

MEMORANDUM

DEPARTMENT OF TRANSPORTATION

4201 East Arkansas Ave.
Denver, Colorado 80222
(303) 757-9011



DATE: February 10, 1992

TO: The Colorado Transportation Commission

FROM: ROBERT L. CLEVINGER *Robert L. Clevinger*

SUBJECT: Type II Noise Barrier Location List

Attached is a listing of 11 noise barrier locations included in the Five Year Program of Projects and 109 potential noise barrier locations across the state. These locations are divided into four groups (Tables A-D) which are briefly explained on page 2 of the attachment. We will review this list with you in February and briefly discuss the following recommendations. To help clarify the discussion, definitions of Type I and Type II barrier projects are provided.

- Type I barriers are barriers on new or widened highways that are built to mitigate noise impacts resulting from a new highway construction project.
- Type II barriers are barriers constructed as noise abatement projects on existing highways.

Recommendations:

1. \$1.5 million per year, on average, beginning in FY 94, should be established as a goal over the next 10 years to address Type II noise mitigation. This funding should be over and above Type I commitments directly tied to our construction program.
2. Where local funding (private or public) can be provided, the Department will develop a process for the possibility of accelerating a project toward the top of the list.
3. Before any Type II barrier location is included in the Five Year Program of Projects, a final cost benefit rating will be recalculated and the technical feasibility and reasonableness of the proposed barrier will be reviewed by the Department.
4. The Department's Noise Barrier Location List should be updated at five year intervals.

Attachment

COLORADO DEPARTMENT OF TRANSPORTATION NOISE BARRIER PROGRAM
NOISE BARRIER LOCATION LIST

TABLES

- Table 'A' Noise Barrier Locations Included In the Five Year Program of Projects
- Table 'B' Ratings of Known Noise Barrier Locations; STAMINA 2.0 Model Run
- Table 'C' Additional Noise Barrier Locations for Future Consideration; NOISE 4.0 Model Run
- Table 'D' Potential Future Noise Problem Locations

TABLE A. Noise Barrier Locations Included in the 1992 - 1996 Five Year Program of Projects

Table A lists noise barriers that are currently budgeted for construction in the Five Year Program of Projects. This list of 11 project locations includes both Type I barriers which will be built in direct association with a highway construction project and Type II barriers which are constructed along existing highways at locations identified with high levels of traffic noise.

TABLE B. Ratings of Known Noise Barrier Locations

Table B lists 43 Type II barrier locations that ranked highest among statewide candidate sites. 145 potential noise barrier locations across the state were initially evaluated using the NOISE IV computer noise model. 48 sites with noise levels exceeding 70 dB(A) and one special use area were selected as a manageable group of candidate locations for Type II funding consideration in the near future. This group received a second evaluation with the more sophisticated STAMINA 2.0 computer noise program. All 49 locations were then ranked by a cost benefit formula and those with a cost benefit ratio greater than zero are included in Table B.

TABLE C. Additional Noise Barrier Locations for Future Consideration

Table C includes 41 locations evaluated by the NOISE IV computer noise model and found to have noise levels between 67 and 70 dB(A). Also included in Table C are 6 locations evaluated for Table B which had cost benefit ratios equal to or less than zero. This group is listed by descending noise levels and is not representative of any final ranking. Locations included on this list will all be re-evaluated when the complete Noise Barrier Location List is updated (estimated 1997).

TABLE D. Potential Future Noise Problem Locations

Table D includes 19 locations evaluated by the NOISE IV computer model and determined to have current noise levels below 67 dB(A) but to have design year (2010) levels of 67 dB(A) or higher. This group is listed by descending noise levels and is not representative of any final ranking. Locations included on this list will be re-evaluated when the complete Noise Barrier Location List is updated (estimated 1997).

TABLE A
FOR DISCUSSION ONLY
NOISE BARRIER LOCATIONS INCLUDED IN THE 1992-96 FIVE YEAR PROGRAM OF PROJECTS
FEBRUARY 6, 1992

DIST S.H. NO. NO.	CITY/COUNTY	DESCRIPTION	MAX.		DEV TYP	NO OF REC.	WALL LGTH (FEET)	EST. CONSTR. COST (\$1000)	EST. CUM. COST (\$1000)	COMMENTS	PAGE 1
			SPD 1990 LMT MPH	2010 LMT DB(A)							
4 287	BROOMFIELD	S. OF MIRAMONTE BLVD--W. SIDE	50	69	SF	12	1400	210.0	210.0	IN 1992-96 5 YR PLAN, TYPE I - 1993	
4 287	LAFAYETTE	LAFAYETTE BYPASS	45	53	SF	119	4000	600.0	810.0	IN 1992-96 5 YR PLAN, TYPE I - 1993	
6 1-225	DENVER METRO	COLFAX TO SMITH RD--BOTH	55	73	SF	146	10000	1500.0	2310.0	IN 1992-96 5 YR PLAN, TYPE I - 1994	
2 1-025	COLORADO SPGS.	BLJOU TO FILLMORE--W. SIDE	55	76	SF	207	14500	2175.0	4485.0	IN 1992-96 5 YR PLAN, TYPE I - 1994	
1 1-070	IDAHO SPRINGS	1ST TO 3RD ST--N. SIDE	60	78	SF	36	1700	382.5	4867.5	IN 1992-96 5 YR PLAN, TYPE II - 1992	
2 1-025	PUEBLO	MARYLAND TO BESSEMER DITCH	50	75	SF	89	5100	765.0	5632.5	IN 1992-96 5 YR PLAN, TYPE II - 1992	
2 1-025	PUEBLO	NORTHERN AVE. TO FAIRVIEW	50	74	SF	61	3100	465.0	6097.5	IN 1992-96 5 YR PLAN, TYPE II - 1992	
1 1-070	SILVERPLUME	AT SILVERPLUME--N. SIDE	65	72	SF	34	3000	675.0	6772.5	IN 1992-96 5 YR PLAN, TYPE II - 1994	
2 1-025	PUEBLO	27TH ST SOUTH	50	74	SF	103	4700	705.0	7477.5	IN 1992-96 5 YR PLAN, TYPE II - 1995	
2 1-025	FOUNTAIN	SE QUAD FOUNTAIN INTRCHNG	65	71	SF	36	400	60.0	7537.5	IN 1992-96 5 YR PLAN, TYPE II - 1995	
6 1-070	DENVER METRO	20TH TO 38TH AVE--BOTH	55	70	SF	72	6000	1350.0	8887.5	IN 1992-96 5 YR PLAN, TYPE II - 1996	
									8887.5	TABLE "A" TOTAL	

FOOTNOTES:
 SF = SINGLE FAMILY, 1ST FLOOR ONLY
 MF = MULTIPLE FAMILY, 1ST FLOOR ONLY
 MH = MOBILE HOMES
 SU = SPECIAL USE AREA (NOISE ABATEMENT CRITERIA = 57 DB(A))
 SCH = SCHOOL AND ASSOCIATED FACILITIES
 NAC = NOISE ABATEMENT CRITERIA AS DEFINED IN 23 CFR PART 772
 CONSTRUCTION COSTS ARE PRELIMINARY WITHOUT SPECIFYING ANY PARTICULAR CONSTRUCTION MATERIAL OR DESIGN.
 CONSTRUCTION MATERIALS ARE TO BE DETERMINED BY THE DEPARTMENT DURING PROJECT DESIGN.
 CONSTRUCTION COST ESTIMATES ARE SHOWN IN 1991 DOLLARS.
 TECHNICAL FEASIBILITY AND REASONABLENESS OF INDIVIDUAL NOISE BARRIER LOCATIONS SUBJECT TO DEPARTMENT REVIEW.
 FEDERAL PARTICIPATION IN FUNDING NOISE BARRIER CONSTRUCTION SUBJECT TO FHWA REVIEW.

TABLE B
FOR DISCUSSION ONLY
RATING OF KNOWN NOISE BARRIER LOCATIONS
FEBRUARY 6, 1992

COST/ BENEFIT FACTOR	DIST NO.	S.H. NO.	CITY/COUNTY	DESCRIPTION	MAX. MAX.		DEV TYP	NO OF REC.	WALL LENGTH (FEET)	CONSTR. COST (\$1000)	EST. CUM. COST (\$1000)	COMMENTS
					SPD LMT	2010 LEQ						
7.92	6	6	DENVER	KNOX CT TO SHERIDAN--BOTH	55	80	SF	105	9700	2182.5	2182.5	
7.88	6	1-025	DENVER METRO	88TH TO 90TH AVE--E. SIDE	55	75	HF	34	2000	300.0	2482.5	
6.92	6	1-025	DENVER	QUINCY TO HAMPDEN--BOTH SIDES	55	76	HF	81	6100	915.0	3397.5	CANYON CLUB, CAMBRIDGE SQ., SOUTHWOOD
6.09	6	121	DENVER METRO	67TH TO 68TH AVE--E. SIDE	45	73	HF	12	600	90.0	3487.5	
4.03	6	6	DENVER METRO	SHERIDAN TO WADSWORTH--BOTH	55	76	HF	71	9400	2115.0	5602.5	
3.82	6	1-070	DENVER METRO	TABOR - EAST--BOTH SIDES	55	75	SF	44	4700	705.0	6307.5	
2.83	6	1-225	DENVER METRO	XANADU WY TO YALE AV--W.	55	72	HF	16	1900	285.0	6592.5	TYPE 1 PER EA/FONSI
2.44	6	285	DENVER METRO	WOLFF TO PATTON--N. SIDE	55	73	SF	37	2900	435.0	7027.5	
2.36	3	1-070	VAIL	VAIL, E & W OF BUFEHR CRK RD	65	71	HF	39	1300	292.5	7320.0	1-70 PREDATES HOMES. 1 COMPLAINT.
2.09	6	1-225	DENVER METRO	2ND TO 6TH AVE--W. SIDE	55	71	HF	34	3800	570.0	7890.0	TYPE 1 PER EA/FONSI
1.81	1	1-070	FRISCO	BTWN INTERCHANGES--SE	65	75	SF	17	2500	562.5	8452.5	
1.77	2	1-025	MONUMENT	N OF PORT OF ENTRY--W. SIDE	65	72	HH	16	1000	150.0	8602.5	MOBILE HOMES @ MONUMENT P.O.E.
1.74	6	1-225	DENVER METRO	YALE TO PARKER RD--BOTH	55	74	HF	108	7800	1170.0	9772.5	TYPE 1 PER EA/FONSI
1.65	4	1-076	HUDSON	@ SW QUAD OF INTERCHANGE	65	77	SF	8	1200	180.0	9952.5	COUNTY NOTIFIED OF SETBACKS IN 1976. NOT ELIGIBLE FOR FEDERAL FUNDS.
1.36	6	121	DENVER METRO	GRANDVIEW TO 60TH--E. SIDE	45	73	HF	9	600	135.0	10087.5	
1.05	6	1-225	DENVER METRO	MISSISSIPPI TO ILLIF--W. SIDE	55	70	HF	22	2100	315.0	10402.5	TYPE 1 PER EA/FONSI
1.00	3	1-070	VAIL	VAIL POST OFFICE - EAST	65	73	HF	60	4800	936.0	11338.5	
0.92	1	1-025	DOUGLAS CO	AT SILVER HEIGHTS--E. SIDE	65	72	SF	10	1600	240.0	11578.5	
0.82	6	285	DENVER	UNIVERSITY BLVD WEST--N.	40	73	SF	10	2400	540.0	12118.5	
0.80	1	1-025	CASTLE ROCK	3RD TO 5TH--E. SIDE	65	74	SF	10	1000	150.0	12268.5	
0.74	4	1-025	WINDSOR	SU QUAD WINDSOR INTERCHANGE	65	70	SF	35	2000	300.0	12568.5	
0.65	6	285	DENVER METRO	KENDALL-JAY/HARLAN-DEREW	55	72	HF	18	1100	165.0	12733.5	CAVALIER CLUB & PEACH TREE APTS.
0.63	6	6	DENVER METRO	WADSWORTH TO KIPLING--BOTH	55	75	SF	71	11000	2475.0	15208.5	
0.59	2	1-025	PUEBLO	2ND TO 4TH--EAST SIDE	50	72	SF	5	900	135.0	15343.5	
0.57	1	1-070	DOMHIEVILLE	INTERCHANGE E & W--BOTH	65	74	HF	39	5100	765.0	16108.5	
0.49	3	1-070	GLENWOOD SPGS.	HATCHERY RD--N. SIDE	65	73	HF	9	2000	300.0	16408.5	1-70 PREDATES HOMES
0.45	1	1-070	DUMONT	AT DUMONT--BOTH	65	72	SF	25	5500	825.0	17233.5	
0.41	1	1-070	IDAHO SPRINGS	3RD ST. TO SH 103--N. SIDE	60	76	SF	35	2200	495.0	17728.5	

112

TABLE B (CONT'D)
FOR DISCUSSION ONLY
RATING OF KNOWN NOISE BARRIER LOCATIONS
FEBRUARY 6, 1992

COST/ BENEFIT FACTOR	DIST NO.	S.H. NO.	CITY/COUNTY	DESCRIPTION	MAX.		DEV TYP	NO OF REC.	WALL LNTH	EST. CONSTR. COST	EST. CUM. COST	COMMENTS	
					SPD LMT	2010 LEQ							
=====													
					MPH	DB(A)	DB(A)						
=====													
0.39	3	1-070	VAIL	VAIL, AT BALD HIN, TOWNHOMES	65	70	73	MF	10	800	180.0	17908.5	1-70 PREDATES HOMES. 1 COMPLAINT.
0.29	3	1-070	EMPIRE JCT	EASTER SEAL HANDICAMP--S.	65	66	69	SU	10	1200	180.0	18088.5	SPEC. USE AREA (NAC = 57) - EARTH BERM
0.29	3	1-070	VAIL	E. OF GOLF COURSE--S. SIDE	65	73	75	SF	13	2000	300.0	18388.5	AKA COMMERCIAL TO GODDARD
0.28	2	1-025	TRINIDAD	COLORADO AVE. TO GODDARD	55	71	72	SF	17	5800	1131.0	19519.5	
0.23	6	1-076	DENVER METRO	YORK TO PLATTE RVR--E. SIDE	55	71	72	SF	2	1000	150.0	19669.5	
0.18	2	83	COLORADO SPGS.	HEADQUARTERS N. & S.--EAST SIDE	40	71	74	SF	32	2500	375.0	20044.5	MESA GRANDE TO RINSON PL.
0.16	2	83	COLORADO SPGS.	HARTFORD TO FOUNTAIN CRK-B	50	70	71	SF	12	2000	300.0	20344.5	
0.13	6	285	DENVER METRO	VANCE TO PIERCE--N.	55	69	72	MF	9	1600	240.0	20584.5	
0.11	1	1-025	DOUGLAS CO	AT BEVERLY HILLS--W. SIDE	65	69	73	SF	10	1900	285.0	20869.5	
0.08	2	83	COLORADO SPGS.	N OF FLINTRIDGE--W. SIDE	40	69	70	SF	15	1700	255.0	21124.5	RIDGEGLEN & RANCH CIR
0.06	2	83	COLORADO SPGS.	S. OF MAITZELAND--WEST SIDE	40	69	70	SF	8	1400	210.0	21334.5	ALPINE PL TO LANDER LN
0.05	2	83	COLORADO SPGS.	MORNING SUN - FLINTRIDGE--W.	40	68	74	SF	38	2900	435.0	21769.5	
0.04	6	1-025	DENVER METRO	DENEY SCHOOL--W. SIDE	55	70	73	SCH	2	2600	390.0	22159.5	
0.03	6	1-270	DENVER METRO	176/1270/YORK--SU QUAD	55	69	73	SF	3	1300	195.0	22354.5	TYPE I WITH INTERCHANGE RECONSTRUCTION
0.01	6	121	DENVER METRO	DRGM RR TO 64TH--E. SIDE	45	69	70	SF	13	2100	315.0	22669.5	TABLE "B" TOTAL

FOOTNOTES:
 SF = SINGLE FAMILY, 1ST FLOOR ONLY
 MF = MULTIPLE FAMILY, 1ST FLOOR ONLY
 MH = MOBILE HOMES
 SU = SPECIAL USE AREA [NOISE ABATEMENT CRITERIA = 57 DB(A)]
 SCH = SCHOOL AND ASSOCIATED FACILITIES
 NAC = NOISE ABATEMENT CRITERIA AS DEFINED IN 23 CFR PART 772.
 CONSTRUCTION COSTS ARE PRELIMINARY WITHOUT SPECIFYING ANY PARTICULAR CONSTRUCTION MATERIAL OR DESIGN.
 CONSTRUCTION MATERIALS ARE TO BE DETERMINED BY THE DEPARTMENT DURING PROJECT DESIGN.
 CONSTRUCTION COST ESTIMATES ARE SHOWN IN 1991 DOLLARS.
 TECHNICAL FEASIBILITY AND REASONABLENESS OF INDIVIDUAL NOISE BARRIER LOCATIONS SUBJECT TO DEPARTMENT REVIEW.
 FEDERAL PARTICIPATION IN FUNDING NOISE BARRIER CONSTRUCTION SUBJECT TO FHWA REVIEW.

113

11

TABLE C
FOR DISCUSSION ONLY
POTENTIAL NOISE BARRIER LOCATIONS FOR FUTURE CONSIDERATION
FEBRUARY 6, 1992

DIST S.H. NO. NO.	CITY/COUNTY	DESCRIPTION	MAX. MAX.		DEV TYP	NO OF REC.	WALL LNTH	EST.		COMMENTS	PAGE 4
			SPD 1990 LHT LEQ	2010 LEQ				CONSTR. COST (\$1000)	CLM. COST (\$1000)		
6 85	DENVER METRO	RIDGE RD TO PRINCE--N.	50	70	74	MH	16	1000	150.0	150.0	
3 1-070	GARFIELD CO	CANYON CREEK--N.SIDE	65	70	74	SF	UK	4000	600.0	750.0	HOMES PREDATE 1-70, SEPERATED BY F. RD.
6 285	DENVER	BRYANT TO BRADY--S. SIDE	55	70	72	MH	56	1200	180.0	930.0	FLYING SAUCER MH PARK
6 121	DENVER METRO	76TH TO VANCE DR--E. SIDE	45	70	72	SF	9	700	105.0	1035.0	
6 121	DENVER METRO	81ST TO 87TH--BOTH SIDES	45	70	71	SF	55	5100	765.0	1800.0	
6 285	DENVER METRO	KIPLING TO ESTES--N. SIDE	55	70	71	SF	43	3200	480.0	2280.0	
6 285	DENVER METRO	AMMONS TO MADSNORTH--N.	55	70	71	SF	4	1200	180.0	2460.0	
2 45	PUEBLO	S. OF SANDS TO PLANEVIEW	45	70	71	SF	16	1100	165.0	2625.0	HOUSES ON SOLAR DRIVE
6 121	DENVER METRO	72ND TO 75TH AVE--E. SIDE	45	70	71	MH	16	1700	255.0	2880.0	
6 285	DENVER METRO	AT S. BIRCH ST.--S. SIDE	40	70	70	SF	2	500	75.0	2955.0	
6 285	DENVER METRO	GARRISON TO BRENTWD--S. SIDE	55	70		SF	16	2500	375.0	3330.0	
6 1-070	DENVER METRO	BRIGHTON TO VASQUEZ--BOTH	55	70		SF	23	4700	705.0	4035.0	DISTRICT MEASURED 70 DB(A)
1 1-070	ARAPAHOE CO	AT FORKRDGE MH PARK--S.	65	69	74	MH	33	3000	450.0	4485.0	
6 85	DENVER METRO	DAVIES TO BRYANT--W. SIDE	45	69	74	MH	24	2100	315.0	4800.0	2 STORY APTS.
1 1-070	CLEAR CREEK CO	@ HIDDEN VALLEY INTERCHNG--S	45	69	72	SF	6	1900	285.0	5085.0	
6 285	DENVER METRO	LOHELL TO FEDERAL--S.	45	69	72	MH	26	500	75.0	5160.0	
6 285	DENVER METRO	UMATILLA TO SHOSHONE--N.	45	69	71	SF	5	500	75.0	5235.0	
4 1-025	WELLINGTON	NW & SW QUAD OF UNDERPASS	65	69	71	SF	2	1000	150.0	5385.0	MITIGATION DIFFICULT/MAY BE UNECONOMICAL
4 157	BOULDER	S BLDR RD TO BASELINE--BOTH	45	69	71	SF	40	6000	900.0	6285.0	DISTRICT CONFIRMED NOISE LEVEL OF 69+
6 1-025	DENVER METRO	98TH TO 99TH AV--W. SIDE	55	69	71	SF	9	900	135.0	6420.0	
4 85	PLATTEVILLE	SH 66 N & S--W. SIDE	55	69	70	SF	17	2000	300.0	6720.0	
6 6	DENVER METRO	INDIANA TO SIMMS--N. SIDE	55	69		MH	71	5000	750.0	7470.0	
2 1-025	COLORADO SPGS.	S. OF O.K. KING NIGHTCLUB	55	68	71	SF	25	1600	240.0	7710.0	HOMES ON CAMBRIDGE, GLEND TO CLABRN
2 50	PUEBLO	LA CROSSE WEST--BOTH SIDES	40	68	70	SF	30	1900	285.0	7995.0	AKA HUDSON TO NORWOOD (BOTH SIDES)
4 36	BOULDER	BASELINE TO S BLDR RD--BOTH	55	68	70	SF	134	8100	1215.0	9210.0	BRIDGE REPLACEMENT AT NORTH END
6 72	DENVER METRO	59TH TO 62ND AVE--BOTH	40	68	70	SF	32	2800	420.0	9630.0	
6 285	DENVER METRO	PURDUE TO WRIGHT--S. SIDE	55	68	70	SF	29	2700	405.0	10035.0	
3 1-070	GRAND JUNCTION	N. OF GRAND JCT--S. SIDE	65	68	70	SF	UK	4500	675.0	10710.0	NEW HOMES AFTER HWY. OLDER HOMES?
2 29	COLORADO SPGS.	AIRPORT RD, VALLEY HI--CHL TM	40	68	69	SF	11	2100	315.0	11025.0	WILL NOT PROTECT CHURCH ON SOUTH SIDE
4 93	BOULDER	BASELINE SOUTH--N. SIDE	40	68	69	SF	UK	700	105.0	11130.0	

TABLE C (CONT'D)
FOR DISCUSSION ONLY
POTENTIAL NOISE BARRIER LOCATIONS FOR FUTURE CONSIDERATION

FEBRUARY 6, 1992

DIST S.H. NO. NO.	CITY/COUNTY	DESCRIPTION	MAX. MAX.		DEV TYP	NO OF REC.	WALL LENGTH (FEET)	EST. COST (\$1000)		COMMENTS
			SPD 1990 LMT	2010 LEQ				CONSTR. COST	EST. CUM. COST	
4	34	GREELEY METRO	45	68	SF	29	2800	420.0	11550.0	POSSIBLE TYPE 1 LOCATION
4	34	GREELEY	55	68	SF	10	3100	465.0	12015.0	
2	50	PUEBLO	55	68	SF	10	1500	225.0	12240.0	MITIG. DIFFICULT. HWY. REDESIGN REQ'D.
6	6	DENVER METRO	67	72	MH	21	1300	195.0	12435.0	
6	6	DENVER METRO	55	67	MH	19	2100	315.0	12750.0	MOBILE HOME PARK
1	1-070	LAWSON	65	67	SF	22	2300	345.0	13095.0	
1	1-070	IDAHO SPRINGS	60	67	SF	80	7200	1080.0	14175.0	1-70 PREDATES HOMES
3	1-070	AVON	65	67	MH	UK	4500	675.0	14850.0	
4	93	BOULDER	40	67	SF	UK	1500	225.0	15075.0	N. OF 4TH WAY, E. SIDE ONLY
6	30	DENVER METRO	40	67	SF	118	7900	1185.0	16260.0	
4	93	BOULDER	40	67	SF	UK	3000	450.0	16710.0	DIXON DR. HOMES. MITIG. DIFFICULT
2	83	COLORADO SPGS.	40	67	SF	13	1100	165.0	16875.0	
6	30	DENVER METRO	40	67	SF	11	1400	210.0	17085.0	N OF PRK RADCLIFF, S OF PRK PRNCIN
6	30	DENVER METRO	40	67	SF	88	6800	1020.0	18105.0	
2	45	PUEBLO	40	67	SF	38	3100	465.0	18570.0	TABLE "C" TOTAL
6	6	DENVER METRO	45	67	SF	58	4500	675.0	19245.0	
			67	68	SF	16	1600	240.0	19485.0	

FOOTNOTES:
SF = SINGLE FAMILY, 1ST FLOOR ONLY
MF = MULTIPLE FAMILY, 1ST FLOOR ONLY
MH = MOBILE HOMES
SU = SPECIAL USE AREA (NOISE ABATEMENT CRITERIA = 57 DB(A))
SCH = SCHOOL AND ASSOCIATED FACILITIES
NAC = NOISE ABATEMENT CRITERIA AS DEFINED IN 23 CFR PART 772:
CONSTRUCTION COSTS ARE PRELIMINARY WITHOUT SPECIFYING ANY PARTICULAR CONSTRUCTION MATERIAL OR DESIGN.
CONSTRUCTION MATERIALS ARE TO BE DETERMINED BY THE DEPARTMENT DURING PROJECT DESIGN.
CONSTRUCTION COST ESTIMATES ARE SHOWN IN 1991 DOLLARS.
TECHNICAL FEASIBILITY AND REASONABLENESS OF INDIVIDUAL NOISE BARRIER LOCATIONS SUBJECT TO DEPARTMENT REVIEW.
FEDERAL PARTICIPATION IN FUNDING NOISE BARRIER CONSTRUCTION SUBJECT TO FHWA REVIEW.

TABLE D
FOR DISCUSSION ONLY
POTENTIAL FUTURE NOISE PROBLEM LOCATIONS

FEBRUARY 6, 1992

PAGE 6

DIST S.H. NO. NO.	CITY/COUNTY	DESCRIPTION	MAX. MAX.			DEV NO OF	WALL LNPTH	CONSTR. COST	
			SPD 1990	2010	LEO				LEO
			LHT MPH	DB(A)	DB(A)		(FEET)	(\$1000)	
6	85	DENVER METRO							
		NW QUAD SH85/C470	55	66	69	MH	UK	2400	360.0
4	68	FT. COLLINS	35	66	69	MH	26	1500	225.0
		SH 287 TO BOARDWALK--BOTH							
6	121	ARVADA	45	66	69	SF	28	3000	450.0
		BOTH TO 88TH--EAST SIDE							
1	1-025	DOUGLAS CO	65	66	69	SF	UK	2500	375.0
		AT SURREY RIDGE--W. SIDE							
1	1-070	SILVERTHORNE	65	66	69	MF	120	900	202.5
		E. DILLON VALLEY---S. SIDE							
6	6	DENVER METRO	45	66	69	MH	32	1900	285.0
		SH 40 TO ULYSSES--N. SIDE							
1	1-070	JEFFERSON CO	65	66	68	SF	14	3400	510.0
		AT HYLAND HILLS SUBDIV--SW							
4	119	LONGMONT	45	66	68	SF	42	2700	405.0
		PAGE TO ALPINE--N.							
2	29	COLORADO SPGS.	40	66	67	SF	32	2100	315.0
		AIRPORT RD, JEWELL-CHELTON							
2	29	COLORADO SPGS.	40	66	67	MH	22	1400	210.0
		SH 29, E. OF I-25--N. SIDE							
1	83	DOUGLAS CO	55	65	68	SF	UK	2000	300.0
		AT PONDEROSA DR--W. SIDE							
1	1-070	WHEELER JCT	65	65	68	MF	92	3700	555.0
		AT COPPER MTN-- SW SIDE							
3	40	HAYDEN	45	65	67	MH	UK	3000	450.0
		HAYDEN MEADOW VIL. MH PRK							
2	115	COLORADO SPGS.	45	65	67	SF	UK	2000	300.0
		NORTH OF STARR RANCH RD							
6	83	DENVER METRO	45	65	67	MF	75	2200	330.0
		YALE TO DARTMOUTH--E. SIDE							
4	66	WELD CO	45	64	69	SF	21	1100	165.0
		E. OF I-25--SOUTH SIDE							
3	1-070	DOISERO	65	64	67	MH	UK	3500	525.0
		EAST OF DOISERO							
2	1-025	COLORADO SPGS.	55	63	67	SF	UK	2000	450.0
		SE QUAD ACADEMY BD INTRCHNG							
3	40	STEAMBOAT SPGS.	45	63	67	MH	UK	2300	345.0
		AT STEAMBOAT SPGS MH PARK							

FOOTNOTES:

- MF = MULTIPLE FAMILY, 1ST FLOOR ONLY
- MH = MOBILE HOMES
- SU = SPECIAL USE AREA (NOISE ABAATEMENT CRITERIA = 57 DB(A))
- SCH = SCHOOL AND ASSOCIATED FACILITIES
- CONSTRUCTION COSTS ARE PRELIMINARY WITHOUT SPECIFYING ANY PARTICULAR CONSTRUCTION MATERIAL OR DESIGN.
- CONSTRUCTION MATERIALS ARE TO BE DETERMINED BY THE DEPARTMENT DURING PROJECT DESIGN.
- CONSTRUCTION COST ESTIMATES ARE SHOWN IN 1991 DOLLARS.
- TECHNICAL FEASIBILITY AND REASONABLENESS OF INDIVIDUAL NOISE BARRIER LOCATIONS SUBJECT TO DEPARTMENT REVIEW.
- FEDERAL PARTICIPATION IN FUNDING NOISE BARRIER CONSTRUCTION SUBJECT TO FHWA REVIEW.

116

**ALTERNATIVE FUNDING LEVELS FOR THE TYPE II NOISE BARRIER PROGRAM
CURRENT DOLLARS X 1000**

BUDGET YEARS	CONSTANT ANNUAL FUNDING LEVELS		
	<u>\$ 1000</u>	<u>\$ 1500</u>	<u>\$ 2000</u>
1 Year	1000	1500	2000
2 Years	2000	3000	4000
3 Years	3000	4500	6000
4 Years	4000	6000	8000
5 Years	5000	7500	10000
6 Years	6000	9000	12000
7 Years	7000	10500	14000
8 Years	8000	12000	16000
9 Years	9000	13500	18000
10 Years	10000	15000	20000
11 Years	11000	16500	22000
12 Years	12000	18000	24000
13 Years	13000	19500	26000
14 Years	14000	21000	28000
15 Years	15000	22500	30000
16 Years	16000	24000	32000
17 Years	17000	25500	34000
18 Years	18000	27000	36000
19 Years	19000	28500	38000
20 Years	20000	30000	40000