**Supplemental Table 1**: Factor probabilities associated with latent class analysis of neighborhood attributes resulting in 9-class neighborhood archetypes, California 2000

**Supplemental Table 2:** Hazard ratios and 95% confidence intervals for overall survival according to 9-class neighborhood archetypes among all, non-Hispanic White, non-Hispanic Black, Hispanic, and Asian/Pacific Islander women diagnosed with breasts cancer, California 1996-2005.

**Supplemental Table 3:** Hazard ratios and 95% confidence intervals for breast cancer-specific survival according to 9-class neighborhood archetypes among non-Hispanic White, non-Hispanic Black, Hispanic, and Asian/Pacific Islander women diagnosed with breast cancer, California 1996-2005.

**Supplemental Table 4:** Hazard ratios and 95% confidence intervals for all-cause and breast cancer-specific survival for race/ethnicity by 9 neighborhood archetypes, California 1996-2005.

**Supplemental Table 1: Factor probabilities associated with latent class analysis of neighborhood attributes resulting in 9-class neighborhood archetypes, California 2000**

|  |  | **Characteristic-response probabilities conditional on given latent class: Rho ( standard error)** |
| --- | --- | --- |
|  | Latent Class 1 | Latent Class 9 | Latent Class 8 | Latent Class 4 | Latent Class 7 | Latent Class 5 | Latent Class 3 | Latent Class 2 | Latent Class 6 |
| **Variable** | **Response level** | **Upper middle-class suburb** | **High status** | **New urban/ Pedestrian** | **Mixed SES class suburb** | **Suburban pioneer** | **Rural/ Micropolitan** | **City pioneer** | **Hispanic small towns** | **Inner city** |
| *Demographics and household composition* |  |  |  |  |  |  |  |  |
| % Whitea | 2 | 0.698 | 0.992\*\* | 0.779 | 0.846 | 0.046 | 0.991 | 0.255 | 0.209 | 0.000†† |
|  |  | (0.023) | (0.003) | (0.017) | (0.020) | (0.010) | (0.006) | (0.021) | (0.021) | (0.000) |
| % Black | 2 | 0.388 | 0.133†† | 0.546 | 0.532 | 0.629 | 0.244 | 0.796\*\* | 0.476 | 0.639 |
|  |  | (0.020) | (0.014) | (0.019) | (0.026) | (0.022) | (0.023) | (0.017) | (0.027) | (0.017) |
| % Hispanic | 2 | 0.074 | 0.019†† | 0.110 | 0.391 | 0.884 | 0.156 | 0.735 | 0.977 | 0.999\*\* |
|  |  | (0.017) | (0.006) | (0.017) | (0.032) | (0.020) | (0.027) | (0.026) | (0.009) | (0.001) |
| % API | 2 | 0.990\*\* | 0.198 | 0.729 | 0.296 | 0.885 | 0.050†† | 0.651 | 0.150 | 0.369 |
|  |  | (0.005) | (0.020) | (0.024) | (0.027) | (0.020) | (0.012) | (0.029) | (0.019) | (0.025) |
| % Foreign-born | 2 | 0.483 | 0.029 | 0.462 | 0.046 | 0.897 | 0.014†† | 0.613 | 0.558 | 0.982\*\* |
|  |  | (0.023) | (0.007) | (0.020) | (0.012) | (0.014) | (0.007) | (0.025) | (0.026) | (0.005) |
| % Spanish-speaking households | 2 | 0.091 | 0.020†† | 0.099 | 0.409 | 0.897 | 0.124 | 0.722 | 0.980 | 1.000\*\* |
|  | (0.018) | (0.006) | (0.016) | (0.031) | (0.019) | (0.024) | (0.027) | (0.008) | (0.000) |
| % API language-speaking households | 2 | 0.962\*\* | 0.143 | 0.678 | 0.318 | 0.916 | 0.037†† | 0.644 | 0.136 | 0.458 |
|  | (0.008) | (0.018) | (0.025) | (0.028) | (0.018) | (0.010) | (0.030) | (0.018) | (0.025) |
| % Children (0-17 years) | 2 | 0.354 | 0.110 | 0.016†† | 0.794 | 0.642 | 0.255 | 0.373 | 0.952 | 0.983\*\* |
|  | (0.022) | (0.014) | (0.005) | (0.023) | (0.028) | (0.024) | (0.024) | (0.010) | (0.005) |
| % Young adults (18-34 years) | 2 | 0.107 | 0.033†† | 0.750 | 0.216 | 0.612 | 0.121 | 0.802 | 0.475 | 0.968\*\* |
|  | (0.014) | (0.008) | (0.018) | (0.027) | (0.025) | (0.018) | (0.018) | (0.026) | (0.006) |
| % Midlife (35-64 years) | 2 | 0.987\*\* | 0.952 | 0.700 | 0.755 | 0.354 | 0.647 | 0.210 | 0.098 | 0.002†† |
|  | (0.005) | (0.009) | (0.018) | (0.026) | (0.024) | (0.028) | (0.018) | (0.014) | (0.002) |
| % Older (65-79 years) | 2 | 0.561 | 0.882 | 0.590 | 0.332 | 0.497 | 0.922\*\* | 0.492 | 0.378 | 0.079†† |
|  | (0.026) | (0.014) | (0.021) | (0.027) | (0.026) | (0.016) | (0.023) | (0.025) | (0.009) |
| % Oldest (80+ years) | 2 | 0.424 | 0.810 | 0.724 | 0.228 | 0.385 | 0.873\*\* | 0.623 | 0.388 | 0.168†† |
|  | (0.024) | (0.017) | (0.019) | (0.024) | (0.025) | (0.019) | (0.022) | (0.024) | (0.012) |
| % Single household (1 person) | 2 | 0.228 | 0.629 | 0.982\*\* | 0.120†† | 0.158 | 0.910 | 0.941 | 0.285 | 0.242 |
|  | (0.019) | (0.023) | (0.005) | (0.018) | (0.018) | (0.016) | (0.011) | (0.024) | (0.015) |
| % Large household (6+ persons) | 2 | 0.300 | 0.026 | 0.019†† | 0.568 | 0.968 | 0.083 | 0.473 | 0.960 | 0.994\*\* |
|  | (0.022) | (0.007) | (0.005) | (0.027) | (0.008) | (0.015) | (0.023) | (0.009) | (0.003) |
|  |  |  |  |  |  |  |  |  |  |  |
| % Female-headed household | 2 | 0.088†† | 0.316 | 0.908 | 0.108 | 0.284 | 0.586 | 0.947\*\* | 0.393 | 0.639 |
|  | (0.013) | (0.022) | (0.011) | (0.017) | (0.022) | (0.029) | (0.010) | (0.025) | (0.018) |
|  |  |  |  |  |  |  |  |  |
| *Composite Neighborhood SES* |  |   |   |   |   |   |   |   |
| Housing stock value | 2 | 0.957\*\* | 0.863 | 0.816 | 0.691 | 0.784 | 0.060 | 0.173 | 0.088 | 0.087†† |
|  |  | (0.008) | (0.014) | (0.016) | (0.024) | (0.018) | (0.013) | (0.017) | (0.013) | (0.010) |
| Rental value | 2 | 0.986\*\* | 0.918 | 0.877 | 0.465 | 0.542 | 0.080 | 0.367 | 0.048†† | 0.112 |
|  |  | (0.005) | (0.012) | (0.013) | (0.030) | (0.026) | (0.014) | (0.023) | (0.010) | (0.011) |
| Education compositionb |  |  |  |  |  |  |  |  |  |
| Mid-low | 1 | 0.013†† | 0.017 | 0.014 | 0.469 | 0.706 | 0.705 | 0.618 | 0.987 | 0.996\*\* |
|  |  | (0.005) | (0.005) | (0.005) | (0.030) | (0.023) | (0.027) | (0.026) | (0.005) | (0.002) |
| Mid-high | 2 | 0.971 | 0.980\*\* | 0.941 | 0.492 | 0.087 | 0.261 | 0.113 | 0.000†† | 0.000†† |
|  |  | (0.007) | (0.006) | (0.009) | (0.029) | (0.014) | (0.025) | (0.015) | (0.000) | (0.000) |
| Stratified | 3 | 0.015 | 0.003†† | 0.044 | 0.039 | 0.208 | 0.034 | 0.268\* | 0.013 | 0.004 |
|  |  | (0.005) | (0.002) | (0.008) | (0.009) | (0.018) | (0.010) | (0.021) | (0.005) | (0.002) |
| % Unemployed | 2 | 0.059†† | 0.080 | 0.200 | 0.265 | 0.504 | 0.663 | 0.806 | 0.909 | 0.940\*\* |
|  |  | (0.009) | (0.011) | (0.015) | (0.023) | (0.022) | (0.025) | (0.017) | (0.013) | (0.008) |
| % Blue collar | 2 | 0.046 | 0.030†† | 0.049 | 0.437 | 0.854 | 0.604 | 0.756 | 0.713 | 0.992\*\* |
|  |  | (0.009) | (0.007) | (0.008) | (0.029) | (0.017) | (0.025) | (0.020) | (0.023) | (0.003) |
| % Less than poverty | 2 | 0.007†† | 0.016 | 0.311 | 0.108 | 0.394 | 0.665 | 0.924 | 0.910 | 0.993\*\* |
|  |  | (0.003) | (0.005) | (0.020) | (0.017) | (0.024) | (0.027) | (0.012) | (0.013) | (0.003) |
| Income compositionc |  |  |  |  |  |  |  |  |  |  |
| Mid-low | 2 | 0.000†† | 0.000†† | 0.035 | 0.028 | 0.068 | 0.394 | 0.652 | 0.594 | 0.844\*\* |
|  |  | (0.000) | (0.000) | (0.007) | (0.009) | (0.012) | (0.026) | (0.022) | (0.023) | (0.012) |
| Mid-high | 3 | 0.047 | 0.177 | 0.243 | 0.473\* | 0.447 | 0.151 | 0.031 | 0.046 | 0.001†† |
|  |  | (0.009) | (0.016) | (0.016) | (0.027) | (0.022) | (0.020) | (0.008) | (0.010) | (0.001) |
| High | 4 | 0.952\*\* | 0.818 | 0.533 | 0.415 | 0.198 | 0.033 | 0.003 | 0.005 | 0.000†† |
|  |  | (0.009) | (0.016) | (0.021) | (0.028) | (0.019) | (0.009) | (0.003) | (0.003) | (0.000) |
| Stratified | 1 | 0.001†† | 0.005 | 0.190 | 0.085 | 0.287 | 0.422\* | 0.314 | 0.355 | 0.155 |
|  |  | (0.001) | (0.003) | (0.016) | (0.016) | (0.022) | (0.023) | (0.020) | (0.021) | (0.012) |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| *Built Environment* |  |  |  |  |  |  |  |  |  |  |
| Urbanicity and population densityd |  |  |  |  |  |  |  |  |
| Rural | 1 | 0.120 | 0.314 | 0.012 | 0.366 | 0.015 | 0.577\* | 0.016 | 0.424 | 0.001†† |
|  |  | (0.013) | (0.022) | (0.004) | (0.028) | (0.006) | (0.032) | (0.006) | (0.025) | (0.001) |
| Urban, less populated | 2 | 0.505 | 0.583\* | 0.252 | 0.492 | 0.180 | 0.384 | 0.239 | 0.365 | 0.091†† |
|  | (0.020) | (0.021) | (0.017) | (0.025) | (0.017) | (0.029) | (0.018) | (0.022) | (0.010) |
| Urban, more population | 3 | 0.376 | 0.103 | 0.737 | 0.143 | 0.805 | 0.039†† | 0.745 | 0.211 | 0.908\*\* |
|  | (0.021) | (0.013) | (0.017) | (0.019) | (0.018) | (0.011) | (0.019) | (0.020) | (0.010) |
| Alpha | 1 | 0.827\*\* | 0.797 | 0.301 | 0.824 | 0.523 | 0.671 | 0.249 | 0.414 | 0.179†† |
|  |  | (0.016) | (0.018) | (0.018) | (0.019) | (0.022) | (0.024) | (0.018) | (0.022) | (0.013) |
| % Owner occupied dwellings | 1 | 0.040†† | 0.082 | 0.879 | 0.104 | 0.311 | 0.273 | 0.960\*\* | 0.493 | 0.931 |
|  | (0.009) | (0.012) | (0.014) | (0.019) | (0.025) | (0.028) | (0.009) | (0.026) | (0.009) |
| % Vacant dwellings | 2 | 0.106†† | 0.463 | 0.534 | 0.379 | 0.138 | 0.892\*\* | 0.621 | 0.783 | 0.623 |
|  |  | (0.013) | (0.022) | (0.019) | (0.025) | (0.015) | (0.017) | (0.021) | (0.019) | (0.017) |
| Traffic density | 1 | 0.604 | 0.726 | 0.195 | 0.883 | 0.345 | 0.915\*\* | 0.187†† | 0.865 | 0.212 |
|  |  | (0.021) | (0.019) | (0.015) | (0.017) | (0.021) | (0.015) | (0.017) | (0.017) | (0.014) |
| % Green area | 1 | 0.340 | 0.267†† | 0.506 | 0.457 | 0.547 | 0.309 | 0.644 | 0.603 | 0.696\*\* |
|  |  | (0.019) | (0.018) | (0.018) | (0.025) | (0.021) | (0.024) | (0.019) | (0.021) | (0.015) |
|  |  |  |  |  |  |  |  |  |  |  |
| *Migration & commuting* |  |  |  |  |  |  |  |  |  |  |
| Low residential mobilitye | 1 | 0.789\*\* | 0.784 | 0.235 | 0.542 | 0.682 | 0.519 | 0.178†† | 0.530 | 0.370 |
|  | (0.019) | (0.017) | (0.019) | (0.029) | (0.024) | (0.028) | (0.017) | (0.023) | (0.017) |
| % Short commute (<0.5h) | 2 | 0.268†† | 0.561 | 0.576 | 0.456 | 0.358 | 0.770\*\* | 0.610 | 0.747 | 0.315 |
|  | (0.035) | (0.036) | (0.039) | (0.056) | (0.041) | (0.035) | (0.045) | (0.033) | (0.027) |
| % Medium commute (0.5-1.5h) | 2 | 0.766\*\* | 0.449 | 0.463 | 0.508 | 0.656 | 0.196†† | 0.384 | 0.209 | 0.679 |
|  | (0.033) | (0.036) | (0.039) | (0.055) | (0.040) | (0.032) | (0.044) | (0.030) | (0.027) |
| % Long commute (>1.5h) | 2 | 0.393 | 0.515 | 0.264†† | 0.656\*\* | 0.458 | 0.566 | 0.478 | 0.576 | 0.649 |
|  | (0.020) | (0.021) | (0.016) | (0.025) | (0.022) | (0.025) | (0.021) | (0.022) | (0.016) |
| % Work at home | 2 | 0.682 | 0.917\*\* | 0.686 | 0.541 | 0.165 | 0.736 | 0.350 | 0.392 | 0.161†† |
|  |  | (0.019) | (0.011) | (0.018) | (0.026) | (0.016) | (0.022) | (0.019) | (0.021) | (0.012) |
|  |  |  |  |  |  |  |  |  |  |  |
| % Public transportation to commute | 2 | 0.335 | 0.233 | 0.640 | 0.133 | 0.680 | 0.092†† | 0.799 | 0.203 | 0.936\*\* |
|  | (0.019) | (0.017) | (0.019) | (0.017) | (0.020) | (0.014) | (0.018) | (0.019) | (0.009) |
| % Walk or bike to commute | 2 | 0.092†† | 0.334 | 0.672 | 0.217 | 0.314 | 0.635 | 0.764\*\* | 0.548 | 0.749 |
|  | (0.012) | (0.019) | (0.018) | (0.023) | (0.020) | (0.024) | (0.018) | (0.024) | (0.014) |
|  |  |  |  |  |  |  |  |  |
| *Residential Buffer Variable* |  |  |  |  |  |  |  |  |
| Total businesses (per 1000 population) | 2 | 0.419 | 0.768 | 0.795\*\* | 0.319 | 0.305 | 0.599 | 0.656 | 0.384 | 0.251†† |
|  | (0.021) | (0.018) | (0.017) | (0.025) | (0.023) | (0.026) | (0.022) | (0.023) | (0.015) |
| Recreational facilities (per 1000 population)f | 2 | 0.673 | 0.801 | 0.819\*\* | 0.604 | 0.538 | 0.714 | 0.691 | 0.516 | 0.369†† |
|  | (0.019) | (0.016) | (0.014) | (0.025) | (0.022) | (0.023) | (0.019) | (0.022) | (0.016) |
| Restaurant Environment Index (REI)g | 2 | 0.343 | 0.317 | 0.510 | 0.231†† | 0.443 | 0.393 | 0.595\* | 0.383 | 0.461 |
|  | (0.023) | (0.022) | (0.020) | (0.025) | (0.024) | (0.029) | (0.023) | (0.023) | (0.017) |
| Retail Food Environment Index (RFEI)h | 2 | 0.582 | 0.584 | 0.820 | 0.499† | 0.766 | 0.711 | 0.868\*\* | 0.742 | 0.841 |
|  | (0.024) | (0.023) | (0.016) | (0.029) | (0.021) | (0.026) | (0.016) | (0.021) | (0.012) |

a. Unless otherwise noted, variable response levels are defined as: 1, <median; and 2, >=median.

b. Education composition: 1, Mid-low, % under high school>median and/or% high school >median; 2, Mid-high, % high school>median and/or % some college>median and/or %BA and over >median; 3, stratified, all other patterns.

c. Income composition: 2, Mid-low, % income <30,000>median and/or % income 30,000-59,000>median; 3, Mid-high, % income 30,000-59,000>median and/or % income 60,000-74,000>median; 4, High, % income 60,000-74,000>median and/or % income >75,000>median; 1, all other patterns.

d. Urbanicity and Population Density: 1, %rural>0%; 2, %rural=0% and population density<median; 3, %rural=0% and population density>=median.

e. Low residential mobility: 1, %different house<median.

f. Recreational facilities (per 1000 population): 1, none; 2, some.

g. Restaurant Environment Index (REI): 1, no fast food restaurants; 2, some fast food restaurants.

h. Retail Food Environment Index (RFEI): 1, no unhealthy food outlets; 2, some unhealthy food outlets

i. \*\* Highest estimate across five classes greater than 0.6.

j. \* Highest estimate across five classes less than 0.6.

k. †† Lowest estimate across five classes less than 0.4.

l. † Lowest estimate across five classes greater than 0.4.

**Supplemental Table 2: Hazard ratios and 95% confidence intervals for overall survival according to 9-class neighborhood archetypes among all, non-Hispanic White, non-Hispanic Black, Hispanic, and Asian/Pacific Islander women diagnosed with breasts cancer, California 1996-2005.**

|  | **Cases** | **Overall Survival** |
| --- | --- | --- |
|  |  |  |  | **Minimally-adjusted modelb** | **Fully-adjusted modelc** |
| **Count** | **Person Years** | **Deaths** | **Person Years** | **HR** | **95% CI** | **HR** | **95% CI** |
| **All races/ethnicitiesd** |  |  |  |  |  |  |  |  |
| Total |  176,097  |  2,051,378  |  84,536  |  631,014  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  27,370  |  346,313  |  10,606  |  84,433  | 1.00 |  | 1.00 |  |
| High status |  30,217  |  371,397  |  13,688  |  110,086  | **1.03**  | **(1.01, 1.06)** | 1.02 | (1.00, 1.05) |
| New urban/ Pedestrian |  26,032  |  306,818  |  12,310  |  92,876  | **1.14**  | **(1.11, 1.17)** | **1.08**  | **(1.05, 1.11)** |
| Mixed-SES class suburb |  13,043  |  156,803  |  5,698  |  43,240  | **1.19**  | **(1.15, 1.23)** | **1.16**  | **(1.12, 1.20)** |
| Suburban pioneer |  15,561  |  179,539  |  7,446  |  55,016  | **1.29**  | **(1.25, 1.32)** | **1.22**  | **(1.18, 1.26)** |
| Rural/ Micropolitan |  17,282  |  192,282  |  9,659  |  72,479  | **1.28**  | **(1.24, 1.31)** | **1.24**  | **(1.20, 1.27)** |
| City pioneer |  16,597  |  178,602  |  9,097  |  63,700  | **1.41**  | **(1.37, 1.45)** | **1.30**  | **(1.26, 1.34)** |
| Hispanic small towns |  13,883  |  151,486  |  7,433  |  51,989  | **1.43**  | **(1.39, 1.47)** | **1.37**  | **(1.33, 1.41)** |
| Inner city |  16,112  |  168,138  |  8,599  |  57,195  | **1.50**  | **(1.46, 1.55)** | **1.38**  | **(1.34, 1.42)** |
| **NH White** |  |  |  |  |  |  |  |  |
| Total |  123,813  |  1,450,226  |  62,297  |  477,416  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  19,659  |  248,565  |  8,193  |  66,467  | 1.00 |   | 1.00 |  |
| High status |  27,216  |  334,056  |  12,623  |  102,214  | 1.02 | (1.00, 1.05) | 1.01 | (0.99, 1.04) |
| New urban/ Pedestrian |  20,223  |  237,534  |  9,978  |  75,853  | **1.13** | **(1.10, 1.17)** | **1.07** | **(1.04, 1.10)** |
| Mixed-SES class suburb |  10,132  |  122,504  |  4,519  |  34,794  | **1.18** | **(1.14, 1.23)** | **1.15** | **(1.11, 1.19)** |
| Suburban pioneer |  7,522  |  84,646  |  4,205  |  31,886  | **1.29** | **(1.24, 1.34)** | **1.21** | **(1.16, 1.25)** |
| Rural/ Micropolitan |  15,626  |  173,555  |  8,896  |  67,163  | **1.25** | **(1.21, 1.29)** | **1.21** | **(1.18, 1.25)** |
| City pioneer |  9,947  |  106,125  |  5,870  |  42,032  | **1.40** | **(1.35, 1.44)** | **1.29** | **(1.25, 1.33)** |
| Hispanic small towns |  8,479  |  91,829  |  4,859  |  34,656  | **1.43** | **(1.38, 1.48)** | **1.36** | **(1.31, 1.41)** |
| Inner city |  5,009  |  51,412  |  3,154  |  22,351  | **1.55** | **(1.49, 1.62)** | **1.42** | **(1.36, 1.48)** |
| **NH Black** |  |  |  |  |  |  |  |  |
| Total |  10,617  |  109,087  |  5,978  |  36,864  |   |   |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  818  |  9,660  |  352  |  2,381  | 1.00 |   | 1.00 |  |
| High status |  450  |  4,902  |  231  |  1,508  | **1.22** | **(1.04, 1.44)** | **1.22** | **(1.03, 1.44)** |
| New urban/ Pedestrian |  1,209  |  13,102  |  637  |  4,091  | **1.25** | **(1.10, 1.42)** | **1.16** | **(1.01, 1.32)** |
| Mixed-SES class suburb |  624  |  6,650  |  317  |  1,975  | **1.20** | **(1.03, 1.40)** | **1.22** | **(1.05, 1.42)** |
| Suburban pioneer |  1,049  |  11,244  |  537  |  3,297  | **1.31** | **(1.15, 1.50)** | **1.25** | **(1.09, 1.43)** |
| Rural/ Micropolitan |  244  |  2,512  |  133  |  814  | 1.21 | (0.99, 1.47) | 1.12 | (0.91, 1.37) |
| City pioneer |  1,955  |  19,298  |  1,157  |  6,948  | **1.53** | **(1.36, 1.73)** | **1.38** | **(1.23, 1.56)** |
| Hispanic small towns |  1,130  |  11,647  |  629  |  3,762  | **1.37** | **(1.20, 1.56)** | **1.31** | **(1.15, 1.49)** |
| Inner city |  3,138  |  30,072  |  1,985  |  12,088  | **1.58** | **(1.41, 1.77)** | **1.43** | **(1.27, 1.60)** |
| **Hispanic** |  |  |  |  |  |  |  |  |
| Total |  23,825  |  270,606  |  10,131  |  70,796  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  2,113  |  26,278  |  755  |  5,671  | 1.00 |   | 1.00 |  |
| High status |  1,270  |  15,909  |  460  |  3,482  | 0.99 | (0.88, 1.11) | 0.97 | (0.87, 1.09) |
| New urban/ Pedestrian |  1,796  |  21,474  |  718  |  5,394  | 1.09 | (0.98, 1.21) | 1.07 | (0.97, 1.18) |
| Mixed-SES class suburb |  1,430  |  17,066  |  573  |  4,274  | **1.22** | **(1.09, 1.36)** | **1.20** | **(1.08, 1.34)** |
| Suburban pioneer |  3,741  |  43,321  |  1,537  |  11,040  | **1.21** | **(1.11, 1.32)** | **1.18** | **(1.08, 1.29)** |
| Rural/ Micropolitan |  920  |  10,354  |  415  |  2,852  | **1.37** | **(1.22, 1.55)** | **1.36** | **(1.21, 1.54)** |
| City pioneer |  2,598  |  28,443  |  1,201  |  8,312  | **1.35** | **(1.24, 1.48)** | **1.26** | **(1.15, 1.38)** |
| Hispanic small towns |  3,627  |  40,375  |  1,668  |  11,515  | **1.40** | **(1.29, 1.53)** | **1.36** | **(1.25, 1.48)** |
| Inner city |  6,330  |  67,386  |  2,804  |  18,256  | **1.40** | **(1.29, 1.51)** | **1.31** | **(1.21, 1.42)** |
| **Asian and Pacific Islander** |  |  |  |  |  |  |  |  |
| Total |  16,580  |  206,262  |  5,650  |  42,498  |   |   |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  4,633  |  59,951  |  1,273  |  9,715  | 1.00 |   | 1.00 |  |
| High status |  1,089  |  13,975  |  319  |  2,458  | 1.00 | (0.89, 1.13) | 1.04 | (0.92, 1.17) |
| New urban/ Pedestrian |  2,631  |  32,727  |  918  |  7,178  | **1.17** | **(1.07, 1.27)** | **1.14** | **(1.05, 1.24)** |
| Mixed-SES class suburb |  761  |  9,366  |  252  |  1,886  | **1.23** | **(1.07, 1.40)** | **1.16** | **(1.02, 1.33)** |
| Suburban pioneer |  3,160  |  39,302  |  1,130  |  8,496  | **1.23** | **(1.14, 1.34)** | **1.20** | **(1.11, 1.30)** |
| Rural/ Micropolitan |  298  |  3,527  |  128  |  957  | **1.53** | **(1.27, 1.83)** | **1.53** | **(1.25, 1.79)** |
| City pioneer |  1,953  |  23,083  |  811  |  6,049  | **1.38** | **(1.26, 1.51)** | **1.26** | **(1.16, 1.39)** |
| Hispanic small towns |  521  |  6,208  |  208  |  1,542  | **1.37** | **(1.18, 1.58)** | **1.25** | **(1.07, 1.44)** |
| Inner city |  1,534  |  18,123  |  611  |  4,217  | **1.45** | **(1.31, 1.59)** | **1.36** | **(1.23, 1.49)** |

a. HR, Hazard Ratio; CI, confidence interval; NH, non-Hispanic.

b. Adjusted for age at diagnosis, year of diagnosis, SEER summary stage, and cluster effect by census tract.

c. Adjusted for age at diagnosis, year of diagnosis, SEER summary stage, histology, grade, ER status, PR status, chemotherapy, radiation, surgery, marital status and cluster effect by census tract.

d. For models among total sample, both minimally-adjusted and fully-adjusted models include race/ethnicity.

**Supplemental Table 3: Hazard ratios and 95% confidence intervals for breast cancer-specific survival according to 9-class neighborhood archetypes among non-Hispanic White, non-Hispanic Black, Hispanic, and Asian/Pacific Islander women diagnosed with breast cancer, California 1996-2005.**

|  | **Cases** | **Breast Cancer-specific Survival** |
| --- | --- | --- |
|  |  |  |  | **Minimally-adjusted modelb** | **Fully-adjusted modelc** |
| **Count** | **Person Years** | **Deaths** | **Person Years** | **HR** | **95% CI** | **HR** | **95% CI** |
| **All races/ethnicitiesd** |  |  |  |  |  |  |  |  |
| Total |  176,097  |  2,051,378  |  84,536  |  631,014  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  27,370  |  346,313  |  10,606  |  84,433  | 1.00 |  | 1.00 |  |
| High status |  30,217  |  371,397  |  13,688  |  110,086  | 1.03 | (1.01, 1.06) | 1.02  | (1.00, 1.05) |
| New urban/ Pedestrian |  26,032  |  306,818  |  12,310  |  92,876  | **1.14** | **(1.11, 1.17)** | **1.08**  | **(1.05, 1.11)** |
| Mixed-SES class suburb |  13,043  |  156,803  |  5,698  |  43,240  | **1.19** | **(1.15, 1.23)** | **1.16**  | **(1.12, 1.20)** |
| Suburban pioneer |  15,561  |  179,539  |  7,446  |  55,016  | **1.29** | **(1.25, 1.32)** | **1.22**  | **(1.18, 1.26)** |
| Rural/ Micropolitan |  17,282  |  192,282  |  9,659  |  72,479  | **1.28** | **(1.24, 1.31)** | **1.24**  | **(1.20, 1.27)** |
| City pioneer |  16,597  |  178,602  |  9,097  |  63,700  | **1.41** | **(1.37, 1.45)** | **1.30**  | **(1.26, 1.34)** |
| Hispanic small towns |  13,883  |  151,486  |  7,433  |  51,989  | **1.43** | **(1.39, 1.47)** | **1.37**  | **(1.33, 1.41)** |
| Inner city |  16,112  |  168,138  |  8,599  |  57,195  | **1.50** | **(1.46, 1.55)** | **1.38**  | **(1.34, 1.42)** |
| **NH White** |  |  |  |  |  |  |  |  |
| Total |  123,813  |  1,450,226  |  62,297  |  477,416  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  19,659  |  248,565  |  8,193  |  66,467  | 1.00 |  | 1.00 |  |
| High status |  27,216  |  334,056  |  12,623  |  102,214  | 1.02 | (1.00, 1.05) | 1.01 | (0.99, 1.04) |
| New urban/ Pedestrian |  20,223  |  237,534  |  9,978  |  75,853  | **1.13** | **(1.10, 1.17)** | **1.07** | **(1.04, 1.10)** |
| Mixed-SES class suburb |  10,132  |  122,504  |  4,519  |  34,794  | **1.18** | **(1.14, 1.23)** | **1.15** | **(1.11, 1.19)** |
| Suburban pioneer |  7,522  |  84,646  |  4,205  |  31,886  | **1.29** | **(1.24, 1.34)** | **1.21** | **(1.16, 1.25)** |
| Rural/ Micropolitan |  15,626  |  173,555  |  8,896  |  67,163  | **1.25** | **(1.21, 1.29)** | **1.21** | **(1.18, 1.25)** |
| City pioneer |  9,947  |  106,125  |  5,870  |  42,032  | **1.40** | **(1.35, 1.44)** | **1.29** | **(1.25, 1.33)** |
| Hispanic small towns |  8,479  |  91,829  |  4,859  |  34,656  | **1.43** | **(1.38, 1.48)** | **1.36** | **(1.31, 1.41)** |
| Inner city |  5,009  |  51,412  |  3,154  |  22,351  | **1.55** | **(1.49, 1.65)** | **1.42** | **(1.36, 1.48)** |
| **NH Black** |  |  |  |  |  |  |  |  |
| Total |  10,617  |  109,087  |  5,978  |  36,864  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  818  |  9,660  |  352  |  2,381  | 1.00 |  | 1.00 |  |
| High status |  450  |  4,902  |  231  |  1,508  | **1.22** | **(1.04, 1.44)** | **1.22** | **(1.03, 1.44)** |
| New urban/ Pedestrian |  1,209  |  13,102  |  637  |  4,091  | **1.25** | **(1.10, 1.42)** | **1.16** | **(1.01, 1.32)** |
| Mixed-SES class suburb |  624  |  6,650  |  317  |  1,975  | **1.20** | **(1.03, 1.40)** | **1.22** | **(1.05, 1.42)** |
| Suburban pioneer |  1,049  |  11,244  |  537  |  3,297  | **1.31** | **(1.15, 1.50)** | **1.25** | **(1.09, 1.43)** |
| Rural/ Micropolitan |  244  |  2,512  |  133  |  814  | 1.21 | (0.99, 1.47) | 1.12 | (0.91, 1.37) |
| City pioneer |  1,955  |  19,298  |  1,157  |  6,948  | **1.53** | **(1.36, 1.73)** | **1.38** | **(1.23, 1.56)** |
| Hispanic small towns |  1,130  |  11,647  |  629  |  3,762  | **1.37** | **(1.20, 1.56)** | **1.31** | **(1.15, 1.49)** |
| Inner city |  3,138  |  30,072  |  1,985  |  12,088  | **1.58** | **(1.41, 1.77)** | **1.43** | **(1.27, 1.60)** |
| **Hispanic** |  |  |  |  |  |  |  |  |
| Total |  23,825  |  270,606  |  10,131  |  70,796  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  2,113  |  26,278  |  755  |  5,671  | 1.00 |   | 1.00 |  |
| High status |  1,270  |  15,909  |  460  |  3,482  | 0.99 | (0.88, 1.11) | 0.97 | (0.87, 1.09) |
| New urban/ Pedestrian |  1,796  |  21,474  |  718  |  5,394  | 1.09 | (0.98, 1.21) | 1.07 | (0.96, 1.18) |
| Mixed-SES class suburb |  1,430  |  17,066  |  573  |  4,274  | **1.22** | **(1.09, 1.36)** | **1.20** | **(1.08, 1.34)** |
| Suburban pioneer |  3,741  |  43,321  |  1,537  |  11,040  | **1.21** | **(1.11, 1.32)** | **1.18** | **(1.08, 1.29)** |
| Rural/ Micropolitan |  920  |  10,354  |  415  |  2,852  | **1.37** | **(1.22, 1.55)** | **1.36** | **(1.21, 1.54)** |
| City pioneer |  2,598  |  28,443  |  1,201  |  8,312  | **1.35** | **(1.24, 1.48)** | **1.26** | **(1.15, 1.38)** |
| Hispanic small towns |  3,627  |  40,375  |  1,668  |  11,515  | **1.40** | **(1.29, 1.53)** | **1.36** | **(1.25, 1.48)** |
| Inner city |  6,330  |  67,386  |  2,804  |  18,256  | **1.40** | **(1.29, 1.51)** | **1.31** | **(1.21, 1.42)** |
| **Asian and Pacific Islander** |  |  |  |  |  |  |  |  |
| Total |  16,580  |  206,262  |  5,650  |  42,498  |  |  |  |  |
| Archetype |  |  |  |  |  |  |  |  |
| Upper middle-class suburb |  4,633  |  59,951  |  1,273  |  9,715  | 1.00 |   | 1.00 |  |
| High status |  1,089  |  13,975  |  319  |  2,458  | 1.00 | (0.89, 1.13) | 1.04 | (0.92, 1.17) |
| New urban/ Pedestrian |  2,631  |  32,727  |  918  |  7,178  | **1.17** | **(1.07, 1.27)** | **1.14** | **(1.05, 1.24)** |
| Mixed-SES class suburb |  761  |  9,366  |  252  |  1,886  | **1.23** | **(1.07, 1.40)** | **1.16** | **(1.02, 1.33)** |
| Suburban pioneer |  3,160  |  39,302  |  1,130  |  8,496  | **1.23** | **(1.14, 1.34)** | **1.20** | **(1.11, 1.30)** |
| Rural/ Micropolitan |  298  |  3,527  |  128  |  957  | **1.53** | **(1.27, 1.83)** | **1.49** | **(1.25, 1.79)** |
| City pioneer |  1,953  |  23,083  |  811  |  6,049  | **1.38** | **(1.26, 1.51)** | **1.27** | **(1.16, 1.39)** |
| Hispanic small towns |  521  |  6,208  |  208  |  1,542  | **1.37** | **(1.18, 1.58)** | **1.24** | **(1.07, 1.44)** |
| Inner city |  1,534  |  18,123  |  611  |  4,217  | **1.45** | **(1.31, 1.59)** | **1.36** | **(1.23, 1.49)** |

a. HR, Hazard Ratio; CI, confidence interval; NH, non-Hispanic

b. Adjusted for age at diagnosis, year of diagnosis, SEER summary stage and cluster effect by census tract.

c. Adjusted for age at diagnosis, year of diagnosis, SEER summary stage, histology, grade, ER status, PR status, chemotherapy, radiation, surgery, marital status and cluster effect by census tract.

d. For models among total sample, both minimally-adjusted and fully-adjusted models include race/ethnicity.

**Supplemental Table 4: Hazard ratios and 95% confidence intervals for all-cause and breast cancer-specific survival for race/ethnicity by 9 neighborhood archetypes, California 1996-2005.**

|  |  |  |
| --- | --- | --- |
| **Race/Ethnicity by archetypes** | **Overall Survival** | **Breast Cancer Specific Survival** |
| **HR1** | **95% CI** | **HR1** | **95% CI** |
| **All archetypes Combined** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.27** | **(1.23, 1.30)** | **1.34** | **(1.29, 1.39)** |
| Hispanic | **1.04** | **(1.02, 1.06)** | **1.07** | **(1.04, 1.10)** |
| API | **0.82** | **(0.79, 0.84)** | **0.92** | **(0.88, 0.95)** |
| **Upper middle-class suburb** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.16** | **(1.04, 1.30)** | **1.16** | **(1.01, 1.35)** |
| Hispanic | 0.99 | (0.92, 1.07) | 1.07 | (0.97, 1.19) |
| API | **0.84** | **(0.79, 0.89)** | **0.89** | **(0.82, 0.97)** |
| **High Status** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.36** | **(1.19, 1.55)** | **1.56** | **(1.30, 1.86)** |
| Hispanic | 0.96 | (0.88, 1.06) | 0.91 | (0.79, 1.04) |
| API | **0.84** | **(0.75, 0.93)** | 0.98 | (0.83, 1.15) |
| **New urban/ pedestrian** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.22** | **(1.13, 1.33)** | **1.29** | **(1.15, 1.44)** |
| Hispanic | 0.94 | (0.87, 1.01) | 1.00 | (0.89, 1.12) |
| API | **0.85** | **(0.80, 0.91)** | 0.97 | (0.88, 1.07) |
| **Mixed SES class suburb** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.24** | **(1.10, 1.39)** | **1.41** | **(1.21, 1.63)** |
| Hispanic | 1.04 | (0.95, 1.14) | 1.07 | (0.95, 1.22) |
| API | **0.86** | **(0.76, 0.98)** | 0.92 | (0.77, 1.09) |
| **Suburban pioneer** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.17** | **(1.06, 1.28)** | **1.25** | **(1.10, 1.42)** |
| Hispanic | **0.92** | **(0.87, 0.98)** | 0.99 | (0.91, 1.09) |
| API | **0.78** | **(0.73, 0.83)** | 0.92 | (0.84, 1.01) |
| **Rural/Micropolitan** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | 1.01 | (0.85, 1.20) | 0.99 | (0.78, 1.25) |
| Hispanic | 1.07 | (0.97, 1.18) | **1.16** | **(1.01, 1.34)** |
| API | 0.96 | (0.81, 1.15) | 1.04 | (0.80, 1.36) |
| **City pioneer** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | **1.18** | **(1.11, 1.26)** | **1.25** | **(1.13, 1.37)** |
| Hispanic | **0.95** | **(0.85, 0.96)** | **0.88** | **(0.80, 0.97)** |
| API | **0.75** | **(0.70, 0.81)** | **0.86** | **(0.77, 0.96)** |
| **Hispanic small towns** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | 1.04 | (0.96, 1.13) | **1.14** | **(1.01, 1.28)** |
| Hispanic | 0.95 | (0.90, 1.01) | 0.99 | (0.91, 1.08) |
| API | **0.72** | **(0.63, 0.83)** | **0.72** | **(0.59, 0.89)** |
| **Inner city** |   |  |   |  |
| NH White | 1.00 |  | 1.00 |  |
| NH Black | 1.03 | (0.97, 1.09) | **1.15** | **(1.05, 1.25)** |
| Hispanic | **0.80** | **(0.76, 0.84)** | **0.86** | **(0.86, 0.93)** |
| API | **0.68** | **(0.62, 0.74)** | **0.84** | **(0.84, 0.95)** |

a.Fully-adjusted model adjusted for age at diagnosis, year of diagnosis, SEER summary stage, grade, chemotherapy, radiation, surgery, marital status and cluster effect by census tract (for all archetypes combined model).