

APPENDIX I

IMPACTS OF LOW-FREQUENCY AIRCRAFT NOISE ON RESIDENTIAL LAND USE

Use of Policy Committee Contour and Block Identification

The impacts of low-frequency aircraft noise for future operation of MSP were assessed on the basis of the “Low-Frequency Sound Level Policy Contours” of Figure 6 of Appendix H as interpreted on a block-by-block basis in the “Low-Frequency Sound Level Mitigation Areas” of Figure 7 of Appendix H. The blocks shown in Figure 7 were selected in accordance with the current practices of the MSP Residential Sound Insulation Program. That is, blocks intersected by low-frequency noise contours are treated as though the whole block were within the contour.

Impacts on Residential Land Use

Table I.1 shows the numbers of residential units in the three low-frequency noise zones. Single-family units and multi-family units are shown separately. The numbers of single-family units that have received treatment in the MSP Residential Sound Insulation Program are also shown.

Table I.1

**Numbers of Residential Units in Low-frequency Noise Zones
(Zones by LFSL Dose in dB)**

City and Type of Unit	Numbers of Units in Zone				Numbers of Units in Zone with Treatment(a)			
	70 - 77	78 - 86	≥ 87	Total	70 - 77	78 - 86	≥ 87	Total
City of Minneapolis								
Multi-family	280	409	0	689	0	0	0	0
Single-family	3,357	944	0	4,301	2,485	815	0	3,300
City of Richfield								
Multi-family	147	251	231	629	0	0	0	0
Single-family	845	1,003	206	2,054	63	506	102	671
City of Bloomington								
Multi-family	32	0	0	32	0	0	0	0
Single-family	0	0	0	0	0	0	0	0
All Cities								
Multi-family	459	660	231	1,350	0	0	0	0
Single-family	4,202	1,947	206	6,355	2,548	1,321	102	3,971
Total	4,661	2,607	437	7,705	2,548	1,321	102	3,971

(a) Does not include treatment for low-frequency sound levels.

Source: MAC