**Table S4. Bike trip count modes specification tests, from Long and Freese countfit command**

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| Model 1: Bike trips, working adults |
| PRM | BIC =19,560 | AIC=19,284 | Prefer | Over | Evidence |
|  | Compared to NBRM | BIC=15,571 | dif=3,989 | NBRM | PRM | Very strong |
|  |  | AIC=15,285 | dif=3,999 | NBRM | PRM |  |
|  |  | LRX2=4,001 | prob=0 | NBRM | PRM | *p=0.000* |
|  | Compared to ZIP | BIC=13,283 | dif=6,278 | ZIP | PRM | Very strong |
|  |  | AIC=12,710 | dif=6,574 | ZIP | PRM |  |
|  |  | Vuong= 25.693 | prob=0 | ZIP | PRM | *p=0.000* |
| NBRM | BIC =15,571 | AIC=15,285 | Prefer | Over | Evidence |
|  | Compared to ZIP | BIC=13,283 | dif=2,289 | ZIP | NBRM | Very strong |
|  |  | AIC=12,710 | dif=2,575 | ZIP | NBRM |  |
| Model 2: Bike trips, non-working adults |
| PRM | BIC =19,046 | AIC=18,816 | Prefer | Over | Evidence |
|  | Compared to NBRM | BIC=11,977 | dif=7,069 | NBRM | PRM | Very strong |
|  |  | AIC=11,737 | dif=7,079 | NBRM | PRM |  |
|  |  | LRX2=7,081 | prob=0 | NBRM | PRM | *p=0.000* |
|  | Compared to ZIP | BIC=11,353 | dif=7,692 | ZIP | PRM | Very strong |
|  |  | AIC=10,884 | dif=7,932 | ZIP | PRM |  |
|  |  | Vuong= 23.2 | prob=0 | ZIP | PRM | *p=0.000* |
| NBRM | BIC =121,613 | AIC=120,902 | Prefer | Over | Evidence |
|  | Compared to ZIP | BIC=11,353 | dif=623 | ZIP | NBRM | Very strong |
|  |  | AIC=10,884 | dif=853 | ZIP | NBRM |  |