5830	260	0.405		
Silver Lake Blvd.	Reservoir St.	40	N 6090	6090	1470	0.447		
Berkeley Ave.	Silver Lake Blvd	40	N 7560	7560	130	0.483		
Rendal Pl.	Berkeley Ave.	40	N 7690	7690	1040	0.483		
Effie St	Rendal Pl.	40	N 8730	8730	155	0.483		
West Silver Lk Dr.	Silver Lake Blvd.	40	N 8885	8885	680	0.314		
West Silver Lk Dr.	Swan Pl.	40	N 9565	9565	350	0.483	0.455	5855

AVERAGE (TL AVG) = 0.398


CORONADO TRUNK LINE
EXPERT CHOICE TOTAL
0.6
0.5
0.4
0.3
0.2
0.1
0
TL AVG = 0.398
ECSL = 0.304
SL = 3,020 FT
ECSL = 0.455
SL = 5,855 FT
Temple St.
Plata St.
London St.
Bellevue Ave.
Kent St.
Marathon St.
Coronado St.
Benton Way
Occidental Blvd.
Sunset Blvd.
Reservoir St.
Silver Lake Blvd
Berkeley Ave.
Rendal Pl.
Silver Lake Blvd.
Swan Pl.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

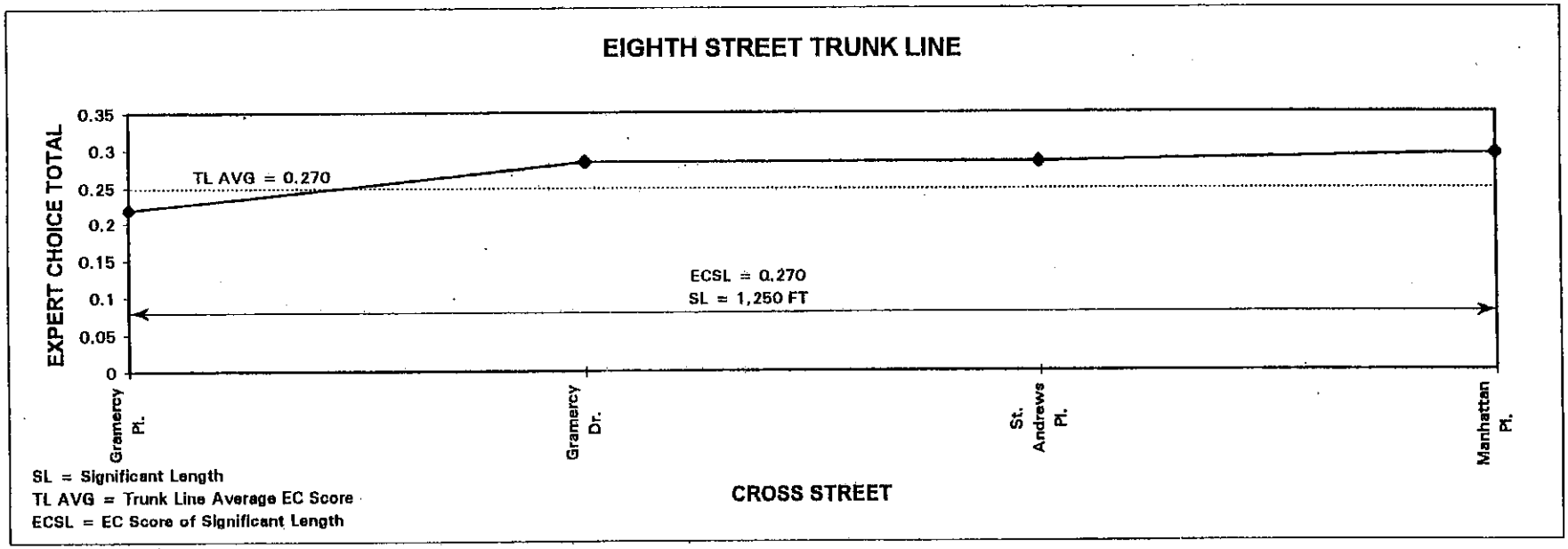
DE SOTO TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Canoga Av.	Oxnard St.	36	N 1000	1000	1320	0.399		
Canoga Av.	Erwin St.	36	N 2320	2320	2005	0.464		
Victory Blvd	Canoga Av.	36	N 4325	4325	1450	0.464		
Victory Blvd	Variel Av.	36	N 5775	5775	675	0.464		
Victory Blvd	Independence Av.	36	N 6450	6450	690	0.464	0.451	6140
					AVERAGE (TL AVG) =	0.451		



EIGHTH STREET TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Eighth St.	Gramercy Pl.	36	E 1000	1000	310	0.219		
Eighth St.	Gramercy Dr.	36	E 1310	1310	310	0.284		
Eighth St.	St. Andrews Pl.	36	E 1620	1620	310	0.284		
Eighth St.	Manhattan Pl.	36	E 1930	1930	320	0.294	0.270	1250
				AVERAGE (TL AVG) =		0.270		



ELYSIAN OUTLET

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
Elysian Reservoir	N141.04-E218.3	40	S1000	1000	1265	0.315

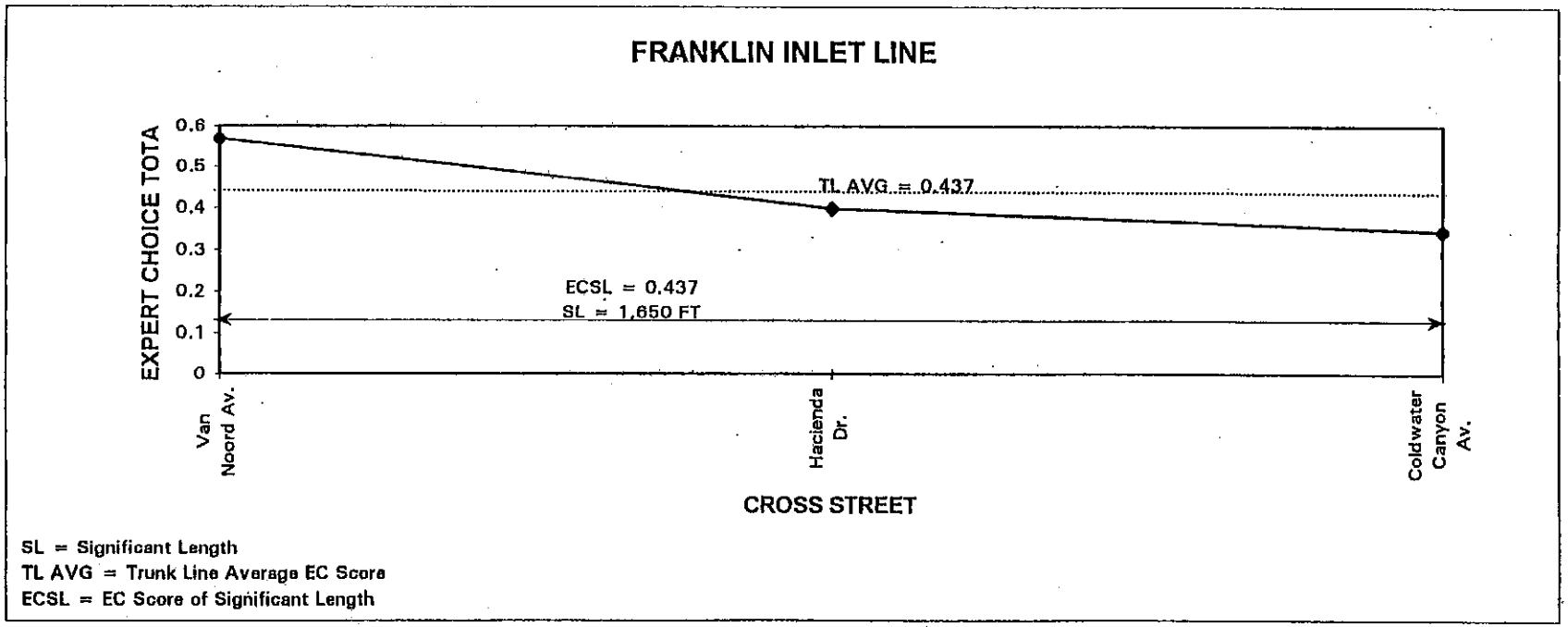
AVERAGE (TL AVG) = 0.315

Significant Length = 1265 feet

FRANKLIN INLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Coldwater Canyon Av.	Van Noord Av.	51	S 1000	1220	870	0.568		
Coldwater Canyon Av.	Hacienda Dr.	60	S 2070	2090	530	0.398		
Avenida Del Sol	Coldwater Canyon Av.	60	S 2620	2620	250	0.346	0.437	1650

AVERAGE (TL AVG) = 0.437



SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

GRANADA TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
LAR Complex	Penstock 93"	36	E 1000	1000	170	0.406

AVERAGE (TL AVG) = 0.406

Significant Length = 170 feet

HARBOR TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Vermont Av.	Anaheim St	31.4	N 1000	1160	1410	0.458		
Normandie Av.	Vermont Av.	31.4	N 2570	2570	1480	0.458		
Normandie Av.	Pacific Coast Hwy	31.4	N 4050	4050	360	0.223		
Normandie Av.	257th St.	31.4	N 4410	4410	340	0.223		
Normandie Av.	256th St.	31.4	N 4750	4750	340	0.223		
Normandie Av.	255th St.	31.4	N 5090	5090	350	0.223		
Normandie Av.	254th St.	31.4	N 5440	5440	350	0.223		
Normandie Av.	253th St.	31.4	N 5790	5790	380	0.2		
Normandie Av.	252nd St.	31.4	N 6170	6170	360	0.184		
Normandie Av.	251st St.	31.4	N 6530	6530	380	0.223	0.264	5,750
Normandie Av.	Lomita Blvd.	31.4	N 6910	6910	4550	0.354		
Normandie Av.	Oakheath Dr.	31.4	N 11460	11460	1180	0.369		
Normandie Av.	Sepulveda Blvd.	31.4	N 12640	12640	1400	0.369		
Normandie Av.	Storm Parkway	31.4	N 14040	14040	750	0.354		
Normandie Av.	228th St.	31.4	N 14790	14790	1250	0.354		
Normandie Av.	225th St.	31.4	N 16040	16040	830	0.458		
Normandie Av.	223rd St.	31.4	N 16870	16870	440	0.393		
Normandie Av.	222nd St.	31.4	N 17310	17310	420	0.458		
Normandie Av.	221st St.	31.4	N 17730	17730	420	0.393		
Normandie Av.	220th St.	31.4	N 18150	18150	450	0.393	0.390	11,690

HARBOR TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Normandie Av.	219th St.	31.4	N 18600	18600	420	0.458		
Normandie Av.	218th St.	31.4	N 19020	19020	450	0.458		
Normandie Av.	Carson St.	31.4	N 19470	19470	380	0.458		
Normandie Av.	216th St.	31.4	N 19850	19850	700	0.458		
Normandie Av.	214th St.	31.4	N 20550	20550	230	0.458		
Normandie Av.	213th St.	31.4	N 20780	20780	550	0.458		
Normandie Av.	212nd St.	31.4	N 21330	21330	550	0.458		
Normandie Av.	211th St.	31.4	N 21880	21880	730	0.458		
Normandie Av.	209th St.	31.4	N 22610	22610	730	0.393		
Normandie Av.	Torrance Blvd.	31.4	N 23340	23340	830	0.458		
Normandie Av.	Milton St.	31.4	N 24170	24170	720	0.458		
Normandie Av.	Maple St.	31.4	N 24890	24890	290	0.458		
Normandie Av.	Del Amo Blvd.	31.4	N 25180	25180	705	0.458		
Normandie Av.	Jon St.	31.4	N 25885	25885	730	0.458	0.453	8,015

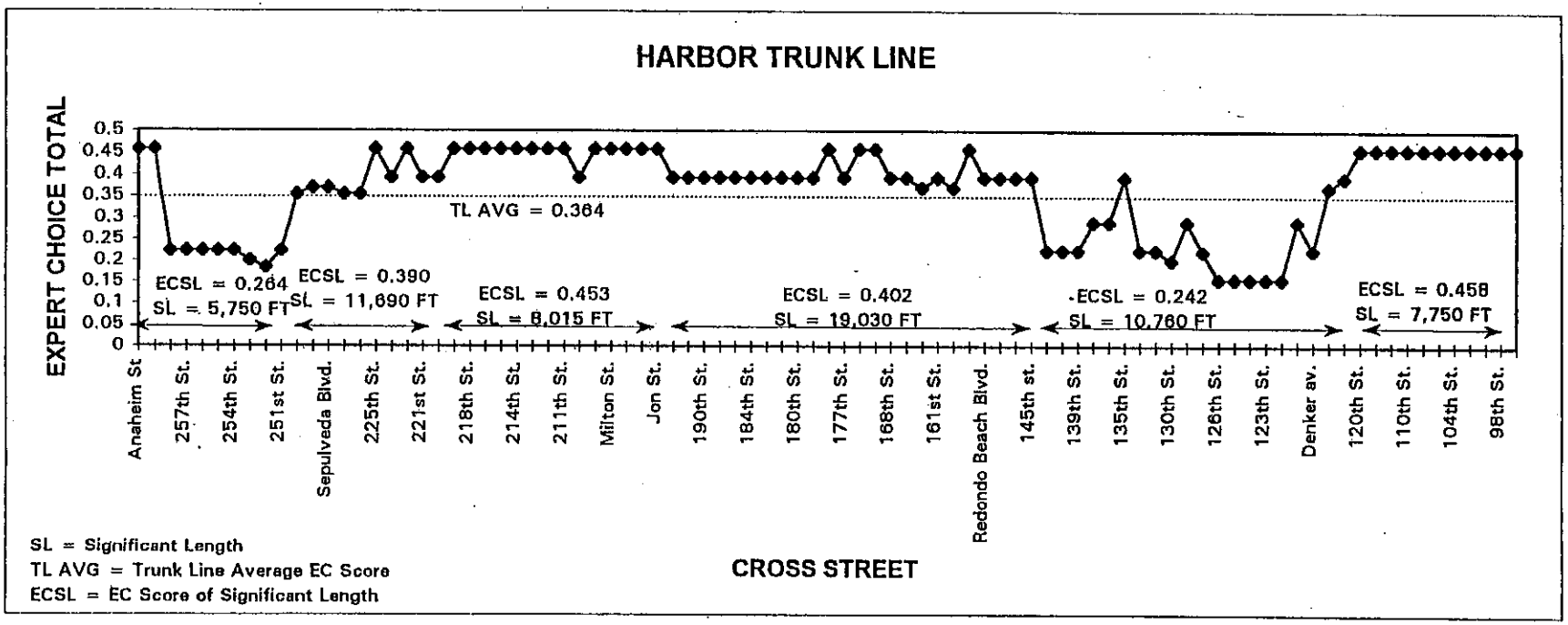
HARBOR TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Normandie Av.	Fransisco St.	31.4	N 26615	26615	1450	0.393		
Normandie Av.	Knox St.	31.4	N 28065	28065	1500	0.393		
Normandie Av.	190th St.	31.4	N 29565	29565	1350	0.393		
Normandie Av.	186th St.	31.4	N 30915	30915	330	0.393		
Normandie Av.	185th St.	31.4	N 31245	31245	340	0.393		
Normandie Av.	184th St.	31.4	N 31585	31585	330	0.393		
Normandie Av.	183th St.	31.4	N 31915	31915	300	0.393		
Normandie Av.	Electric St.	31.4	N 32215	32215	470	0.393		
Normandie Av.	180th St.	31.4	N 32685	32685	440	0.393		
Normandie Av.	179th St.	31.4	N 33125	33125	430	0.393		
Normandie Av.	178th St.	31.4	N 33555	33555	460	0.458		
Normandie Av.	177th St.	31.4	N 34015	34015	440	0.393		
Normandie Av.	Cassidy St.	31.4	N 34455	34455	530	0.458		
Normandie Av.	174th St.	31.4	N 34985	34985	2230	0.458		
Normandie Av.	168th St.	31.4	N 37215	37215	470	0.393		
Normandie Av.	166th St.	31.4	N 37685	37685	770	0.393		
Normandie Av.	164th St.	31.4	N 38455	38455	1000	0.369		
Normandie Av.	161st St.	31.4	N 39455	39455	890	0.393		
Normandie Av.	158th St.	31.4	N 40345	40345	445	0.369		
Normandie Av.	Magnolia Av.	31.4	N 40790	40790	1090	0.458		
Normandie Av.	Redondo Beach Blvd.	31.4	N 41880	41880	1220	0.393		
Normandie Av.	Marine Av.	31.4	N 43100	43100	1585	0.393		
Normandie Av.	146th St.	31.4	N 44685	44685	410	0.393		
Normandie Av.	145th st.	31.4	N 45095	45095	550	0.393	0.402	19,030

HARBOR TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Normandie Av.	Rosecrans Av.	31.4	N 45645	45645	680	0.223		
Normandie Av.	141st St.	31.4	N 46325	46325	650	0.223		
Normandie Av.	139th St.	31.4	N 46975	46975	680	0.223		
Normandie Av.	137th St.	31.4	N 47655	47655	640	0.289		
135th St.	Normandie Av.	31.4	N 48295	48295	570	0.289		
Halldale Av.	135th St.	31.4	N 48865	48865	600	0.393		
Halldale Av.	134th St.	31.4	N 49465	49465	670	0.223		
Halldale Av.	132nd St.	31.4	N 50135	50135	690	0.223		
Halldale Av.	130th St.	31.4	N 50825	50825	700	0.2		
Halldale Av.	El Segundo Blvd.	31.4	N 51525	51525	350	0.289		
Halldale Av.	127th St.	31.4	N 51875	51875	340	0.22		
Halldale Av.	126th St.	31.4	N 52215	52215	370	0.155		
Halldale Av.	125th St.	31.4	N 52585	52585	300	0.155		
Halldale Av.	124th St.	31.4	N 52885	52885	360	0.155		
Halldale Av.	123th St.	31.4	N 53245	53245	300	0.155		
Halldale Av.	122nd St.	31.4	N 53545	53545	380	0.155		
121st St.	Halldale Av.	31.4	W 53925	53925	700	0.289		
121st St.	Denker av.	31.4	W 54625	54625	670	0.223		
121st St.	Harvard Blvd.	31.4	W 55295	55295	690	0.369		
Western Av.	121st St.	31.4	N 55985	55985	420	0.393	0.242	10,760
Western Av.	120th St.	31.4	N 56345	57205	1680	0.458		
Western Av.	Imperial Hwy	31.4	N 58885	58885	1030	0.458		
Western Av.	111th St.	31.4	N 59915	59915	530	0.458		
Western Av.	110th St.	31.4	N 60445	60445	1080	0.458		
Western Av.	108th St.	31.4	N 61525	61525	650	0.458		
Western Av.	106th St.	31.4	N 62175	62175	660	0.458		
Western Av.	104th St.	31.4	N 62835	62835	500	0.458		
Western Av.	103th St.	31.4	N 63335	63335	810	0.458		
Western Av.	Century Blvd.	31.4	N 64145	64145	520	0.458		
Western Av.	98th St.	31.4	N 64665	64665	290	0.458	0.458	7,750
Western Av.	75th St.	36	N 73745	73745	330	0.458	0.458	330

AVERAGE (TL AVG) = 0.364


HARBOR TRUNK LINE
EXPERT CHOICE TOTAL
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.364
ECSL = 0.264
SL = 5,750 FT
ECSL = 0.390
SL = 11,690 FT
ECSL = 0.453
SL = 8,015 FT
ECSL = 0.402
SL = 19,030 FT
ECSL = 0.242
SL = 10,760 FT
ECSL = 0.458
SL = 7,750 FT
Anaheim St
257th St.
254th St.
251st St.
Sepulveda Blvd.
225th St.
221st St.
218th St.
214th St.
211th St.
Milton St.
Jon St.
190th St.
184th St.
180th St.
177th St.
168th St.
161st St.
Redondo Beach Blvd.
145th st.
139th St.
135th St.
130th St.
126th St.
123th St.
Denker av.
120th St.
110th St.
104th St.
98th St.
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length
CROSS STREET

HASKELL TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
LAR Complex	LAR Outlet Line (N214,850 E143,240)	60	S 1000	1000	1105	0.417		
Haskell Av.	Rinaldi St.	60	S 2105	2105	1325	0.482		
Haskell Av.	Index St.	60	S 3430	3430	990	0.393		
Haskell Av.	Lahey St.	60	S 4420	4420	340	0.417		
Haskell Av.	San Fernando Mission Blvd.	60	S 4760	4760	1330	0.393	0.420	5,090
Haskell Av.	Tulsa St.	60	S 6090	6090	565	0.247		
Haskell Av.	Bermuda St.	60	S 6655	6655	380	0.247		
Haskell Av.	Los Alimos St.	60	S 7035	7035	330	0.247		
Haskell Av.	Chatsworth St.	60	S 7365	7365	340	0.247		
Haskell Av.	Kingsbury St.	60	S 7705	7705	970	0.247		
Haskell Av.	San Jose St.	60	S 8675	8675	1340	0.247	0.247	3,925

HASKELL TRUNK LINE

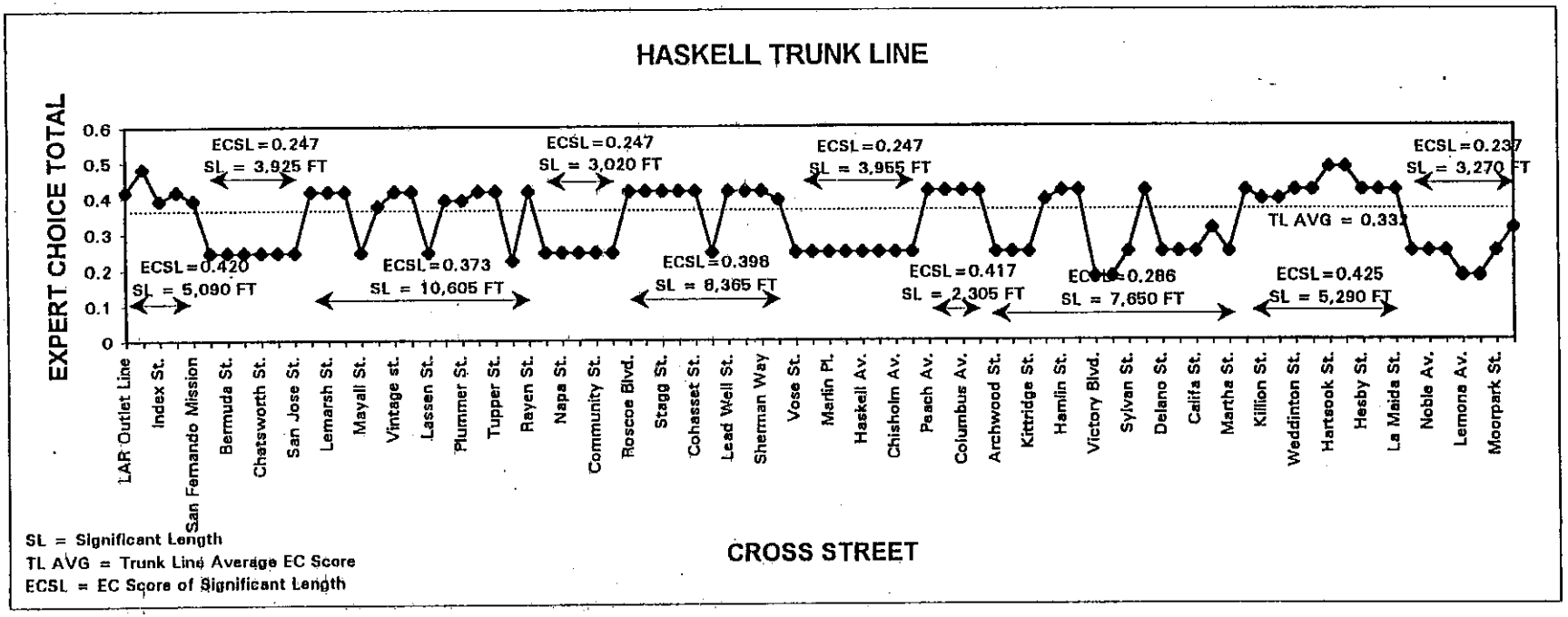
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Haskell Av.	Devonshire st.	60	S 10015	10015	670	0.417		
Haskell Av.	Lemarsh St.	60	S 10685	10685	330	0.417		
Haskell Av.	Romar St.	60	S 11015	11015	330	0.417		
Haskell Av.	Mayall St.	60	S 11345	11345	330	0.247		
Haskell Av.	Stare St.	60	S 11675	11675	325	0.377		
Haskell Av.	Vintage st.	60	S 12000	12000	330	0.417		
Haskell Av.	Septo St.	60	S 12330	12330	350	0.417		
Haskell Av.	Lassen St.	60	S 12680	12680	1310	0.247		
Haskell Av.	Superior St.	60	S 13990	13990	1345	0.393		
Haskell Av.	Plummer St.	60	S 15335	15335	680	0.393		
Haskell Av.	Vincennes St.	60	S 16015	16015	650	0.417		
Haskell Av.	Tupper St.	60	S 16665	16665	1320	0.417		
Haskell Av.	Nordhoff St.	60	S 17985	17985	1325	0.223		
Haskell Av.	Rayen St.	60	S 19310	19310	1310	0.417	0.373	10,605
Haskell Av.	Parthenia St.	60	S 20620	20620	665	0.247		
Haskell Av.	Napa St.	60	S 21285	21285	670	0.247		
Haskell Av.	Chase St.	60	S 21955	21955	615	0.247		
Haskell Av.	Community St.	60	S 22570	22570	580	0.247		
Roscoe Blvd.	Haskell Av.	60	E 23150	23150	490	0.247	0.247	3,020

HASKELL TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Haskell Av.	Roscoe Blvd.	60	S 23640	23640	2050	0.417		
Haskell Av.	Strathern St.	60	S 25690	25690	1325	0.417		
Haskell Av.	Stagg St.	60	S 27015	27015	1340	0.417		
Haskell Av.	Saticoy St.	60	S 28355	28355	665	0.417		
Haskell Av.	Cohasset St.	60	S 29020	29020	660	0.417		
Haskell Av.	Valerio	60	S 29680	29680	330	0.247		
Haskell Av.	Lead Well St.	60	S 30010	30010	330	0.417		
Haskell Av.	Wyandotte St.	60	S 30340	30340	670	0.417		
Haskell Av.	Sherman Way	60	S 31010	31010	665	0.417		
Haskell Av.	Gault St.	60	S 31675	31675	330	0.393	0.398	8,365
Haskell Av.	Vose St.	60	S 32005	32005	330	0.247		
Haskell Av.	Hart St.	60	S 32335	32335	330	0.247		
Haskell Av.	Marlin Pl.	60	S 32665	32665	335	0.247		
Haskell Av.	Bassett St.	60	S 33000	33000	660	0.247		
Vanowen St.	Haskell Av.	60	E 33660	33660	600	0.247		
Vanowen St.	Firmament Av.	60	E 34260	34260	710	0.247		
Vanowen St.	Chisholm Av.	60	E 34970	34970	330	0.247		
Vanowen St.	Orion Av.	60	E 35300	35300	660	0.247	0.247	3,955
Vanowen St.	Peach Av.	60	E 35960	35960	665	0.417		
Vanowen St.	Sepulveda Blv.	60	E 36625	36625	630	0.417		
Vanowen St.	Columbus Av.	60	E 37255	37255	650	0.417		
Noble Av.	Vanowen St.	60	S 37905	37905	360	0.417	0.417	2,305

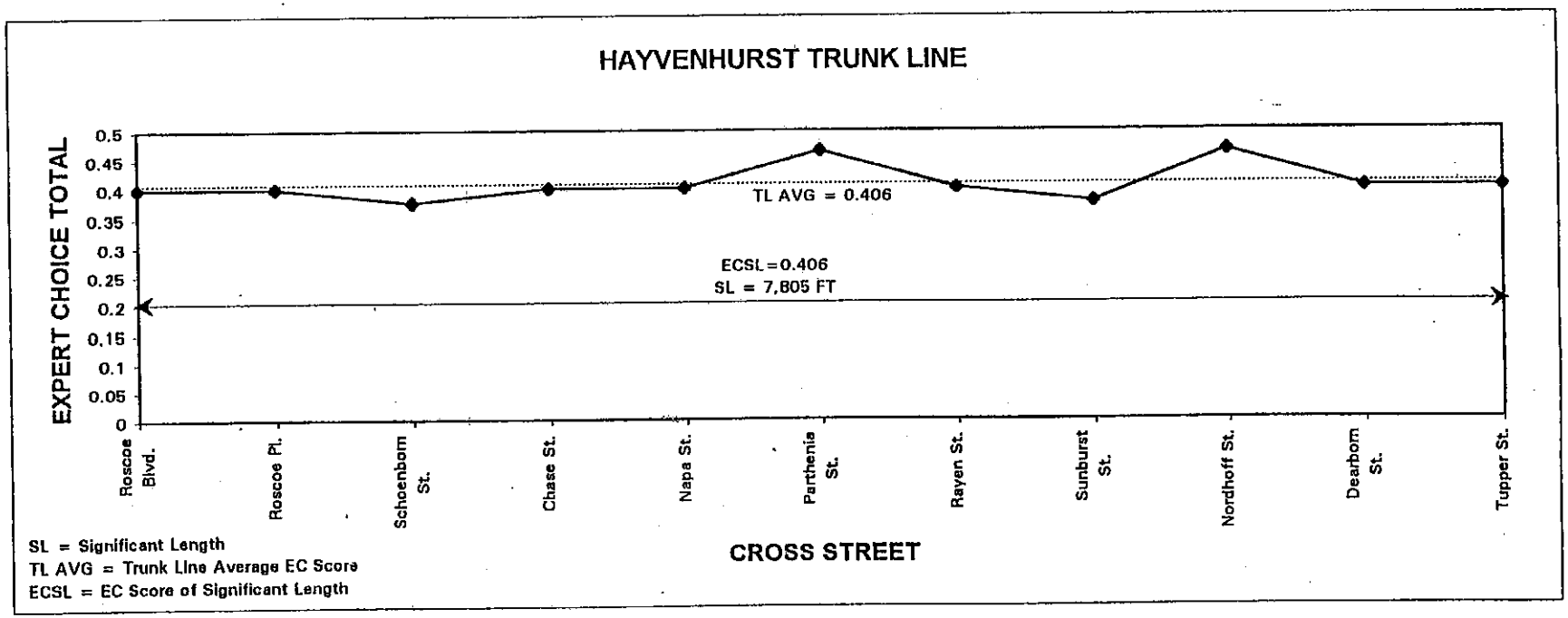
HASKELL TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Noble Av.	Archwood St.	60	S 38265	38265	310	0.247		
Noble Av.	Lemay St.	60	S 38575	38575	670	0.247		
Noble Av.	Kittridge St.	60	S 39245	39245	335	0.247		
Noble Av.	Haynes St.	60	S 39580	39580	265	0.393		
Noble Av.	Hamlin St.	60	S 39845	39845	400	0.417		
Noble Av.	Gilmore St.	60	S 40245	40245	335	0.417		
Noble Av.	Victory Blvd.	60	S 40580	40580	330	0.178		
Noble Av.	Friar St.	60	S 40910	40910	335	0.178		
Noble Av.	Sylvan St.	60	S 41245	41245	330	0.247		
Noble Av.	Domino St.	60	S 41575	41575	500	0.417		
Noble Av.	Delano St.	60	S 42075	42075	1175	0.247		
Noble Av.	Oxnard St.	60	S 43250	43250	670	0.247		
Noble Av.	Califa St.	60	S 43920	43920	665	0.247		
Noble Av.	Hatteras St.	60	S 44585	44585	990	0.312		
Noble Av.	Martha St.	60	S 45575	45575	340	0.247	0.286	7,650
Noble Av.	Burbank Blvd.	60	S 45915	45915	360	0.417		
Noble Av.	Killion St.	60	S 46275	46275	965	0.393		
Noble Av.	Clark St.	60	S 47240	47240	435	0.393		
Noble Av.	Weddinton St.	60	S 47675	47675	890	0.417		
Noble Av.	Magnolia St.	60	S 48565	48565	330	0.417		
Noble Av.	Hartsook St.	60	S 48895	48895	330	0.482		
Noble Av.	Ostego St.	60	S 49225	49225	330	0.482		
Noble Av.	Hesby St.	60	S 49555	49555	660	0.417		
Noble Av.	Morrison St.	60	S 50215	50215	660	0.417		
Noble Av.	La Maida St.	60	S 50875	50875	330	0.417	0.425	5,290
Noble Av.	Camarillo St.	60	S 51205	51205	1310	0.247		
Moorpark St.	Noble Av.	60	E 52515	52515	340	0.247		
Moorpark St.	Norwich Av.	60	E 52855	52855	330	0.247		
Moorpark St.	Lemona Av.	60	E 53185	53185	340	0.178		
Moorpark St.	Saloma Av.	60	E 53525	53525	340	0.178		
Kester Av.	Moorpark St.	60	S 53865	53865	330	0.247		
Ventura Blvd.	Kester Av.	60	S 54195	54195	280	0.312	0.237	3,270
				AVERAGE (TL AVG) =		0.332		


HASKELL TRUNK LINE
EXPERT CHOICE TOTAL
0.6
0.5
0.4
0.3
0.2
0.1
0
ECSL = 0.247
SL = 3,925 FT
ECSL = 0.247
SL = 3,020 FT
ECSL = 0.247
SL = 3,965 FT
ECSL = 0.237
SL = 3,270 FT
TL AVG = 0.331
ECSL = 0.420
SL = 5,090 FT
ECSL = 0.373
SL = 10,605 FT
ECSL = 0.398
SL = 8,365 FT
ECSL = 0.417
SL = 2,305 FT
ECSL = 0.286
SL = 7,650 FT
ECSL = 0.425
SL = 5,290 FT
LAR Outlet Line
Index St.
San Fernando Mission
Bermuda St.
Chatsworth St.
San Jose St.
Lemarsh St.
Mayall St.
Vintage st.
Lassen St.
Plummer St.
Tupper St.
Rayen St.
Napa St.
Community St.
Roscoe Blvd.
Stagg St.
Cohasset St.
Lead Well St.
Sherman Way
Vose St.
Merlin Pl.
Haskell Av.
Chisholm Av.
Peach Av.
Columbus Av.
Archwood St.
Kittridge St.
Hamlin St.
Victory Blvd.
Sylvan St.
Delano St.
Califa St.
Martha St.
Killion St.
Weddinton St.
Hartsook St.
Hesby St.
La Maida St.
Noble Av.
Lemona Av.
Moorpark St.
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length
CROSS STREET

HAYVENHURST TRUNK LINE

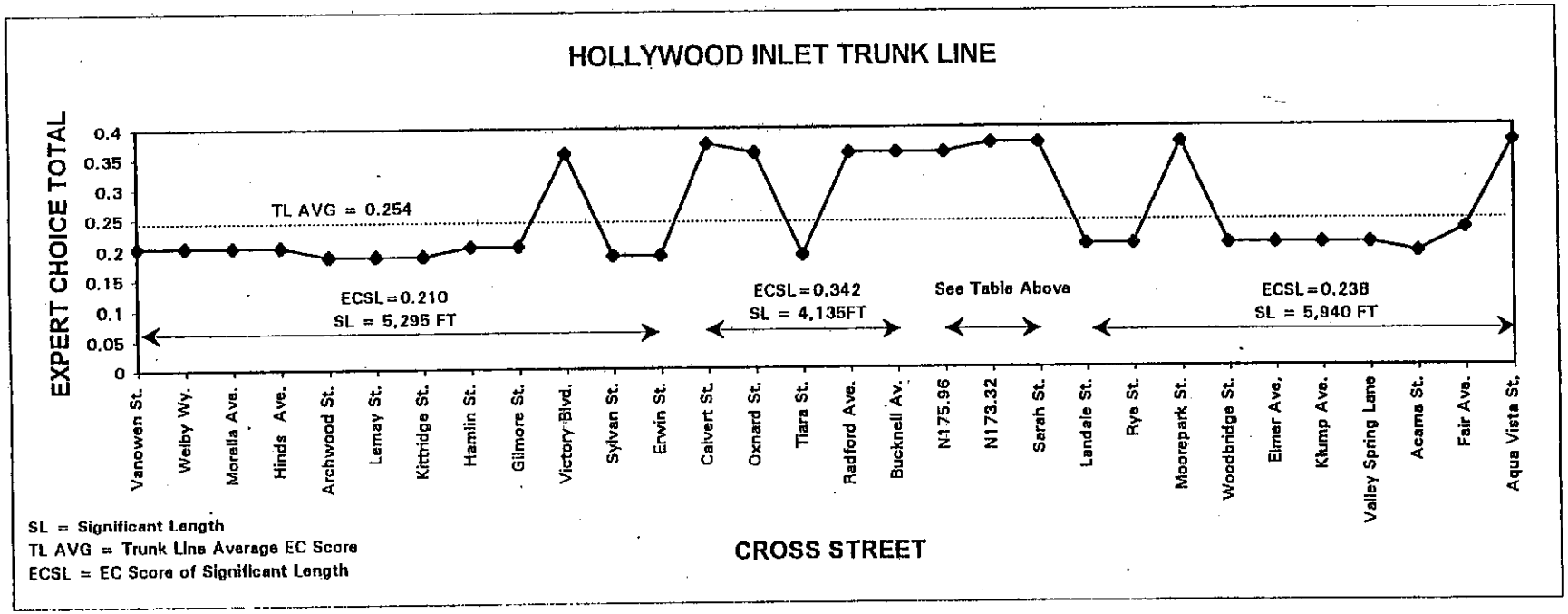
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Hayvenhurst PL.	Roscoe Blvd.	54	N 1000	850	310	0.399		
Hayvenhurst PL.	Roscoe Pl.	54	N 1160	1160	470	0.399		
Hayvenhurst PL.	Schoenborn St.	54	N 1630	1630	820	0.375		
Hayvenhurst Av.	Chase St.	54	N 2450	2450	660	0.399		
Hayvenhurst Av.	Napa St.	54	N 3110	3110	660	0.399		
Hayvenhurst Av.	Parthenia St.	54	N 3770	3770	1330	0.464		
Hayvenhurst Av.	Rayen St.	54	N 5100	5100	990	0.399		
Hayvenhurst Av.	Sunburst St.	54	N 6090	6090	330	0.375		
Hayvenhurst Av.	Nordhoff St.	54	N 6420	6420	660	0.464		
Hayvenhurst Av.	Dearborn St.	54	N 7080	7080	670	0.399		
Hayvenhurst Av.	Tupper St.	54	N 7750	7750	905	0.399	0.406	7,805
				AVERAGE (TL AVG) =		0.406		


HAYVENHURST TRUNK LINE
EXPERT CHOICE TOTAL
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.406
ECSL=0.406
SL = 7,805 FT
Roscoe Blvd.
Roscoe Pl.
Schoenborn St.
Chase St.
Napa St.
Parthenia St.
Rayen St.
Sunburst St.
Nordhoff St.
Dearborn St.
Tupper St.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

HOLLYWOOD INLET TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Morella Ave.	Vanowen St.	51	S1000	1000	355	0.203		
Morella Ave.	Welby Wy.	51	S 1355	1355	330	0.203		
Archwood St,	Morella Ave.	51	W 1685	1685	330	0.203		
Archwood St,	Hinds Ave.	51	W 2015	2015	320	0.203		
Radford Ave.	Archwood St.	51	S 2335	2335	325	0.188		
Radford Ave.	Lemay St.	51	S 2660	2660	340	0.188		
Radford Ave.	Kittridge St.	51	S 3000	3000	570	0.188		
Radford Ave.	Hamlin St.	51	S 3570	3570	450	0.203		
Radford Ave.	Gilmore St.	51	S 4020	4020	300	0.203		
Radford Ave.	Victory Blvd.	51	S 4320	4320	665	0.358		
Radford Ave.	Sylvan St.	51	S 4985	4985	650	0.188		
Radford Ave.	Erwin St.	51	S 5635	5635	660	0.188	0.210	5,295
Radford Ave.	Calvert St.	51	S6295	6295	665	0.373		
Radford Ave.	Oxnard St.	51	S 6960	6960	320	0.358		
Radford Ave.	Tiara St.	51	S 7280	7280	250	0.188		
Easement	Radford Ave.	51	S 7530	7530	580	0.358		
Easement	Bucknell Av.	51	S 8110	8110	320	0.358	0.327	2,135
Easement	N175.96	51	S 7850	8747	690	0.358	0.358	690
Easement	N173.32	51	S 12587	12587	740	0.373	0.373	740
Tujunga Av.	Sarah St.	51	S 17917	17347	570	0.373	0.373	570
Elmer Ave.	Landale St.	51	S18887	18697	500	0.203		
Elmer Ave.	Rye St.	51	S 19197	19197	310	0.203		
Elmer Ave.	Moorepark St.	51	S 19507	19507	670	0.373		
Elmer Ave.	Woodbridge St.	51	S 20177	20177	510	0.203		
Valley Spring Lane	Elmer Ave,	51	E 20687	20687	340	0.203		
Valley Spring Lane	Klump Ave.	51	E 21027	21027	320	0.203		
Fair Ave.	Valley Spring Lane	51	S 21347	21347	360	0.203		
Fair Ave.	Acama St.	51	S 21707	21707	440	0.188		
Aqua Vista St.	Fair Ave.	51	E 22147	22147	1340	0.227		
Vineland Ave.	Aqua Vista St,	51	S 23487	23487	1150	0.373	0.238	5,940

AVERAGE (TL AVG) = 0.254


HOLLYWOOD INLET TRUNK LINE
EXPERT CHOICE TOTAL
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.254
ECSL=0.210
SL = 5,295 FT
ECSL=0.342
SL = 4,135FT
See Table Above
ECSL=0.238
SL = 5,940 FT
Vanowen St.
Welby Wy.
Morella Ave.
Hinds Ave.
Archwood St.
Lemay St.
Kittridge St.
Hamlin St.
Gilmore St.
Victory Blvd.
Sylvan St.
Erwin St.
Calvert St.
Oxnard St.
Tiara St.
Radford Ave.
Bucknell Av.
N175.96
N173.32
Sarah St.
Landale St.
Rye St.
Moorepark St.
Woodbridge St.
Elmer Ave.
Klump Ave.
Valley Spring Lane
Acama St.
Fair Ave.
Aqua Vista St.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

HOLLYWOOD OUTLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
At Lower Hollywood Reservoir outlet tower	Hollywood Dam	60	S 1000	1120	460	0.15		
Deep Dell Dr.	Mulholland PS	45	S1580	1580	510	0.219		
Holly Dr.	Deep Dell Dr.	45	S2090	2090	600	0.388		
Holly Dr.	Bryn Mawr Dr	45	S2690	2690	290	0.388		
Granada Dr,	Holly Dr.	40	S2980	2980	600	0.388		
Odin St.	Granada Dr.	40	S3580	3580	240	0.219	0.292	2,700
Cahuenga Blvd.	Odin St.	40	S3820	3820	390	0.454		
Cahuenga Blvd.	Whitley Av.	40	S4210	4210	1090	0.454		
Cahuenga Blvd.	Cerritos Pl.	40	S5300	5300	590	0.454		
Cahuenga Blvd.	Dix St.	40	S5890	5890	210	0.365		
Cahuenga Blvd.	Franklin Ave.	40	S6100	6100	520	0.388		
Cahuenga Blvd.	Yucca St.	36	S6620	6620	850	0.388	0.417	3,650
Cahuenga Blvd.	Hollywood Blvd	36	S7470	7470	115	0.219		
Cahuenga Blvd.	Sunset Blvd.	36	S7585	7585	610	0.195		
Cahuenga Blvd.	De Longpre Ave	36	S8195	8195	360	0.294		
Cahuenga Blvd.	Homewood Ave	36	S8555	8555	340	0.388		
Cahuenga Blvd.	Fountain Ave.	36	S8895	8895	320	0.388		
Cahuenga Blvd.	La Mirada Ave.	36	S9215	9215	335	0.388		
Cahuenga Blvd.	Lexington Ave	36	S9550	9550	660	0.388		
Cahuenga Blvd.	Santa Monica Blvd	36	S10210	10210	665	0.284		
Cahuenga Blvd.	Romaine St	36	S10875	10875	665	0.284		
Cahuenga Blvd.	Willoughby Ave.	36	S11540	11540	660	0.284		
Cahuenga Blvd.	Waring Ave.	36	S12200	12200	540	0.284		
Melrose Ave.	Cahuenga Blvd.	36	E12740	12740	630	0.454		
Rossmore Ave.	Melrose Ave.	36	S13370	13370	110	0.284		
Arden Pl	Rossmore Ave.	36	S13480	13480	265	0.284		
Arden Blvd	Arden Pl.	36	S13745	13745	340	0.464		
Arden Blvd	Clinton St	36	S14085	14085	990	0.454		
Arden Blvd	Rosewood Ave.	36	S15075	15075	1000	0.454		
Arden Blvd	Beverly Blvd	36	S16075	16075	1160	0.284		
Arden Blvd	First St.	36	S17235	17235	695	0.219		
Arden Blvd	Second St.	36	S17930	17930	900	0.284	0.329	11,360

HOLLYWOOD OUTLET LINE

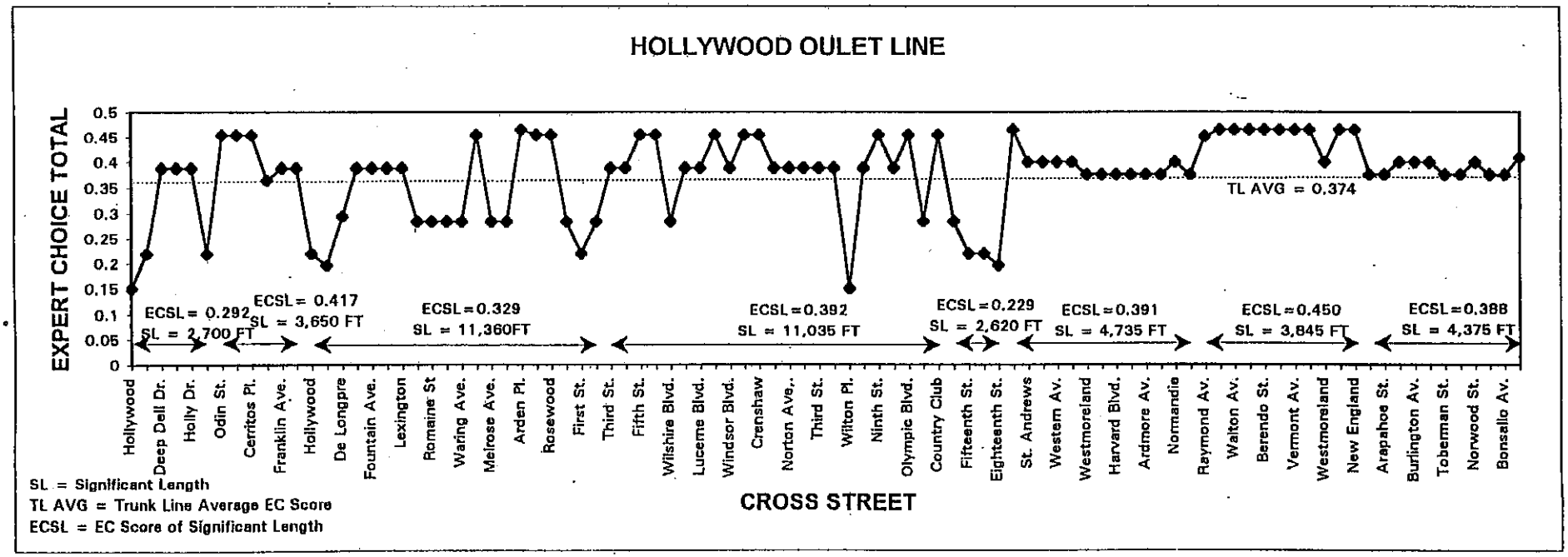
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Arden Blvd	Third St.	36	S18830	18830	670	0.388		
Arden Blvd	Fourth St	36	S19500	19500	665	0.388		
Arden Blvd	Fifth St.	36	S20165	20165	600	0.454		
Arden Blvd	Sixth St.	36	S20765	20765	660	0.454		
Freemont Pl.	Wilshire Blvd.	36	S21425	21425	390	0.284		
Eighth St.	Freemont Pl.	36	S21815	21815	370	0.388		
Eighth St.	Lucerne Blvd.	36	S22185	22185	380	0.388		
Eighth St.	Plymouth Blvd.	36	S22565	22565	410	0.454		
Eighth St.	Windsor Blvd.	36	S22975	22975	325	0.388		
Eighth St.	Lorraine Blvd.	36	S23300	23300	330	0.454		
Eighth St.	Crenshaw Blvd.	36	S23630	23630	340	0.454		
Eighth St.	Bronson Ave.	36	S23970	23970	345	0.388		
Eighth St.	Norton Ave.	36	S24315	24315	360	0.388		
Eighth St.	Fifth Ave.	36	E24675	24675	240	0.388		
Eighth St.	Third St.	36	E24915	24915	320	0.388		
Eighth St.	Westchester Pl.	36	E25235	25235	360	0.388		
Eighth St.	Wilton Pl.	36	E25595	25595	320	0.15		
Gramercy Pl.	Eighth St.	36	S 25915	25915	775	0.388		
Gramercy Pl.	Ninth St.	36	S 26690	26690	515	0.454		
Gramercy Pl.	San Marino St.	36	S 27205	27205	670	0.388		
Gramercy Pl.	Olympic Blvd.	36	S 27875	27875	650	0.454		
Gramercy Pl.	Eleventh St.	36	S 28525	28525	490	0.284		
Gramercy Pl.	Country Club Dr.	36	S 29015	29015	850	0.454	0.392	11,035
Gramercy Pl.	Pico Blvd.	36	S 29865	29865	665	0.284		
Gramercy Pl.	Fifteenth St.	36	S 30530	30530	660	0.219		
Gramercy Pl.	Venice Blvd.	36	S 31190	31190	665	0.219		
Gramercy Pl.	Eighteenth St.	36	S 31855	31855	630	0.195	0.229	2,620

HOLLYWOOD OUTLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Washington Blvd.	Gramercy Pl.	30	E 32485	32485	420	0.464		
Washington Blvd.	St. Andrews Pl.	30	E 32905	32905	450	0.399		
Washington Blvd.	Manhattan Pl.	30	E 33355	33355	330	0.399		
Washington Blvd.	Western Av.	30	E 33685	33685	350	0.399		
Washington Blvd.	Oxford Av.	30	E 34035	34035	405	0.399		
Washington Blvd.	Westmoreland Blvd.	30	E 34440	34440	385	0.375		
Washington Blvd.	Hobard Blvd.	30	E 34825	34825	295	0.375		
Washington Blvd.	Harvard Blvd.	30	E 35120	35120	290	0.375		
Washington Blvd.	Kingsley Dr.	30	E 35410	35410	180	0.375		
Washington Blvd.	Ardmore Av.	30	E 35590	35590	300	0.375		
Washington Blvd.	Roosevelt Av.	30	E 35890	35890	455	0.375		
Washington Blvd.	Normandie AV.	30	E 36345	36345	585	0.399		
Washington Blvd.	Mariposa Av.	30	E 36930	36930	290	0.375	0.391	4,735
Washington Blvd.	Raymond Av.	30	E 37220	37220	360	0.451		
Washington Blvd.	Budlong Av.	30	E 37580	37580	355	0.464		
Washington Blvd.	Walton Av.	30	E 37935	37935	215	0.464		
Washington Blvd.	Catalina St.	30	E 38150	38150	290	0.464		
Washington Blvd.	Berendo St.	30	E 38440	38440	310	0.464		
Washington Blvd.	New Hampshire Av.	30	E 38750	38750	250	0.464		
Washington Blvd.	Vermont Av.	30	E 39000	39000	300	0.464		
Washington Blvd.	Menlo Av.	30	E 39300	39300	300	0.464		
Washington Blvd.	Westmoreland Av.	30	E 39600	39600	260	0.399		
Washington Blvd.	Orchard Av.	30	E 39860	39860	350	0.464		
Washington Blvd.	New England St.	30	E 40210	40210	340	0.464		
Washington Blvd.	Magnolia Av.	30	E 40550	40550	515	0.375	0.450	3,845

HOLLYWOOD OUTLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Washington Blvd.	Arapahoe St.	30	E 41065	41065	320	0.375		
Washington Blvd.	Bonnie Brae St.	30	E 41385	41385	355	0.399		
Washington Blvd.	Burlington Av.	30	E 41740	41740	580	0.399		
Washington Blvd.	Union Av.	30	E 42320	42320	610	0.399		
Washington Blvd.	Toberman St.	30	E 42930	42930	540	0.375		
Washington Blvd.	Oak St.	30	E 43470	43470	335	0.375		
Washington Blvd.	Norwood St.	30	E 43805	43805	190	0.399		
Washington Blvd.	Park Grove Av.	30	E 43995	43995	310	0.375		
Washington Blvd.	Bonsallo Av.	30	E 44305	44305	645	0.375		
Washington Blvd.	Lovelace Av.	30	E 44950	44950	490	0.409	0.388	4,375
				AVERAGE (TL AVG) =		0.374		


HOLLYWOOD OULET LINE
EXPERT CHOICE TOTAL
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.374
ECSL = 0.292
SL = 2,700 FT
ECSL = 0.417
SL = 3,650 FT
ECSL = 0.329
SL = 11,360FT
ECSL = 0.392
SL = 11,035 FT
ECSL = 0.229
SL = 2,620 FT
ECSL = 0.391
SL = 4,735 FT
ECSL = 0.450
SL = 3,845 FT
ECSL = 0.388
SL = 4,375 FT
Hollywood
Deep Dell Dr.
Holly Dr.
Odin St.
Cerritos Pl.
Franklin Ave.
Hollywood
De Longpre
Fountain Ave.
Lexington
Romaine St
Waring Ave.
Melrose Ave.
Arden Pl.
Rosewood
First St.
Third St.
Fifth St.
Wilshire Blvd.
Luceme Blvd.
Windsor Blvd.
Crenshaw
Norton Ave..
Third St.
Wilton Pl.
Ninth St.
Olympic Blvd.
Country Club
Fifteenth St.
Eighteenth St.
St. Andrews
Western Av.
Westmoreland
Harvard Blvd.
Ardmore Av.
Normandie
Raymond Av.
Walton Av.
Berendo St.
Vermont Av.
Westmoreland
New England
Arapahoe St.
Burlington Av.
Toberman St.
Norwood St.
Bonsallo Av.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

LA25 54" TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
LAR Complex	LA25 99" (N221,790 E139,540)	54	N 1000	1000	630	0.405

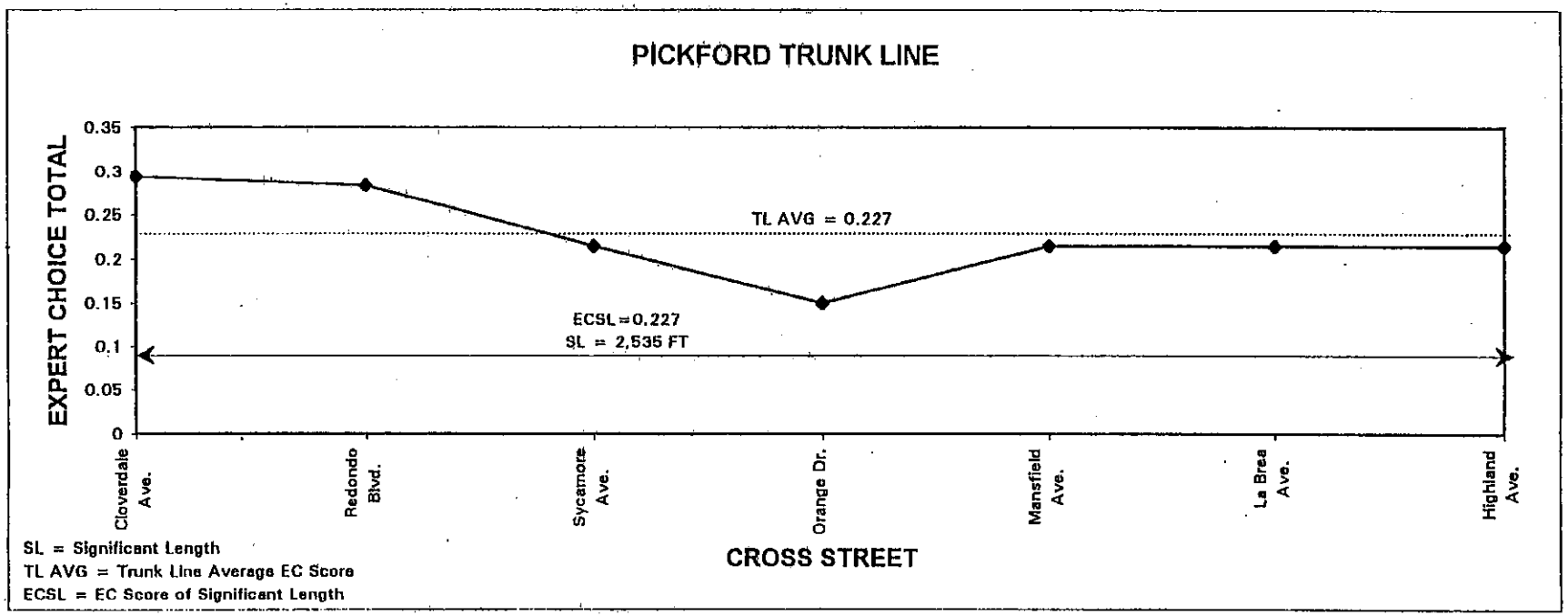
AVERAGE (TL AVG) = 0.405

Significant Length = 630 feet

PICKFORD TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Pickford St.	Cloverdale Ave.	30	S 1000	1020	490	0.294		
Pickford St.	Redondo Blvd.	30	S 1510	1510	440	0.284		
Pickford St.	Sycamore Ave.	30	S 1950	1950	330	0.215		
Pickford St.	Orange Dr.	30	S 2280	2280	330	0.15		
Pickford St.	Mansfield Ave.	30	S 2610	2610	340	0.215		
Pickford St.	La Brea Ave.	30	S 2950	2950	345	0.215		
Pickford St.	Highland Ave.	30	S 3295	3295	260	0.215	0.227	2,535

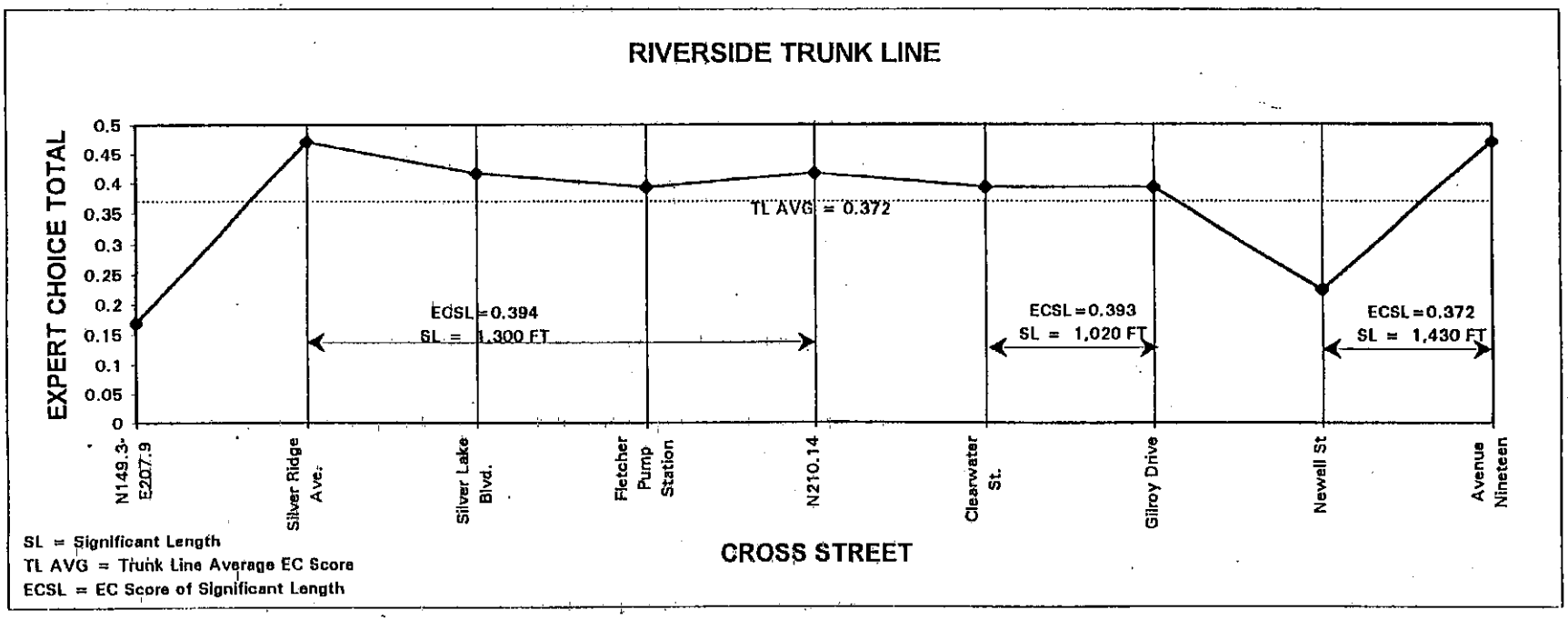
AVERAGE (TL AVG) = 0.227


PICKFORD TRUNK LINE
EXPERT CHOICE TOTAL
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.227
ECSL=0.227
SL = 2,535 FT
Cloverdale Ave.
Redondo Blvd.
Sycamore Ave.
Orange Dr.
Mansfield Ave.
La Brea Ave.
Highland Ave.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

RIVERSIDE TRUNK LINE

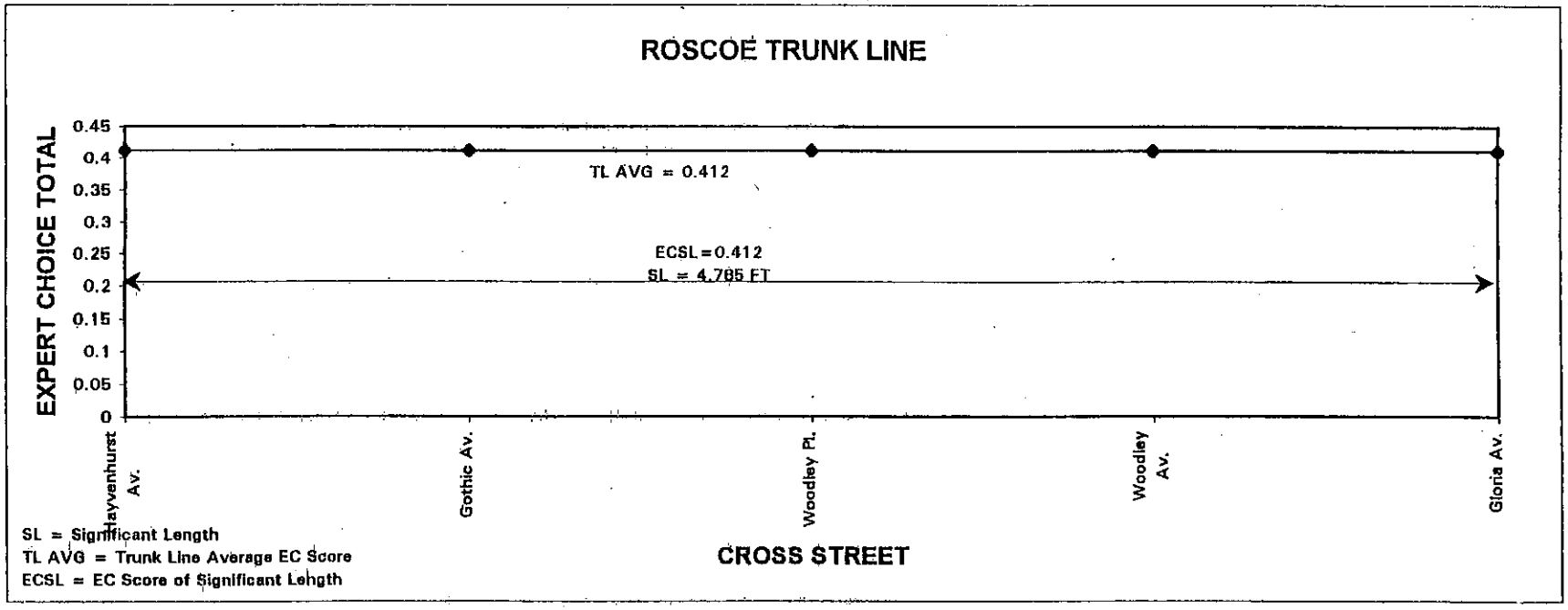
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Silver Lake reservoir	N149.3-E207.9	72	N1000	1000	390	0.168	0.168	390
Glendale Blvd.,								
Fletcher Dr.	Silver Ridge Ave.	40	E2515	2250	525	0.471		
Fletcher Dr.	Silver Lake Blvd.	40	E2775	2775	400	0.417		
Fletcher Dr.	Fletcher Pump Station	40	E 3175	3175	160	0.393		
Fletcher Dr.	N210.14	40	S 3335	3335	215	0.417	0.394	1,300
Riverside Dr,	Clearwater St.	40	S4013	3743	460	0.393		
Riverside Dr.	Gilroy Drive	40	N 4203	4203	560	0.393	0.393	1,020
Riverside Dr.	Newell St	40	S 6925	6580	1140	0.223		
Riverside Dr.	Avenue Nineteen	40	E16247	15817	290	0.471	0.372	1,430

AVERAGE (TL AVG) = 0.372


RIVERSIDE TRUNK LINE
EXPERT CHOICE TOTAL
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.372
ECSL = 0.394
SL = 1,300 FT
ECSL = 0.393
SL = 1,020 FT
ECSL = 0.372
SL = 1,430 FT
N149.3-
E207.9
Silver Ridge
Ave.
Silver Lake
Blvd.
Fletcher
Pump
Station
N210.14
Clearwater
St.
Gilroy Drive
Newell St
Avenue
Nineteen
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

ROSCOE TRUNK LINE

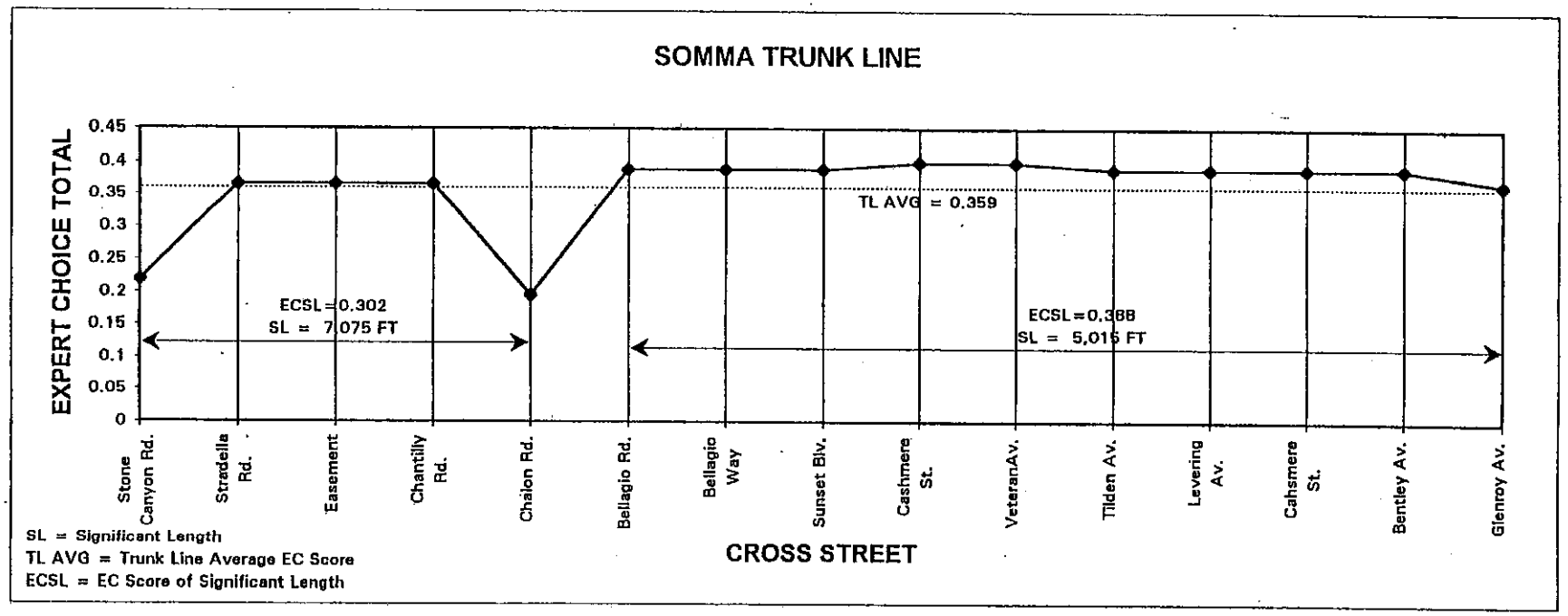
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Roscoe Blvd.	Hayvenhurst Av.	52	E 41150	41150	785	0.412		
Roscoe Blvd.	Gothic Av.	52	E 41935	41935	1330	0.412		
Roscoe Blvd.	Woodley Pl.	52	E 43265	43265	475	0.412		
Roscoe Blvd.	Woodley Av.	52	E 43740	43740	875	0.412		
Roscoe Blvd.	Gloria Av.	52	E 44615	44615	1320	0.412	0.412	4,785
					AVERAGE (TL AVG) =	0.412		



SOMMA TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Somma Way	Stone Canyon Rd.	36	W 1000	1000	1710	0.219		
Easement	Stradella Rd.	36	W 2710	2710	530	0.365		
Chantilly Rd.	Easement	36	S 3240	3240	1480	0.365		
Chalon Rd.	Chantilly Rd.	36	S 4720	4720	625	0.365		
Tarcuto Way	Chalon Rd.	36	S 5345	5345	2730	0.195	0.302	7,075
Bellagio Way	Bellagio Rd.	36	S 8075	8075	205	0.388		
Sunset Blv.	Bellagio Way	36	S 8280	8280	400	0.388		
VeteranAv.	Sunset Blv.	36	S 8680	8680	1300	0.388		
VeteranAv.	Cashmere St.	36	S 9980	9980	670	0.399		
Montana Av.	VeteranAv.	30	S 10650	10650	500	0.399		
Montana Av.	Tilden Av.	30	S 11150	11150	540	0.388		
Montana Av.	Levering Av.	30	S 11690	11690	205	0.388		
Montana Av.	Cahsmere St.	30	S 11895	11895	295	0.388		
Montana Av.	Bentley Av.	30	S 12190	12190	440	0.388		
Montana Av.	Glenroy Av.	30	S 12630	12630	460	0.365	0.388	5,015

AVERAGE (TL AVG) = 0.359


SOMMA TRUNK LINE
EXPERT CHOICE TOTAL
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.359
ECSL=0.302
SL = 7,075 FT
ECSL=0.388
SL = 5,015 FT
Stone Canyon Rd.
Stradella Rd.
Easement
Chantilly Rd.
Chalon Rd.
Bellagio Rd.
Bellagio Way
Sunset Blv.
Cashmere St.
VeteranAv.
Tilden Av.
Levering Av.
Cahsmere St.
Bentley Av.
Glenroy Av.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

STONE CANYON TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Century Blv.	Western Av.	36	W 1000	1040	310	0.226		
Century Blv.	Manhattan Pl.	36	W 1350	1350	325	0.215		
Century Blv.	St. Andrews Pl.	36	W1675	1675	320	0.215		
Century Blv.	Ruthelen St.	36	W 1995	1995	330	0.454		
Century Blv.	Gramercy Pl.	36	W 2325	2325	280	0.215		
Century Blv.	Wilton Pl.	36	W 2605	2605	510	0.388		
Century Blv.	Haas Av.	36	W 3115	3115	530	0.454		
Century Blv.	Van Ness Av.	36	W 3645	3645	335	0.219		
Century Blv.	Second Av.	36	W 4030	3980	330	0.150		
Century Blv.	Third Av.	36	W 4360	4310	330	0.215		
Century Blv.	Fourth Av.	36	W 4690	4640	335	0.215		
Century Blv.	Fifth Av.	36	W 5025	4975	345	0.150		
Century Blv.	Sixth Av.	36	W 5370	5320	330	0.150		
Century Blv.	Seventh Av.	36	W 5700	5650	320	0.126		
Century Blv.	Eighth Av.	36	W 6020	5970	330	0.388		
Century Blv.	Crenshaw Blv.	36	W 6350	6300	830	0.195		
Century Blv.	Woodworth St.	36	W 7180	7130	1825	0.195		
Century Blv.	Yukon Av.	36	W 9005	8955	1395	0.219		
Century Blv.	Doty Av.	36	W 10400	10350	1260	0.284		
Century Blv.	Prairie Av.	36	W 11660	11610	825	0.365		
Century Blv.	Flower St.	36	W 12485	12435	500	0.365		
Century Blv.	Freeman Av.	36	W 12985	12935	270	0.195		
Century Blv.	Myrtle Av.	36	W 13255	13205	1060	0.195		
Century Blv.	La Brea Av.	36	W 14315	14265	345	0.195		
Century Blv.	Maple Av.	36	W 14660	14610	355	0.195		
Century Blv.	Grevillea Av.	36	W 15015	14965	310	0.365		
Century Blv.	Walnut St.	36	W 15325	15275	305	0.195		
Century Blv.	Fir Av.	36	W 15630	15580	320	0.195		
Century Blv.	Truro Av.	36	W 15950	15900	325	0.195		
Century Blv.	Eucalyptus Av.	36	W 16275	16225	330	0.195		
Century Blv.	Rosewood Av.	36	W 16605	16555	350	0.349		
Century Blv.	Inglewood Av.	36	W 16955	16905	340	0.195		
Century Blv.	Burl Av.	36	W 17295	17245	330	0.219		

STONE CANYON TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Century Blv.	Buford Av.	36	W 17625	17575	670	0.219		
Century Blv.	Oak St.	36	W 18295	18245	1320	0.365		
Century Blv.	La Cienega Blv.	36	W 19615	19565	330	0.365		
Century Blv.	Glasgow Pl.	36	W 19945	19895	1160	0.180		
Century Blv.	Concourse Way	36	W 21105	21055	1070	0.195		
Century Blv.	Aviation Blv.	36	W 22175	22125	460	0.219		
Century Blv.	Bellanca Av.	36	W 22635	22585	1850	0.213		
Century Blv.	Airport Blv.	36	W 24485	24435	1235	0.278		
Century Blv.	Avion Dr.	36	W 25720	25670	1080	0.289	0.248	25,710
Century Blv.	Sepulveda Blv.	36	W 27635	27410	200	0.284		
Sepulveda Blv.	Century Blv.	36	N 27660	27610	720	0.284		
Sepulveda Blv.	Ninety Eighth St.	36	N 28330	28330	500	0.480		
Sepulveda Blv.	Ninety Sixth St.	36	N 28830	28830	1695	0.226		
Sepulveda Blv.	Ninety Second St.	36	N 30525	30525	440	0.195		
Sepulveda Blv.	Wetchester Pkwy	36	N 30965	30965	485	0.195		
Sepulveda Blv.	Eighty Ninth St.	36	N 31450	31450	480	0.206		
Sepulveda Blv.	La Tijera Blv.	36	N 31930	31930	950	0.180		
Sepulveda Blv.	Manchester Av.	36	N 32880	32880	690	0.375		
Sepulveda Blv.	Eighty Fourth St.	36	N 33570	33570	635	0.137		
Sepulveda Blv.	Eighty Third St.	36	N 34205	34205	1285	0.206		
Sepulveda Blv.	Seventy Ninth St.	36	N 35490	35490	1100	0.375		
Sepulveda Blv.	Seventy Eighth St.	36	N 36590	36590	650	0.375		
Sepulveda Blv.	Seventy Sixth St.	36	N 37240	37240	845	0.375		
Sepulveda Blv.	Seventy Fourth St.	36	N 38085	38085	370	0.137		
Sepulveda Blv.	Howard Hughes Pkwy	36	N 38455	38455	1190	0.206		
Sepulveda Blv.	Center Dr.	36	N 39645	39645	1055	0.229		
Sepulveda Blv.	Centinela Av.	36	N 40700	40700	110	0.399	0.270	13,400
Sepulveda Blv.	Bankfield Av.	36	N 56125	55905	1080	0.229		
Sepulveda Blv.	Marina Fwy	36	N 56985	56985	435	0.464	0.347	1,515

STONE CANYON TRUNK LINE

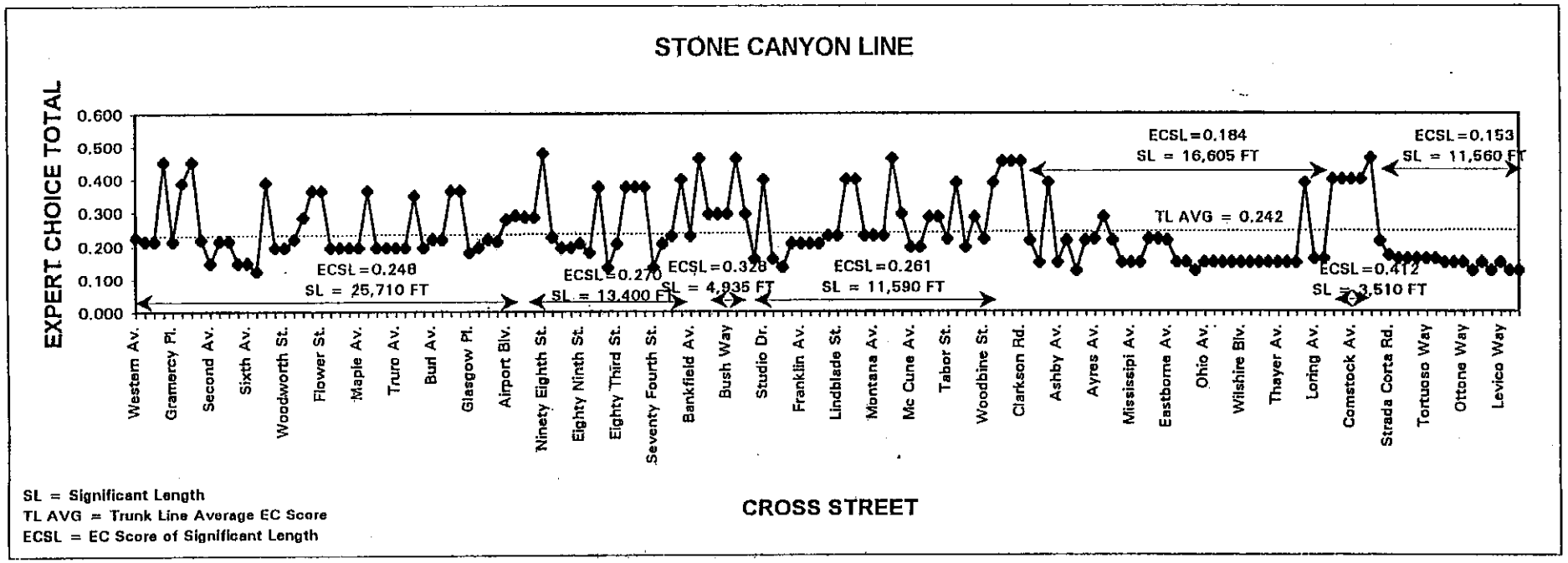
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Sepulveda Blv.	Slauson Av.	36	N 57470	57470	565	0.294		
Jefferson Blv.	Playa St.	36	N 58035	58035	1130	0.294		
Jefferson Blv.v.	Bush Way	36	N 59165	59165	625	0.294		
Jefferson Blv.	Sawtelle Blv.	36	N 59790	59790	1805	0.464		
Jefferson Blv.	Cota St.	36	N 61595	61595	810	0.294	0.328	4,935
Jefferson Blv.	Hazelton Av.	36	N 62405	62405	840	0.161		
Overland Av.	Studio Dr.	36	N 63245	63245	830	0.399		
Overland Av.	Virginia Av.	36	N 64075	64075	300	0.161		
Overland Av.	Ocean Dr.	36	N 64375	64375	1410	0.137		
Overland Av.	Farragut Av.	36	N 65785	65785	295	0.206		
Overland Av.	Franklin Av.	36	N 66080	66080	280	0.206		
Overland Av.	Garfield Av.	36	N 66360	66360	280	0.206		
Overland Av.	Braddock Dr.	36	N 66640	66640	275	0.206		
Overland Av.	Barman Av.	36	N 66915	66915	230	0.229		
Overland Av.	Lindblade St.	36	N 67145	67145	270	0.229		
Overland Av.	Wagner St.	36	N 67415	67415	310	0.399		
Overland Av.	Culver Blv.	36	N 67725	67725	640	0.399		
Overland Av.	Wyoming Av.	36	N 68365	68365	255	0.229		
Overland Av.	Montana Av.	36	N 68620	68620	260	0.229		
Overland Av.	Oregon Av.	36	N 68880	68880	300	0.229		
Overland Av.	Washington Blv.	36	N 69180	69180	805	0.464		
Overland Av.	Venice Blv.	36	N 69985	69985	560	0.294		
Overland Av.	Mc Cune Av.	36	N 70545	70545	465	0.195		
Overland Av.	Regent St.	36	N 71010	71010	350	0.195		
Overland Av.	Francis Pl.	36	N 71360	71360	295	0.284		
Overland Av.	Charnock Rd.	36	N 71655	71655	300	0.284		
Overland Av.	Tabor St.	36	N 71955	71955	310	0.219		
Overland Av.	Westminster Av.	36	N 72265	72265	340	0.388		
Overland Av.	Palms Blv.	36	N 72605	72605	260	0.195		
Overland Av.	Lawler St.	36	N 72865	72865	290	0.284		
Overland Av.	Woodbine St.	36	N 73155	73155	380	0.219		
Overland Av.	Rose Av. West	36	N 73535	73535	460	0.388	0.261	11,590
Overland Av.	National Pl.	36	N 75300	75150	280	0.454	0.454	280

STONE CANYON TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Overland Av.	National Blv.	36	N 76035	75945	405	0.454		
Overland Av.	Clarkson Rd.	36	N 76350	76350	310	0.454	0.454	715
Overland Av.	Coventry Pl.	36	N 77380	76970	700	0.215		
Easement	Overland Av.	36	N 77670	77670	255	0.150		
Putney Rd.	Northvale Rd.	36	N 77925	77925	690	0.388		
Manning Av.	Ashby Av.	36	N 78615	78615	410	0.150		
Manning Av.	Esther Av.	36	N 79025	79025	310	0.215		
Manning Av.	Cushdon Av.	36	N 79335	79335	310	0.126		
Manning Av.	Blythe Av.	36	N 79645	79645	310	0.215		
Manning Av.	Ayres Av.	36	N 79955	79955	330	0.219		
Manning Av.	Pico Blv.	36	N 80285	80285	860	0.284		
Manning Av.	Tennessee Av.	36	N 81145	81145	985	0.215		
Manning Av.	Olympic Blv.	36	N 82130	82130	620	0.150		
Manning Av.	Mississipi Av.	36	N 82750	82750	640	0.150		
Manning Av.	La Grange Av.	36	N 83390	83390	670	0.150		
Manning Av.	Missouri Av.	36	N 84060	84060	560	0.219		
Manning Av.	Santa Monica Blv.	36	N 84620	84620	390	0.219		
Manning Av.	Eastborne Av.	36	N 85010	85010	820	0.215		
Manning Av.	Holman Av.	36	N 85830	85830	550	0.150		
Manning Av.	Kinnard Av.	36	N 86380	86380	350	0.150		
Manning Av.	Wilkins Av.	36	N 86730	86730	330	0.126		
Manning Av.	Ohio Av.	36	N 87060	87060	330	0.150		
Manning Av.	Rochester Av.	36	N 87390	87390	320	0.150		
Manning Av.	Wellworth Av.	36	N 87710	87710	320	0.150		
Manning Av.	Ashton Av.	36	N 88030	88030	410	0.150		
Manning Av.	Wilshire Blv.	36	N 88440	88440	395	0.150		
Lindbrook Dr.	Manning Av.	36	N 88835	88835	370	0.150		
Lindbrook Dr.	Hilts Av.	36	N 89205	89205	260	0.150		
Lindbrook Dr.	Westholme Av.	36	N 89465	89465	710	0.150		
Lindbrook Dr.	Thayer Av.	36	N 90175	90175	240	0.150		
Warner Av.	Lindbrook Dr.	36	N 90415	90415	860	0.150		
Warner Av.	Le Conte Av.	36	N 91275	91275	500	0.150		
Warner Av.	Woodruff Av.	36	N 91775	91775	450	0.388		

STONE CANYON TRUNK LINE

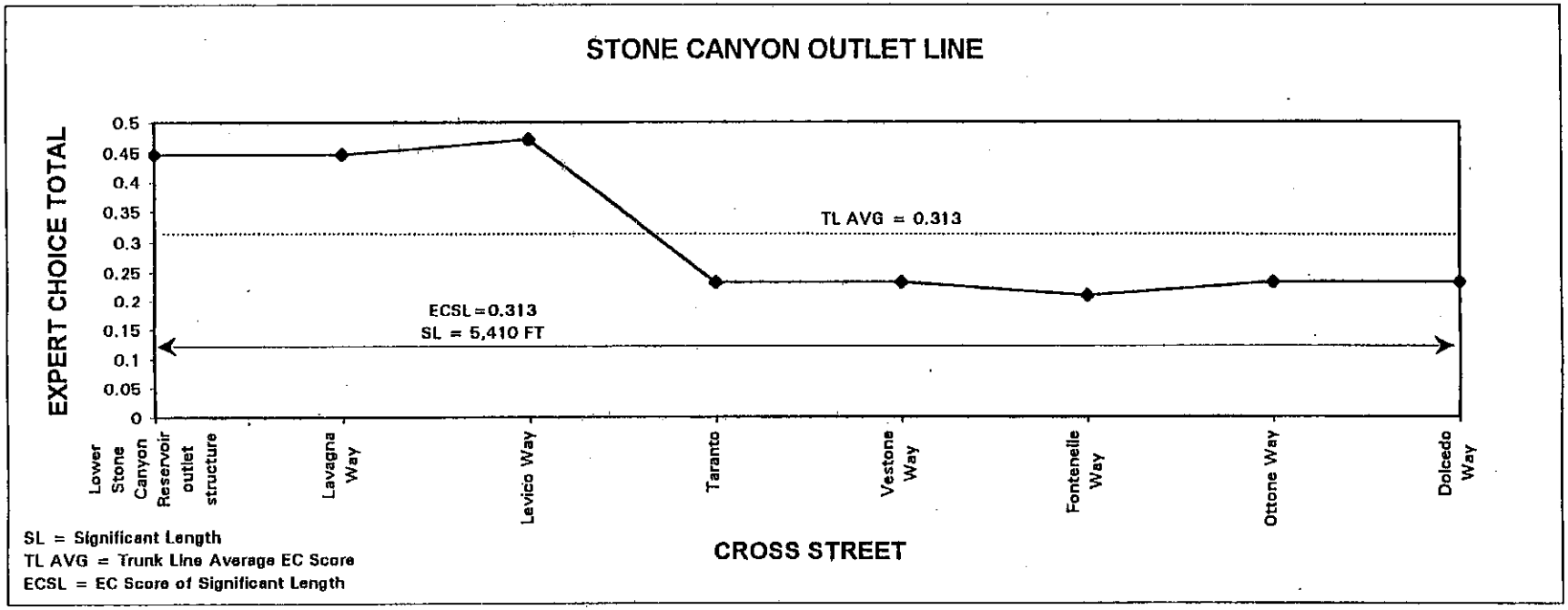
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Warner Av.	Loring Av.	36	N 92225	92225	570	0.161		
Warner Av.	Dalehurst Av.	36	N 92795	92795	780	0.161	0.184	16,605
Hilgard Av.	Warner Av.	36	N 93575	93575	650	0.399		
Hilgard Av.	Wyton av.	36	N 94225	94225	860	0.399		
Hilgard Av.	Comstock Av.	36	N 95085	95085	550	0.399		
Hilgard Av.	Charing Cross Rd.	36	N 95635	95635	150	0.399		
Sunset Blv.	Hilgard Av.	36	N 95785	95785	1300	0.464	0.412	3,510
Stone Canyon Rd.	Sunset Blv.	36	N 97085	97085	975	0.213		
Stone Canyon Rd.	Strada Corta Rd.	36	N 98060	98060	1115	0.171		
Stone Canyon Rd.	Bellagio Rd. East	36	N 99175	99175	240	0.161		
Stone Canyon Rd.	Bellagio Rd. West	36	N 99415	99415	925	0.161		
Stone Canyon Rd.	Chalon Rd.	36	N 100340	100340	375	0.161		
Stone Canyon Rd.	Tortuoso Way	36	N 100715	100715	1480	0.161		
Stone Canyon Rd.	Capello Way	36	N 102195	102195	1000	0.161		
Stone Canyon Rd.	Somma Way	36	N 103195	103195	610	0.150		
Stone Canyon Rd.	Dolcedo Way	36	N 103805	103805	660	0.150		
Stone Canyon Rd.	Ottone Way	36	N 104465	104465	960	0.150		
Stone Canyon Rd.	Fontenelle Way	36	N 105425	105425	225	0.126		
Stone Canyon Rd.	Vestone Way	36	N 105650	105650	475	0.150		
Stone Canyon Rd.	Taranto Way	36	N 106125	106125	900	0.126		
Stone Canyon Rd.	Levico Way	36	N 107025	107025	515	0.150		
Stone Canyon Rd.	Tanner Bridge Rd.	36	N 107540	107540	500	0.126		
Stone Canyon Rd.	Lavagna Way	36	N 108040	108040	605	0.126	0.153	11,560
				AVERAGE (TL AVG) =		0.242		



SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

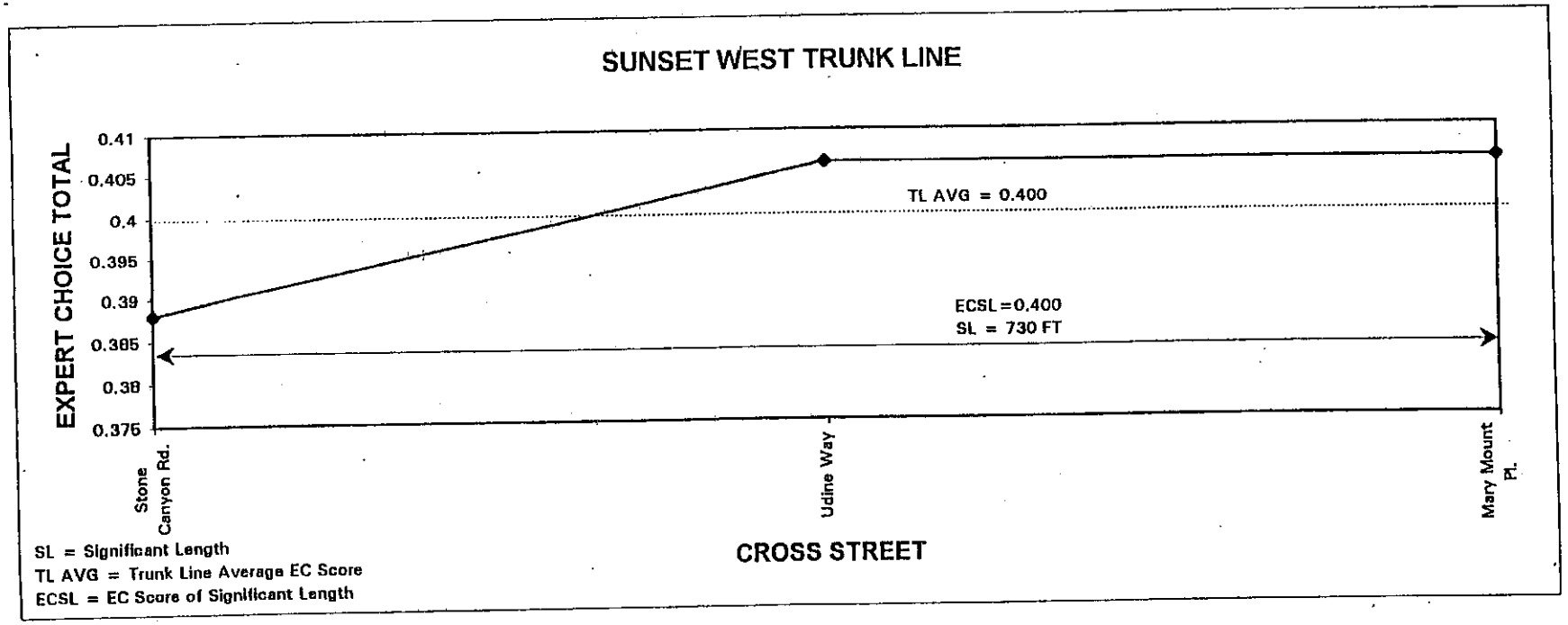
STONE CANYON OUTLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Stone Canyon Rd.	Lower Stone Canyon Reservoir outlet structure	60	S 1000	2465	575	0.447		
Stone Canyon Rd.	Lavagna Way	60	S 3040	3040	1075	0.447		
Stone Canyon Rd.	Levico Way	60	S 4115	4115	910	0.471		
Stone Canyon Rd.	Taranto	60	S 5025	5025	475	0.232		
Stone Canyon Rd.	Vestone Way	60	S 5500	5500	170	0.232		
Stone Canyon Rd.	Fontenelle Way	60	S 5670	5670	960	0.209		
Stone Canyon Rd.	Ottone Way	60	S 6630	6630	645	0.232		
Stone Canyon Rd.	Dolcedo Way	60	S 7275	7275	600	0.232	0.313	5,410
				AVERAGE (TL AVG) =		0.313		


STONE CANYON OUTLET LINE
EXPERT CHOICE TOTAL
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.313
ECSL=0.313
SL = 5,410 FT
Lower Stone Canyon Reservoir outlet structure
Lavagna Way
Levico Way
Taranto
Vestone Way
Fontenelle Way
Ottone Way
Dolcedo Way
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

SUNSET WEST TRUNK LINE

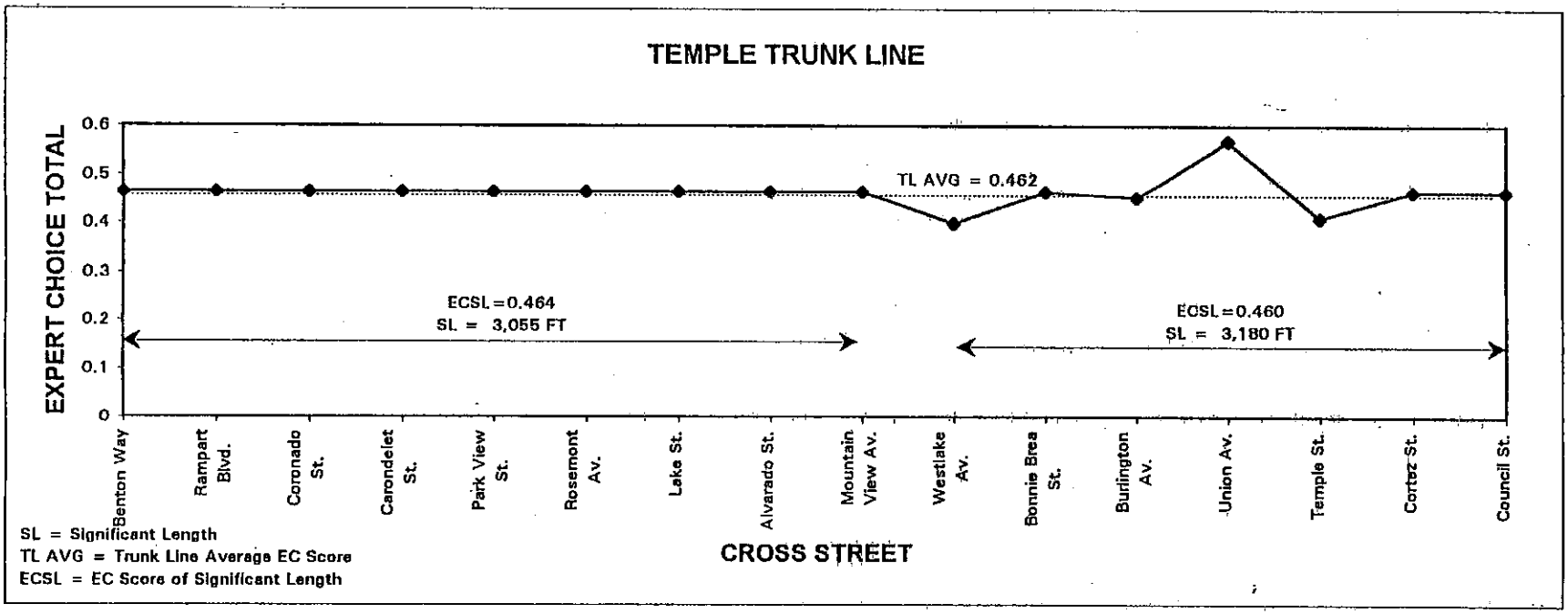
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Sunset Blv.	Stone Canyon Rd.	36	W 1000	1120	210	0.388		
Sunset Blv.	Udine Way	36	W 1380	1330	220	0.406		
Sunset Blv.	Mary Mount Pl.	36	W 1550	1550	300	0.406	0.400	730
					AVERAGE (TL AVG) =	0.400		



TEMPLE TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Temple St.	Benton Way	30	E 1000	1000	300	0.464		
Temple St.	Rampart Blvd.	30	E 1300	1300	320	0.464		
Temple St.	Coronado St.	30	E 1620	1620	310	0.464		
Temple St.	Carondelet St.	30	E 1930	1930	350	0.464		
Temple St.	Park View St.	30	E 2280	2280	390	0.464		
Temple St.	Rosemont Av.	30	E 2670	2670	450	0.464		
Temple St.	Lake St.	30	E 3120	3120	435	0.464		
Temple St.	Alvarado St.	30	E 3555	3555	320	0.464		
Temple St.	Mountain View Av.	30	E 3875	3875	180	0.464	0.464	3,055
Temple St.	Westlake Av.	30	E 4055	4055	325	0.399		
Temple St.	Bonnie Brea St.	30	E 4380	4380	320	0.464		
Temple St.	Burlington Av.	30	E 4700	4700	420	0.451		
Temple St.	Union Av.	30	E 5120	5120	720	0.569		
Glendale Blvd.	Temple St.	30	E 5840	5840	330	0.409		
Glendale Blvd.	Cortez St.	30	E 6170	6170	620	0.464		
Glendale Blvd.	Council St.	30	E 6790	6790	445	0.464	0.460	3,180

AVERAGE (TL AVG) = 0.462


TEMPLE TRUNK LINE
EXPERT CHOICE TOTAL
0.6
0.5
0.4
0.3
0.2
0.1
0
TL AVG = 0.462
ECSL = 0.464
SL = 3,055 FT
ECSL = 0.460
SL = 3,180 FT
Benton Way
Rampart Blvd.
Coronado St.
Carondelet St.
Park View St.
Rosemont Av.
Lake St.
Alvarado St.
Mountain View Av.
Westlake Av.
Bonnie Brea St.
Burlington Av.
Union Av.
Temple St.
Cortez St.
Council St.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

TERRA BELLA TRUNK LINE

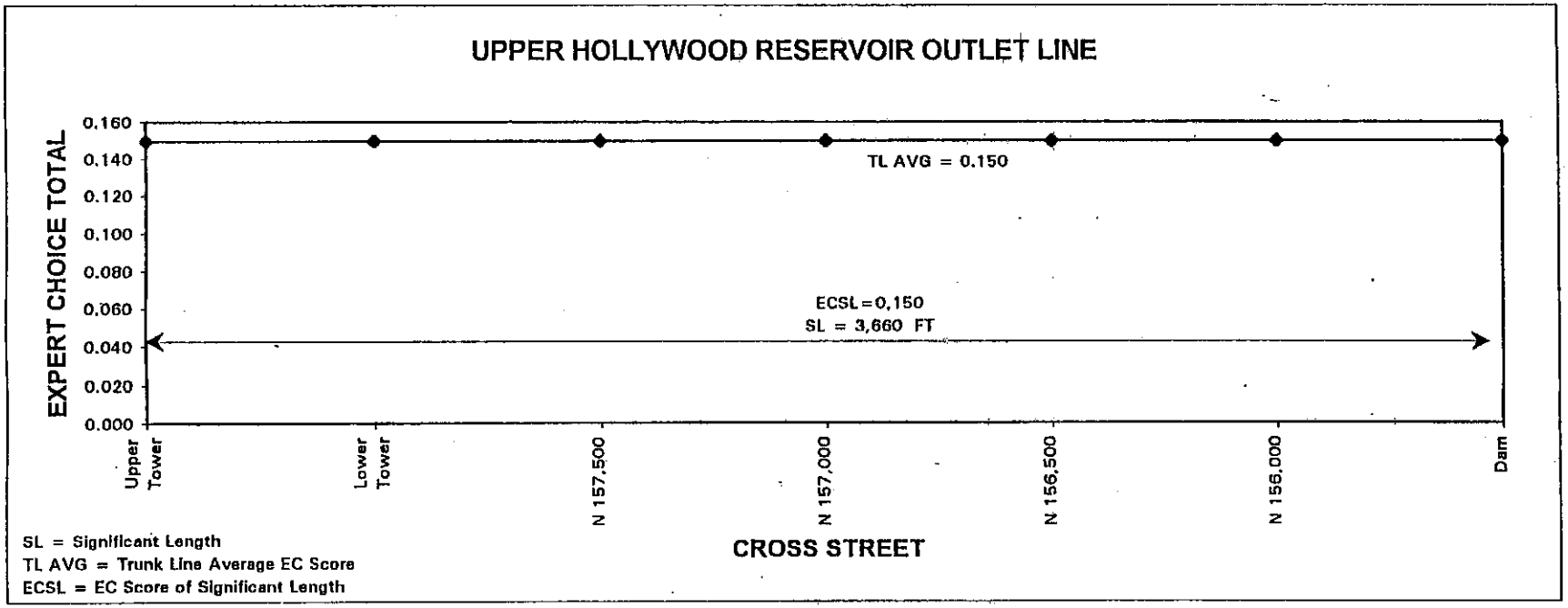
Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
Easement	Montague St.	30	W 1000	1540	605	0.209

AVERAGE (TL AVG) = 0.209

Significant Length = 605 feet

UPPER HOLLYWOOD RESERVOIR OUTLET LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Upper Hollywood Reservoir	Upper Tower	45	S 1000	1000	460	0.150		
Lower Hollywood Reservoir	Lower Tower	45	N 1460	1460	250	0.150		
Lower Hollywood Reservoir	N 157,500	45	N 1710	1710	530	0.150		
Lower Hollywood Reservoir	N 157,000	45	N 2240	2240	550	0.150		
Lower Hollywood Reservoir	N 156,500	45	N 2790	2790	610	0.150		
Lower Hollywood Reservoir	N 156,000	45	N 3400	3400	640	0.150		
Lower Hollywood Reservoir	Dam	45	N 4040	4040	620	0.150	0.150	3,660
					AVERAGE (TL AVG) =	**0.150**		

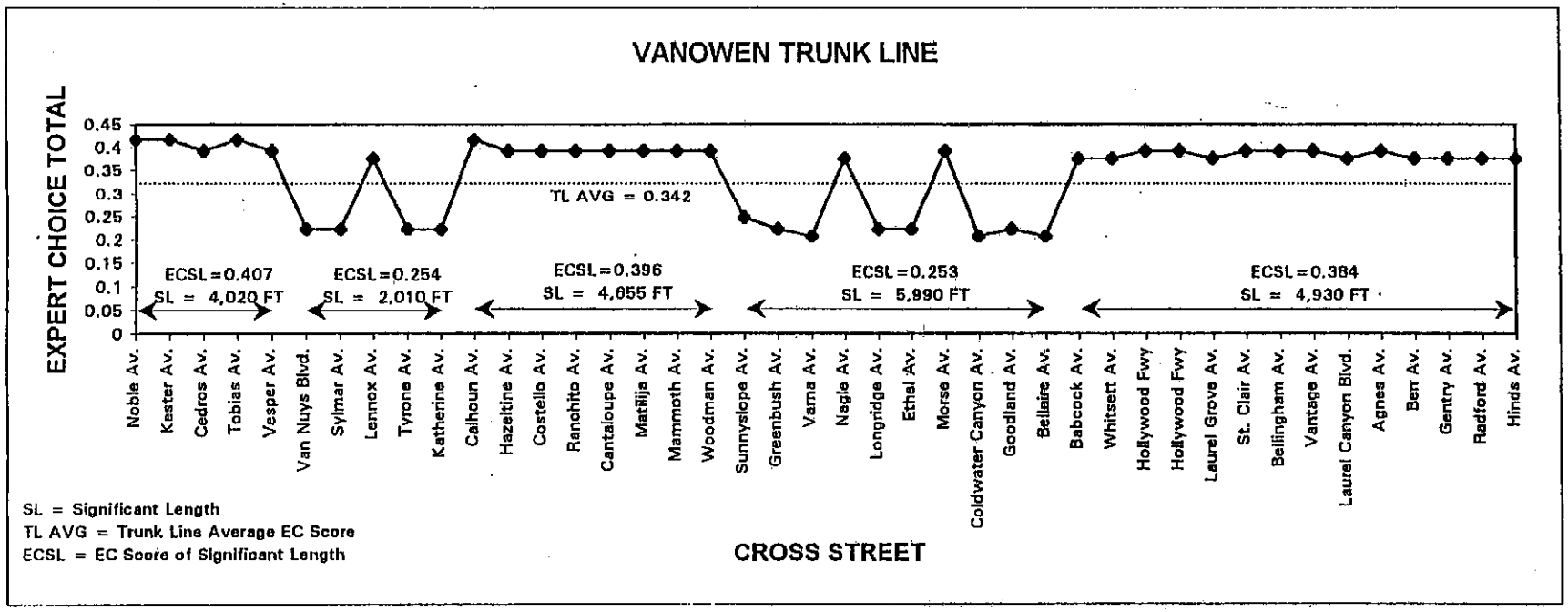

UPPER HOLLYWOOD RESERVOIR OUTLET LINE
EXPERT CHOICE TOTAL
0.160
0.140
0.120
0.100
0.080
0.060
0.040
0.020
0.000
TL AVG = 0.150
ECSL=0.150
SL = 3,660 FT
Upper Tower
Lower Tower
N 157,500
N 157,000
N 156,500
N 156,000
Dam
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

VANOWEN TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Vanowen St.	Noble Av.	48	E 1000	970	1360	0.417		
Vanowen St.	Kester Av.	48	E 2330	2330	1330	0.417		
Vanowen St.	Cedros Av.	48	E 3660	3660	330	0.393		
Vanowen St.	Tobias Av.	48	E 3990	3990	330	0.417		
Vanowen St.	Vesper Av.	48	E 4320	4320	670	0.393	0.407	4,020
Vanowen St.	Van Nuys Blvd.	48	E 4990	4990	670	0.223		
Vanowen St.	Sylmar Av.	48	E 5660	5660	330	0.223		
Vanowen St.	Lennox Av.	48	E 5990	5990	330	0.377		
Vanowen St.	Tyrone Av.	48	E 6320	6320	350	0.223		
Vanowen St.	Katherine Av.	48	E 6670	6670	330	0.223	0.254	2,010
Vanowen St.	Calhoun Av.	48	E 7000	7000	670	0.417		
Vanowen St.	Hazeltine Av.	48	E 7670	7670	665	0.393		
Vanowen St.	Costello Av.	48	E 8335	8335	670	0.393		
Vanowen St.	Ranchito Av.	48	E 9005	9005	350	0.393		
Vanowen St.	Cantaloupe Av.	48	E 9355	9355	305	0.393		
Vanowen St.	Matilija Av.	48	E 9660	9660	335	0.393		
Vanowen St.	Mammoth Av.	48	E 9995	9995	330	0.393		
Vanowen St.	Woodman Av.	48	E 10325	10325	1330	0.393	0.396	4,655
Vanowen St.	Sunnyslope Av.	48	E 11655	11655	335	0.247		
Vanowen St.	Greenbush Av.	48	E 11990	11990	330	0.223		
Vanowen St.	Varna Av.	48	E 12320	12320	325	0.208		
Vanowen St.	Nagle Av.	48	E 12645	12645	665	0.377		
Vanowen St.	Longridge Av.	48	E 13310	13310	1005	0.223		
Vanowen St.	Ethel Av.	48	E 14315	14315	255	0.223		
Vanowen St.	Morse Av.	48	E 14570	14570	1080	0.393		
Vanowen St.	Coldwater Canyon Av.	48	E 15650	15650	570	0.208		
Vanowen St.	Goodland Av.	48	E 16220	16220	765	0.223		
Vanowen St.	Bellaire Av.	48	E 16985	16985	660	0.208	0.253	5,990

VANOWEN TRUNK LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score	ECSL	Significant Length (ft)
Vanowen St.	Babcock Av.	48	E 17645	17645	610	0.377		
Vanowen St.	Whitsett Av.	48	E 18255	18255	850	0.377		
Vanowen St.	Hollywood Fwy	48	E 19105	19105	130	0.393		
Vanowen St.	Hollywood Fwy	48	E 19105	19275	305	0.393		
Vanowen St.	Laurel Grove Av.	48	E 19580	19580	330	0.377		
Vanowen St.	St. Clair Av.	48	E 19910	19910	330	0.393		
Vanowen St.	Bellingham Av.	48	E 20240	20240	330	0.393		
Vanowen St.	Vantage Av.	48	E 20570	20570	335	0.393		
Vanowen St.	Laurel Canyon Blvd.	48	E 20905	20905	340	0.377		
Vanowen St.	Agnes Av.	48	E 21245	21245	330	0.393		
Vanowen St.	Ben Av.	48	E 21575	21575	330	0.377		
Vanowen St.	Gentry Av.	48	E 21905	21905	330	0.377		
Vanowen St.	Radford Av.	48	E 22235	22235	330	0.377		
Vanowen St.	Hinds Av.	48	E 22565	22565	50	0.377	0.384	4,930
				AVERAGE (TL AVG) =		0.342		

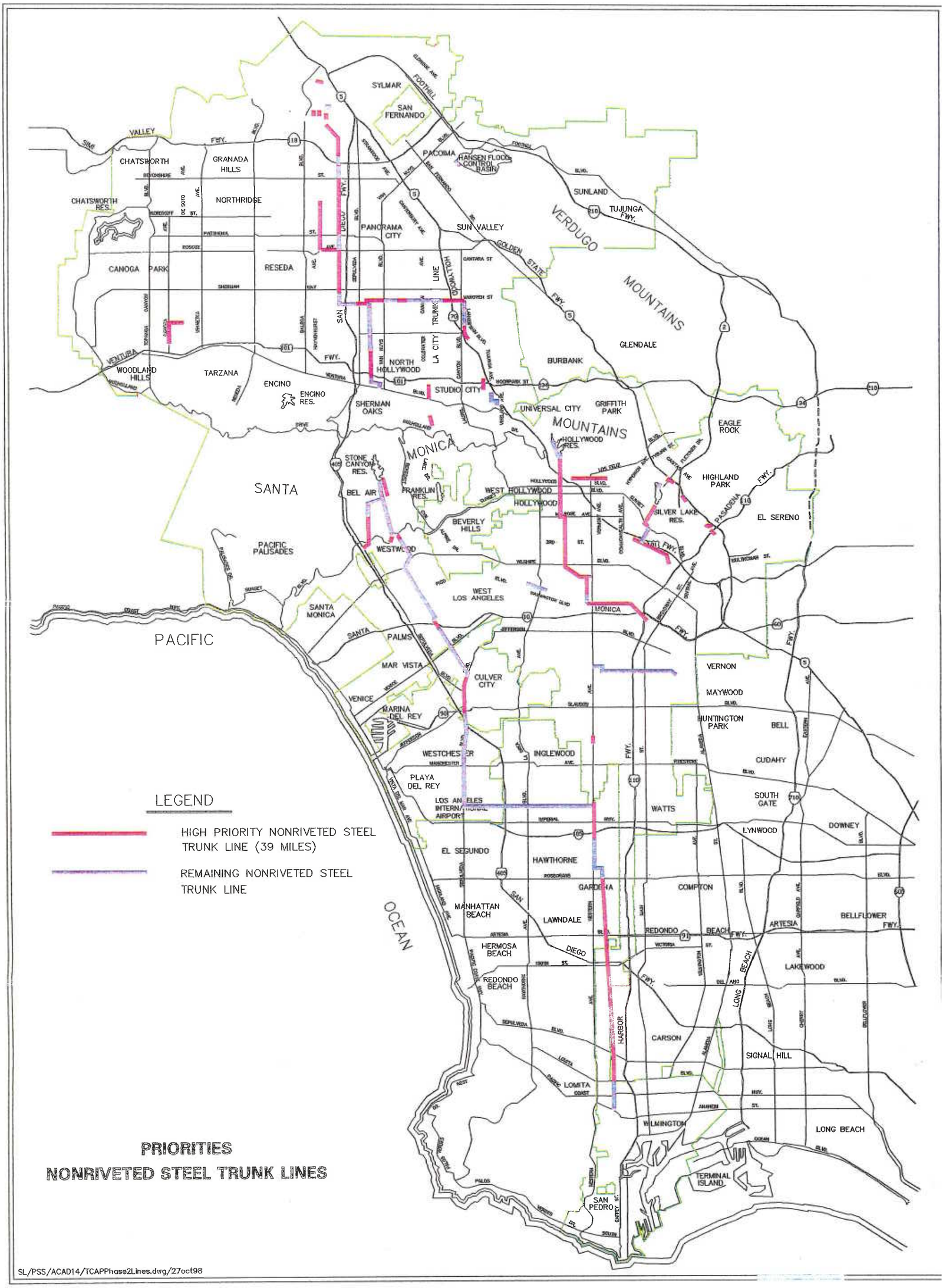

VANOWEN TRUNK LINE
EXPERT CHOICE TOTAL
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
TL AVG = 0.342
ECSL = 0.407
SL = 4,020 FT
ECSL = 0.254
SL = 2,010 FT
ECSL = 0.396
SL = 4,655 FT
ECSL = 0.253
SL = 5,990 FT
ECSL = 0.384
SL = 4,930 FT
Noble Av.
Kester Av.
Cedros Av.
Tobias Av.
Vesper Av.
Van Nuys Blvd.
Sylmar Av.
Lennox Av.
Tyrone Av.
Katherine Av.
Calhoun Av.
Hazeltine Av.
Costello Av.
Ranchito Av.
Cantaloupe Av.
Matilija Av.
Mammoth Av.
Woodman Av.
Sunnyslope Av.
Greenbush Av.
Varna Av.
Nagle Av.
Longridge Av.
Ethel Av.
Morse Av.
Coldwater Canyon Av.
Goodland Av.
Bellaire Av.
Babcock Av.
Whitsett Av.
Hollywood Fwy
Hollywood Fwy
Laurel Grove Av.
St. Clair Av.
Bellingham Av.
Vantage Av.
Laurel Canyon Blvd.
Agnes Av.
Ben Av.
Gentry Av.
Radford Av.
Hinds Av.
CROSS STREET
SL = Significant Length
TL AVG = Trunk Line Average EC Score
ECSL = EC Score of Significant Length

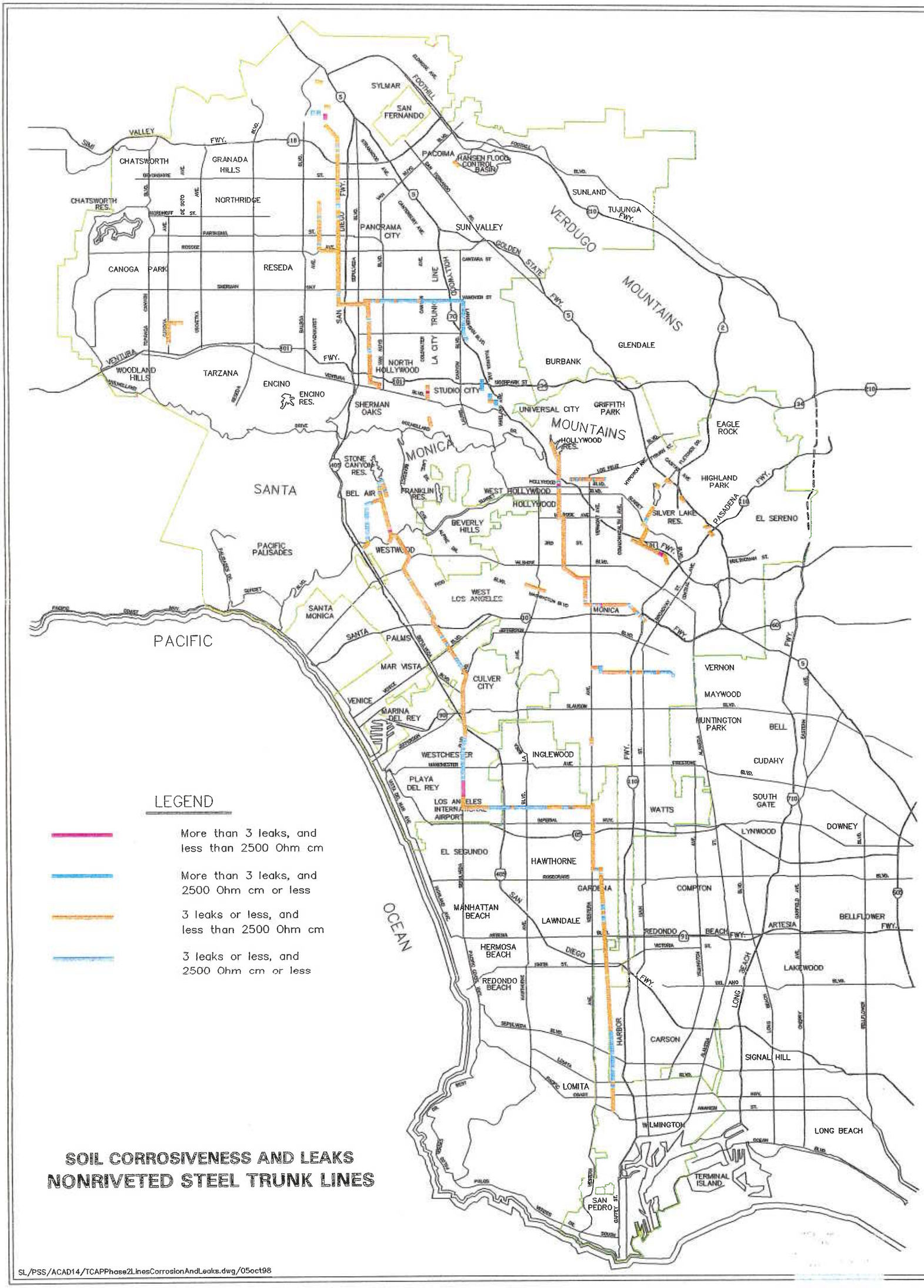
VNPS#1 DISCHARGE LINE

Street	Cross Street	Diameter (in)	Cross Street Station	Line Beginning Station	Length (ft)	EC Score
LAR Complex	54" No.40245 LA25	36	E 1000	1000	160	0.168

AVERAGE (TL AVG) = 0.168

Significant Length = 160 feet


LEGEND
HIGH PRIORITY NONRIVETED STEEL TRUNK LINE (39 MILES)
REMAINING NONRIVETED STEEL TRUNK LINE
PRIORITIES
NONRIVETED STEEL TRUNK LINES
SYLMAR
SAN FERNANDO
PACOIMA
HANSEN FLOOD CONTROL BASIN
SUNLAND
TUJUNGA
VERDUGO MOUNTAINS
SUN VALLEY
PANORAMA CITY
GRANADA HILLS
CHATSWORTH
CHATSWORTH RES.
NORTHRIDGE
CANOGA PARK
RESEDA
GLENDALE
BURBANK
NORTH HOLLYWOOD
LA CITY TRUNK LINE
SAN DIEGO
HOLLYWOOD
WOODLAND HILLS
TARZANA
ENCINO
ENCINO RES.
SHERMAN OAKS
STUDIO CITY
UNIVERSAL CITY
GRIFFITH PARK
HOLLYWOOD RES.
EAGLE ROCK
HIGHLAND PARK
SILVER LAKE RES.
EL SERENO
STONE CANYON RES.
SANTA MONICA MOUNTAINS
FRANKLIN RES.
BEL AIR
WEST HOLLYWOOD
HOLLYWOOD
BEVERLY HILLS
WESTWOOD
PACIFIC PALISADES
SANTA MONICA
WEST LOS ANGELES
PACIFIC
PALMS
MAR VISTA
CULVER CITY
VENICE
MARINA DEL REY
VERNON
MAYWOOD
HUNTINGTON PARK
BELL
CUDAHY
WESTCHESTER
INGLEWOOD
PLAYA DEL REY
LOS ANGELES INTERNATIONAL AIRPORT
WATTS
SOUTH GATE
LYNWOOD
DOWNEY
EL SEGUNDO
HAWTHORNE
GARDENA
COMPTON
MANHATTAN BEACH
LAWNDALE
REDONDO BEACH
HERMOSA BEACH
ARTESIA
BELLFLOWER
LAKEWOOD
LONG BEACH
CARSON
SIGNAL HILL
LOMITA
WILMINGTON
LONG BEACH
TERMINAL ISLAND
SAN PEDRO
OCEAN
SL/PSS/ACAD14/TCAPPhase2Lines.dwg/27oct98


SYLMAR
SAN FERNANDO
PACOIMA
HANSEN FLOOD CONTROL BASIN
SUNLAND
TUJUNGA FWY.
VERDUGO MOUNTAINS
SUN VALLEY
PANORAMA CITY
CHATSWORTH
GRANADA HILLS
NORTHRIDGE
CHATSWORTH RES.
CANOGA PARK
RESEDA
TARZANA
WOODLAND HILLS
ENCINO
ENCINO RES.
SHERMAN OAKS
NORTH HOLLYWOOD
STUDIO CITY
BURBANK
GLENDALE
UNIVERSAL CITY
GRIFFITH PARK
HOLLYWOOD RES.
EAGLE ROCK
HIGHLAND PARK
SILVER LAKE RES.
EL SERENO
STONE CANYON RES.
BEL AIR
FRANKLIN RES.
WEST HOLLYWOOD
HOLLYWOOD
BEVERLY HILLS
WESTWOOD
PACIFIC PALISADES
SANTA MONICA MOUNTAINS
WEST LOS ANGELES
SANTA MONICA
PACIFIC
PALMS
MAR VISTA
VENICE
MARINA DEL REY
CULVER CITY
MONICA
VERNON
MAYWOOD
HUNTINGTON PARK
BELL
CUDAHY
SOUTH GATE
WESTCHESTER
INGLEWOOD
PLAYA DEL REY
LOS ANGELES INTERNATIONAL AIRPORT
WATTS
LYNWOOD
DOWNEY
EL SEGUNDO
HAWTHORNE
GARDENA
COMPTON
MANHATTAN BEACH
LAWNDALE
REDONDO BEACH
BEACH
ARTESIA
BELLFLOWER
HERMOSA BEACH
LAKEWOOD
CARSON
SIGNAL HILL
LOMITA
WILMINGTON
LONG BEACH
TERMINAL ISLAND
SAN PEDRO
OCEAN
LEGEND
More than 3 leaks, and less than 2500 Ohm cm
More than 3 leaks, and 2500 Ohm cm or less
3 leaks or less, and less than 2500 Ohm cm
3 leaks or less, and 2500 Ohm cm or less
SOIL CORROSIVENESS AND LEAKS
NONRIVETED STEEL TRUNK LINES
SL/PSS/ACAD14/TCAPPhase2LinesCorrosionAndLeaks.dwg/05oct98