Appendix 1 The Methodology of First 5 LA/UCLA Anderson Forecast City Human Capital Index

We compute the CHCI based on three parts with corresponding population percentages as follows. We do not consider the migration factor of human capital because there is no available data.

(1) For those residents who are above 25 years of age, we calculate the CHCI by assigning the schooling year with the following categories:

Category 1: Less than 9th grade: we assign 5 schooling years (50 CHCI points) for this percentage of residents.
Category 2: 9th to 12th grade: we assign 10 schooling years.
Category 3: High school graduate: we assign 12 schooling years.
Category 4: Some college, no degree: we assign 13 schooling years.
Category 5: Associate's degree: we assign 14 schooling years.
Category 6: Bachelor's degree: we assign 16 schooling years.
Category 7: Graduate or professional degree: we assign 18 schooling years.

(2) For those residents who are between 18 and 24 years of age, we estimate the CHCI by assigning the schooling year with the following categories:

Category 1: less than high school graduate: we assign X schooling years, in which X is estimated by the CHCI average of Categories 1 and 2 from Part (1) in the same region.
Category 2: High school graduate: we assign 12 schooling years.
Category 3: Some college or associate's degree: we assign Y schooling years, in which Y is estimated by the weighting average of Categories 4, 5, 6, and 7 from Part (1) in the same region.
Category 4: Bachelor's degree or higher: we assign 16 schooling years.

(3) For those residents who are between 5 and 17 years of age, we forecast their future potential CHCI based on the CHCI average of the CHCI of residents from Part (1) in the same region with the following weighting adjustment of their current school enrollment rate:

Category 1: 5 to 9 years old: if the area's enrollment rate is, say 94%, 94% will be assigned CHCI calculated from Part (1) and 6% of this area's residents will be assigned as 2 schooling years.
Category 2: 10 to 14 years old: if the area's enrollment rate is Z, Z will be assigned CHCI calculated from Part (1) and 1-Z of this area's residents will be assigned as 7 schooling years.
Category 3: 15 to 17 years old: if the area's enrollment rate is Z, 1-Z of this area's residents will be assigned as 11 schooling years.