Appendix L 2006 LADOT Pedestrian and Traffic Counts

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2006 LADOT PEDESTRIAN COUNTS
AT FARMDALE AND EXPOSITION

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
(Rev Apr 92)

STREET:
North/South FARMDALE AV

East/West EXPOSITION BL N /RDWY

Day: FRIDAY Date: JAN 20, 2006 Weather: CLEAR

Hours: 7–10 AM 3–6 PM

School Day: YES District: SOUTHERN I/S CODE 2697227400

	N/B	S/B	E/B	W/B
DUAL–WHEELED	13	30	26	31
BIKES	1	5	4	2
BUSES	0	0	0	1

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	80	8.00	68	7.30	36	8.00	116	7.30
PM PK 15 MIN	70	3.15	66	5.15	64	4.30	50	4.45
AM PK HOUR	271	7.30	205	7.15	110	7.15	352	7.00
PM PK HOUR	199	3.00	223	4.30	222	3.45	169	4.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7–8	41	140	34	215
8–9	36	140	36	212
9–10	14	77	9	100
3–4	33	131	35	199
4–5	30	100	21	151
5–6	23	89	24	136
TOTAL	177	677	159	1013

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7–8	17	161	21	199
8–9	9	91	8	108
9–10	10	63	7	80
3–4	23	166	14	203
4–5	34	163	13	210
5–6	22	189	5	216
TOTAL	115	833	68	1016

TOTAL	XING S/L		XING N/L	
N–S	Ped	Sch	Ped	Sch
414	0	50	0	21
320	1	61	3	0
180	1	9	2	0
402	5	115	6	84
361	4	3	6	0
352	1	0	5	0
2029	12	238	22	105

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7–8	5	38	38	81
8–9	9	48	32	89
9–10	5	25	13	43
3–4	15	93	69	177
4–5	14	123	79	216
5–6	10	123	77	210
TOTAL	58	450	308	816

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7–8	60	227	65	352
8–9	43	161	39	243
9–10	30	84	24	138
3–4	48	62	26	136
4–5	52	93	24	169
5–6	45	54	18	117
TOTAL	278	681	196	1155

TOTAL	XING W/L		XING E/L	
E–W	Ped	Sch	Ped	Sch
433	3	285	3	84
332	6	242	2	61
181	7	19	0	13
313	14	599	6	78
385	4	44	13	12
327	5	12	3	1
1971	39	1201	27	249

2006 LADOT TRAFFIC COUNTS AT FARMDALE AND EXPOSITION

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South: CRENSHAW BL

East/West: EXPOSITION BL

Day: MONDAY Date: August 14, 2006 Weather: CLEAR

Hours: 7-10AM 3-6PM

School Day: YES District: HOLLYWOOD I/S CODE 1840026970

	N/B	S/B	E/B	W/B
DUAL-WHEELED	136	167	13	90
BIKES	4	0	8	14
BUSES	89	51	0	1

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	505	7.30	300	7.30	44	8.00	221	8.15
PM PK 15 MIN	404	5.30	549	4.30	64	5.15	119	5.45
AM PK HOUR	1945	7.30	1116	7.15	152	7.45	796	7.30
PM PK HOUR	1575	5.00	1820	4.30	199	4.45	400	5.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	37	1778	30	1845
8-9	61	1777	42	1880
9-10	36	1546	20	1602
3-4	28	1449	20	1497
4-5	35	1450	38	1523
5-6	31	1508	36	1575
TOTAL	228	9508	186	9922

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	12	1075	6	1093
8-9	11	828	6	845
9-10	10	884	5	899
3-4	22	1381	38	1441
4-5	25	1658	5	1688
5-6	28	1733	0	1761
TOTAL	108	7559	60	7727

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
2938	0	0	1	0
2725	0	0	1	0
2501	1	0	0	0
2938	1	0	0	0
3211	0	0	0	0
3336	0	0	0	0
17649	2	0	2	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	10	87	11	108
8-9	13	96	26	135
9-10	8	27	13	48
3-4	11	103	20	134
4-5	10	110	28	148
5-6	16	141	36	193
TOTAL	68	564	134	766

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	80	448	208	736
8-9	66	420	174	660
9-10	36	194	87	317
3-4	55	184	126	365
4-5	58	187	92	337
5-6	55	245	100	400
TOTAL	350	1678	787	2815

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
844	7	0	21	1
795	24	0	12	0
365	18	0	33	9
499	31	0	39	9
485	21	0	17	2
593	6	0	22	0
3581	107	0	144	21

(Rev Apr 06)

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Metropolitan
Transportation
Authority

One Gateway Plaza
Los Angeles, CA
90012-2952

MTA BOARD MEETING
DECEMBER 4, 2003

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SUBJECT: GRADE CROSSING POLICY FOR LIGHT RAIL TRANSIT (LRT)

ACTION: APPROVE LRT GRADE CROSSING POLICY AND SPECIFIC GRADE CROSSING RECOMMENDATIONS FOR THE EXPOSITION LIGHT RAIL TRANSIT PROJECT

RECOMMENDATION

APPROVE:

A) The attached MTA Grade Crossing Policy for Light Rail Transit (Attachment A);

B) The attached Evaluation of Exposition Light Rail Transit Project (Vermont Avenue to Venice Boulevard Segment) with the Proposed MTA Grade Crossing Policy (Attachment B);

ISSUE

In September 2003, the Board considered the MTA Grade Crossing Policy for Light Rail Transit and the Exposition Grade Crossing Analysis. The Board approved the addition of a grade separation at La Brea Avenue and La Cienega Boulevard on the Exposition Light Rail Transit project, but requested that staff work with the City of Los Angeles and other agencies/jurisdictions to resolve specific issues concerning the policy, prior to Board adoption.

Revisions to LRT Grade Crossing Policy- Staff has slightly revised the draft LRT Grade Crossing Policy from the version that was presented to the Board at its September meeting. The major change is that the Initial Screening graph has been adjusted so that a greater number of intersections would fall into the Milestone 2 (more detailed analysis) category. The draft policy also now calls for more consideration of safety measures and adds detail for operations and safety analysis.

Revisions to Exposition Grade Crossing Analysis- With respect to specific grade crossings on the Exposition LRT Project, the analysis does not call for any additional grade separations at this time between Vermont and Venice than previously approved by the MTA Board at its September meeting. However, there were several

intersections where the analysis identifies supplemental operating, safety and geometric measures that should be included in the preliminary engineering design. These crossings include Vermont, Western, Arlington and Crenshaw.

The analysis indicates that a reconfiguration of the Jefferson Boulevard crossing may be possible that would move the intersection closer to La Cienega Boulevard and allow the Jefferson crossing to be included under the aerial grade separation that has already been approved for La Cienega. MTA staff will work with LADOT and Culver City to determine if such a reconfiguration will be cost effective.

Venice Boulevard Analysis- In response to a request from the City of Culver City, supplemental analysis was conducted to determine whether a future extension of the line would require a grade separation at Venice Boulevard. The analysis concluded that such a grade separation would be required at Venice Boulevard when the Expo Line is extended in the future to cross that street. Because of the close proximity of Washington and National Boulevards to Venice Boulevard, a future grade separation at Venice will require grade separations at Washington and National at that time as well due to engineering design requirements. Presently, the policy indicates that Washington and National Boulevards could operate in an at-grade configuration, based on operational and traffic criteria. There is enough width in the Exposition right of way to allow for the staging of additional grade separations at Washington and National Boulevards in the future. Staff will continue to work with the cities of Culver City and Los Angeles to determine the most cost effective design strategy to accommodate these future improvements.

City of Los Angeles Issues: Staff has met with the City of Los Angeles Department of Transportation staff regarding issues raised with regard to the policy. The revised policy addresses the concerns of the City of Los Angeles and the staff of that city now supports the overall policy and Exposition project recommendations, with the provisions identified above and in the detailed analysis documents.

City of Culver City Issues: The City of Culver City submitted a letter on October 16, 2003 raising concerns with regard to the Grade Crossing Policy and stating the city's position that no at-grade light rail crossings are permitted under the City's General Plan. Staff has met with City of Culver City; however, resolution of this issue has not yet been achieved. The revised Grade Crossing Policy provides more detailed analysis of the intersections in Culver City and recommends a future grade separation at Venice, National and Washington Boulevards when the line is extended west.

POLICY IMPLICATIONS

The MTA does not currently have a policy on light rail transit grade separations. Approval of a policy would provide a standard by which future corridors will be able to more effectively plan for their projects.

OPTIONS

The Board could choose not to approve the proposed Grade Crossing Policy for LRT. Staff is not recommending this option, because the proposed Policy will provide MTA with good direction in future planning efforts. Also, the sources utilized to develop the proposed policy reflect the current "best practices" and provide a solid foundation for the proposed Policy. The proposed policy, prepared for the MTA by Korve Engineering, is based on guidelines taken from different sources including the Institute of Transportation Engineers, the Dallas Area Rapid Transit system and the California Public Utilities Commission. Specific safety guidelines were adapted from the Transportation Cooperative Research Board (TCRP) and the MTA Risk Management Department.

For the Exposition LRT Project Analysis, the Board could direct that staff include additional grade separations into the project. Staff is not recommending this option, because the technical analysis indicates that at-grade operation of the Exposition line will be possible at locations other than La Brea and La Cienega. With the exception of La Brea and La Cienga, the proposed Policy calls for at-grade designs at crossings to proceed at this time.

FINANCIAL IMPACT

Costs for the grade separation at La Cienega have been included in the current Exposition Light Rail Transit cost estimate of $505 million. These costs do not include the grade separation at La Brea. Costs for the La Brea grade separation will be developed as a part of preliminary engineering and added to the project budget.

DISCUSSION

Grade Crossing Policy for LRT

The purpose of the proposed Grade Crossing Policy for LRT is to identify and address all of the principle concerns and trade-offs involved in grade separation and safety decision-making. The proposed policy recognizes that local, state and federal government officials are involved in the process as well as the communities along the light rail line and therefore, no policy can dictate the ultimate solution. The proposed Policy can, however, prioritize decision-making about grade separations and safety measures so that budget decisions about project cost can be made earlier in the process, when they have less impact on the project funding commitments and construction schedule.

In general, the proposed Policy follows a three-phase process: (1) Initial Screening; (2) Detailed Analysis; and (3) Verification. The Initial Screening relies on traffic volume and train frequency to sort the crossings into at-grade, grade-separated or further analysis required categories. Crossings requiring further analysis move into the detailed analysis phase and are studied for intersection geometry, queuing, intersection level of service and other issues. Based on these

studies, these crossings are then given a preliminary disposition of either at-grade or grade separation. In the verification phase, the PE level of design is completed and more detailed traffic volume and safety information may be compiled, in consultation with local jurisdictions, the PUC and local communities. Final determinations can be made at this point.

Exposition LRT Grade Crossing Analysis

Korve Engineering applied the methodology described above through the Initial Screening and Detailed Analysis phases, to the crossings along the Exposition LRT project between Vermont Avenue and Venice Boulevard (the Downtown to Exposition Park segment is being evaluated separately as a part of the Hill and Flower Street Downtown Alignment Assessment).

Korve evaluated the 14 highest-volume crossings and determined, after Milestone 1 analysis that one would require grade separation based on traffic volumes and train frequencies (La Cienega). Six other locations were taken into the Milestone 2 more detailed analysis. Out of this analysis, La Brea was recommended for grade separation based on queuing problems (cars stopped at the traffic light backing up into the right-of-way). For the other five, more detailed analysis indicated that at-grade solutions were possible based on expected train speeds at those locations, acceptable solutions to traffic/traffic safety issues, expected Levels of Service at the intersections and understanding that partial rather than full preemption was acceptable at several intersections.

City of Culver City Issues

A letter has also been received from the City of Culver City dated October 16, 2003 identifying concerns of that city regarding the policy. That letter states:

> "The City is concerned that both the PE Drawings and the Grade Crossing Policy disregard our firm stance concerning at-grade and aerial crossings, as detailed in the Circulation Element of the Culver City General Plan and in City Council Resolution No. 2001-R063. The General Plan calls for no at-grade Light Rail Transit crossings and no aerial crossings adjacent to residential areas."

The letter from Culver City further states:

> "Additionally, the City is concerned that the PE drawings, do not adequately address the eventual extension of the Mid City/Exposition Boulevard Light Rail Transit Project to Santa Monica and the future Venice Boulevard crossing."

In response to the concerns of the City of Culver City, additional analysis has been conducted for the two grade crossings located within the City limits of Culver City at Washington Boulevard and National Boulevard. Staff has also reviewed the future crossing of Venice Boulevard that will be required when the project is extended to the west.

This analysis has determined that the future crossing of Venice Boulevard will require grade separation and that such a grade separation will also require the grade separation of Washington

and National Boulevards, because of their close proximity to Venice Boulevard. Although no grade separation is called for at this time under the policy, the recommendation is that a grade separation be provided in the future, when the project is extended past Venice Boulevard to the west.

NEXT STEPS

Staff will incorporate recommendations approved by the Board into preliminary engineering for the project.

ATTACHMENTS

Attachment A	Draft MTA Grade Crossing Policy for Light Rail Transit
Attachment B	Evaluation of Exposition Light Rail Transit Project With Proposed MTA Grade Crossing Policy

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