CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Research Findings

1. By looking at the ratio of WTP with respect to increases and decreases to the status quo, it is clear that asymmetry of the value of time exists, and it depends highly on the trip purpose and whether people experience gains or losses in travel time. People are found to value their money over time in leisure trips and are also found to value their time over money in business trips.

2. The ratio of WTP for decreases to increases found in the asymmetric model is found to be 1:3.5 for leisure trips, and 8:1 for business trips. The model used is the one that uses both rows since it has lower p-values, thus minimizing error.

3. It is found that the ratio of WTP for a leisure trip to a business trip to be 1:1.5. This is a guide for policymakers when choosing the value of time, when it is calculated on weekends when most people are probably going on a leisure trip, it should be amplified for weekdays, vice versa.

5.2 Recommendation for Future Works

1. A prior contingency valuation study is recommended to get an early estimate of the parameters.

2. Future studies should use a more advanced design of experiment techniques such as D-efficient design using the variance-covariance matrix provided in the appendix.

3. Future studies should study the value of time on other trips such as commuting trips or mandatory trips

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ATTACHMENT 1

MODEL RESULT COVARIANCE MATRIX

A1.1 Correlation of Covariance of Base Model of Leisure Trip (top row only)

Coefficient1	Coefficient2	Covariance	Correlation	t-test	p-value	Rob. cov.	Rob. corr.	Rob. t-test	Rob. p-value
ASC_B	ASC_A	0.00922	0.56	-6.85	7.34e-12	0.00792	0.574	-7.73	1.07e-14
B_COS	ASC_A	-4.51e-05	-0.565	-8.61	0	-6.13e-05	-0.688	-8.82	0
B_COS	ASC_B	-4.51e-05	-0.467	-1.18	0.238	-3.93e-05	-0.414	-1.37	0.17
B_FFT	ASC_A	2.57e-05	0.0313	-8.41	0	3.34e-05	0.0445	-8.64	0
B_FFT	ASC_B	0.000102	0.103	-1	0.317	0.000168	0.209	-1.17	0.243
B_FFT	B_COS	-1.06e-07	-0.0221	3.74	0.000184	6.86e-07	0.133	4.04	5.35e-05
B_SDT	ASC_A	-2.87e-05	-0.0175	-8.79	0	-6.21e-05	-0.0423	-9	0
B_SDT	ASC_B	-0.00025	-0.127	-1.35	0.176	-0.000364	-0.233	-1.55	0.12
B_SDT	B_COS	1.97e-07	0.0205	-1.95	0.0509	-1.37e-06	-0.136	-2.1	0.0355
B_SDT	B_FFT	-9.84e-05	-0.997	-2.56	0.0105	-8.51e-05	-0.998	-2.76	0.00573
B_TT	ASC_A	-2.97e-06	-0.00362	-8.7	0	-2.87e-05	-0.0399	-8.91	0
B_TT	ASC_B	-0.000148	-0.15	-1.24	0.215	-0.000197	-0.257	-1.43	0.152
B_TT	B_COS	9.07e-08	0.0189	-1.37	0.172	-6.81e-07	-0.138	-1.49	0.137
B_TT	B_FFT	-4.89e-05	-0.99	-2.57	0.01	-4.13e-05	-0.99	-2.8	0.0051
B_TT	B_SDT	9.84e-05	0.997	2.53	0.0116	8.12e-05	0.997	2.69	0.00725
B_VAR	ASC_A	-9.09e-05	-0.113	-8.19	2.22e-16	-9.35e-05	-0.106	-8.4	0
B_VAR	ASC_B	-0.000159	-0.164	-0.864	0.388	-0.000104	-0.111	-1	0.316
B_VAR	B_COS	-4.45e-07	-0.0944	6.31	2.83e-10	8.21e-07	0.136	5.74	9.46e-09
B_VAR	B_FFT	4.76e-06	0.0984	1.88	0.0605	1.74e-05	0.34	2.12	0.0344
B_VAR	B_SDT	-8.31e-06	-0.0861	4.42	9.76e-06	-3.11e-05	-0.311	4.21	2.6e-05
B_VAR	B_TT	-3.55e-06	-0.0733	5.26	1.41e-07	-1.37e-05	-0.279	4.76	1.93e-06

A1.2 Correlation of Covariance of Base Model of Business Trip (top row only)

Coefficient1	Coefficient2	Covariance	Correlation	t-test	p-value	Rob. cov.	Rob. corr.	Rob. t-test	Rob. p-value
ASC_B	ASC_A	0.0567	0.724	-9.24	0	0.0836	0.819	-9.72	0
B_COS	ASC_A	-0.000153	-0.576	-7.17	7.7e-13	-0.000217	-0.686	-6.36	2.04e-10
B_COS	ASC_B	-0.000206	-0.648	0.429	0.668	-0.00027	-0.697	0.37	0.711
B_FFT	ASC_A	0.000382	0.316	-7.18	7.09e-13	0.000283	0.211	-6.35	2.09e-10
B_FFT	ASC_B	-0.000252	-0.175	0.467	0.641	-0.000244	-0.149	0.404	0.686
B_FFT	B_COS	2.31e-07	0.0472	2.48	0.0133	-5.88e-07	-0.116	2.42	0.0157
B_SDT	ASC_A	0.00016	0.284	-7.24	4.37e-13	0.00019	0.295	-6.43	1.3e-10
B_SDT	ASC_B	5.99e-05	0.0894	0.394	0.694	0.000126	0.16	0.34	0.734
B_SDT	B_COS	-9.27e-07	-0.406	-3.95	7.66e-05	-1.15e-06	-0.472	-3.79	0.000154
B_SDT	B_FFT	4.55e-06	0.44	-5.39	6.98e-08	5.52e-06	0.533	-5.8	6.74e-09
B_TT	ASC_A	-0.000224	-0.717	-7.16	7.84e-13	-0.000286	-0.745	-6.36	2.05e-10
B_TT	ASC_B	-0.000157	-0.423	0.424	0.671	-0.000252	-0.536	0.367	0.714
B_TT	B_COS	6.41e-07	0.507	-1.16	0.245	9.45e-07	0.649	-1.27	0.205
B_TT	B_FFT	-3.18e-06	-0.554	-2.4	0.0165	-3.2e-06	-0.518	-2.41	0.016
B_TT	B_SDT	-1.98e-06	-0.739	3.03	0.00247	-2.22e-06	-0.751	2.9	0.00374
B_VAR	ASC_A	-0.00108	-0.54	-7.18	6.98e-13	-0.00178	-0.68	-6.34	2.28e-10
B_VAR	ASC_B	-0.000937	-0.394	0.328	0.743	-0.00177	-0.554	0.282	0.778
B_VAR	B_COS	3.29e-06	0.407	-4.03	5.66e-05	5.95e-06	0.6	-3.54	0.000397
B_VAR	B_FFT	-2.01e-06	-0.0546	-4.48	7.57e-06	-1.73e-06	-0.041	-4.03	5.48e-05
B_VAR	B_SDT	-6.23e-06	-0.364	-2.14	0.0322	-8.65e-06	-0.429	-1.85	0.0641
B_VAR	B_TT	5.37e-06	0.565	-3.99	6.69e-05	8.08e-06	0.671	-3.48	0.000506

A1.3 Correlation of Covariance of Base Model of Leisure Trip (both rows)