**Online Supplement to:**

**A Spatial Rank-Ordered Probit Model with an Application to Travel Mode Choice**

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**Table S1: Pseudo-Elasticity Effects for ROP Model (ignoring spatial lag and drift effects)**

| **Variable** | **Base** | **Treatment** | **Public Transit** | **Private vehicle** | **Bicycle** | **HD private RH** | **HD pooled RH** | **AV private RH** | **AV pooled RH** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Sociodemographic Effects*** |  |  |  |  |  |  |  |  |  |
| **Gender** | Male | Female | -9.84 | 8.75 | 2.66 | -20.91 | -12.74 | -25.44 | -22.00 |
| **Age** | Less than 50 | Greater than 50 | -16.49 | 11.70 | -11.93 | -24.60 | -20.93 | -15.55 | -15.09 |
| **License possession** | No | Yes | -20.54 | 15.07 | -16.15 | -31.21 | -24.48 | -22.87 | -19.78 |
| **Completed graduation** | No | Yes | 14.84 | 2.72 | -30.68 | 7.28 | 5.08 | 5.35 | 16.08 |
| **Employed** | No | Yes | -2.59 | 3.95 | -1.46 | 2.14 | -4.03 | 4.92 | -5.30 |
| **Household vehicles** | 1 or less | More than 1 | -8.35 | 7.13 | -6.89 | -14.34 | -8.54 | -11.23 | -6.16 |
| **Household size** | Less than 3 | 3 or more | -5.53 | 6.58 | -5.26 | -10.77 | -8.92 | -7.04 | -8.91 |
| **Annual income** | < $100,000 | > $100,000 | -8.97 | 4.86 | -5.48 | 5.04 | -17.52 | 5.43 | -20.66 |
| ***Built-Environment Effects*** |  |  |  |  |  |  |  |  |
| **Population density**  | 20% increase | 1.37 | -0.02 | 3.11 | -3.72 | 7.62 | -1.27 | 0.76 |
| **Employment density** | 20% increase | 2.30 | 0.20 | 0.45 | -8.45 | 5.23 | -12.18 | 12.02 |
| ***Trip Level Attributes*** |  |  |  |  |  |  |  |  |  |
| **Trip purpose** | Eat-out | Shopping | -10.87 | 11.90 | -5.19 | -19.30 | -13.89 | -10.71 | -10.31 |
| **Trip purpose** | Eat-out | Airport-access | -15.28 | 9.95 | -7.20 | 1.51 | -16.46 | 3.30 | -14.83 |
| **Trip purpose** | Eat-out | Social | -9.40 | 10.63 | -24.29 | -14.90 | -12.09 | 3.37 | 3.34 |
| **Public Transit Travel Time** | 20% increase | -5.10 | 0.11 | 1.33 | 0.36 | 3.42 | 0.22 | 2.22 |
| **Private vehicle Travel Time** | 20% increase | 2.68 | -0.19 | 1.50 | 3.09 | -1.23 | -0.21 | 1.77 |
| **Bicycle Travel Time** | 20% increase | 1.51 | 0.39 | -7.42 | 0.55 | 1.85 | 0.79 | 1.54 |
| **HD private RH Travel Time** | 20% increase | 1.26 | 0.53 | 0.61 | -6.89 | 2.29 | 2.17 | 2.33 |
| **HD pooled RH Travel Time** | 20% increase | 0.83 | 0.22 | 1.68 | 2.61 | -5.70 | 0.14 | 1.78 |
| **AV private RH Travel Time** | 20% increase | 1.27 | 0.20 | 1.49 | 2.09 | 2.38 | -5.52 | 1.60 |
| **AV pooled RH Travel Time** | 20% increase | 0.98 | 0.23 | 0.86 | 1.46 | 2.35 | 1.08 | -7.64 |
| **Public Transit Travel Cost** | 20% increase | -10.72 | 0.36 | 1.94 | 0.93 | 1.51 | 0.06 | 1.97 |
| **Private vehicle Travel Cost** | 20% increase | 2.30 | -0.29 | 2.39 | 1.02 | 1.63 | 0.70 | 1.32 |
| **HD private RH Travel Cost** | 20% increase | 1.30 | 0.13 | 1.19 | -10.86 | 1.97 | 1.53 | 2.32 |
| **HD pooled RH Travel Cost** | 20% increase | 0.79 | 0.10 | 0.07 | 2.08 | -12.57 | 3.03 | 2.48 |
| **AV private RH Travel Cost** | 20% increase | 1.85 | 0.08 | 0.55 | 3.13 | 2.62 | -10.21 | 1.93 |
| **AV pooled RH Travel Cost** | 20% increase | 0.79 | 0.11 | 0.32 | 2.08 | 3.15 | 1.99 | -18.65 |