**Table 2. Generalized Estimating Equation (GEE) Models of Municipal Pedestrian Plans, 1974-2011**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Model 1**  Unadjusted MODEL FOR TEMPORAL FACTORS  Odds Ratio (95% C.I.) | **Model 2**  Unadjusted MODEL FOR SPATIAL *(NEIGHBOR)* FACTORS1 | **Model 3**  ADJUSTED MODEL FORNEIGHBORS WITHIN 20 MILES | **Model 4**  ADJUSTED MODEL FORNEIGHBORS WITHIN 50 MILES |
| **Time period**  2006-2010  1974-2005 (Referent) | 34.4 (15.8, 75.0)  1.0 | -  - | 8.7 (4.2, 17.7)  1.0 | 4.8 (2.2, 10.8)  1.0 |
| **Number of Neighbors with Plans[[1]](#footnote-1)\***  Number of Neighbors (within 20 miles)(continuous)  Number of Neighbors (within 50 miles)(continuous) | -  - | 2.2 (2.0, 2.5)  1.3 (1.2, 1.3) | 1.3 (1.1, 1.5)  - | -  1.2 (1.1, 1.2) |
| **Urban Area[[2]](#footnote-2)†**  Yes  No (Referent) |  |  | 5.7 (1.2, 28.1)  1.0 | 6.1 (1.2, 30.0))  1.0 |
| **High Education**  Yes (> NC median)  No (Referent) |  |  | 2.4 (1.1, 5.2)  1.0 | 3.0 (1.4, 6.5)  1.0 |
| **NCDOT Grant Funding Status[[3]](#footnote-3)‡** |  |  | 28.4 (14.9, 54.0) | 30.2 (15.8, 57.8) |
| **High Poverty**  Yes (>18%)  No (Referent) |  |  | 2.5(1.0, 6.5)  1.0 | 2.81 (1.1, 7.3)  1.0 |
| **Population Growth[[4]](#footnote-4)§** |  |  | 0.9(0.7, 1.1) | 0.8 (0.6, 1.1) |

**Table 3. Generalized Estimating Equation (GEE) Models of Municipal Bicycle Plans, 1974-2011**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Model 1**  Unadjusted MODEL FOR TEMPORAL FACTORS  Odds Ratio (95% C.I.) | **Model 2**  Unadjusted MODEL FOR SPATIAL *(NEIGHBOR)* FACTORS1 | **Model 3**  ADJUSTED MODEL FORNEIGHBORS WITHIN 20 MILES | **Model 4**  ADJUSTED MODEL FORNEIGHBORS WITHIN 50 MILES |
| **Time period**  2006-2010  1974-2005 (Referent) | 4.0 (2.5, 6.4)  1.0 | -  - | 4.4 (2.0, 9.8)  1.0 | 3.2 (1.6, 6.7)  1.0 |
| **Number of Neighbors with Plans[[5]](#footnote-5)\***  Number of Neighbors within 20 miles (continuous)  Number of Neighbors within 50 miles (continuous) | -  - | 1.2 (0.3, 1.9)  1.2 (1.0, 1.4) | 0.5 (0.2, 1.1)  - | -  1.0 (0.8, 1.2) |
| **Urban Area[[6]](#footnote-6)†**  Yes  No (Referent) |  |  | 12.3 (3.6, 41.7)  1.0 | 11.2 (3.2, 39.6)  1.0 |
| **High Education**  Yes (> NC median)  No (Referent) |  |  | 12.3 (2.7, 54.7)  1.0 | 11.1 (2.7, 46.1)  1.0 |
| **NCDOT Grant Funding Status[[7]](#footnote-7)‡** |  |  | 7.0 (3.8, 12.7) | 7.1 (3.8, 13.2) |
| **High Poverty**  Yes (>18%)  No (Referent) |  |  | 2.3 (0.7, 7.2)  1.0 | 2.5 (0.8, 7.8)  1.0 |
| **Population Growth[[8]](#footnote-8)§ (continuous)** |  |  | 1.1 (0.7, 1.7) | 1.0 (0.6, 1.7) |
| **Percent White Population[[9]](#footnote-9)ll (continuous)** |  |  | 1.0 (0.9, 1.0) | 1.0 (0.9, 1.0) |

1. \* Separate models were run for each neighbor variable (e.g.“Neighbors within 20 miles” and “Neighbors within 50 miles”) [↑](#footnote-ref-1)
2. † Urban area defined as population >=50,000 (U.S. Census of Population) [↑](#footnote-ref-2)
3. ‡ Coded as: 0=No funding; 1=Plan funded by NCDOT Bicycle and Pedestrian Planning Grant Award; 2= Plan funded by NCDOT Small Community Planning Award (highest quintile of per capita funding) [↑](#footnote-ref-3)
4. § Growth indicator variable defined as: 0=Fast Population Decline (-100% to -5.01%), 1=Slow decline to stagnant (-5% to 0), 2=Slow growth (0.1 to 15%), 3=Moderate growth (15.1% to 30%), 4=Fast growth (30.1% to 414%) [↑](#footnote-ref-4)
5. \* Separate models were run for each neighbor variable (e.g.“Neighbors within 20 miles” and “Neighbors within 50 miles”) [↑](#footnote-ref-5)
6. † Urban area defined as population >=50,000 (U.S. Census of Population) [↑](#footnote-ref-6)
7. ‡ Coded as: 0=No funding; 1=Plan funded by NCDOT Bicycle and Pedestrian Planning Grant Award; 2= Plan funded by NCDOT Small Community Planning Award (highest quintile of per capita funding) [↑](#footnote-ref-7)
8. § Growth indicator variable defined as: 0=Fast Population Decline (-100% to -5.01%), 1=Slow decline to stagnant (-5% to 0), 2=Slow growth (0.1 to 15%), 3=Moderate growth (15.1% to 30%), 4=Fast growth (30.1% to 414%) [↑](#footnote-ref-8)
9. ll U.S. Census of Population; time-varying covariate based on the linear rolling average between decennial Census years [↑](#footnote-ref-9)