Online appendix for
Modelling Unobserved Heterogeneity in Hedonic Price Models

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This online appendix provides details on the spatial distribution of the random effects. Figures 1 - 2 give “heatmaps” of the spatial effects in Los Angeles and Heemstede respectively. A darker red (green) color indicates higher (lower) property values, while controlling for all available characteristics. The results for all four spatial random effects models are given, although it should be noted that the differences are not noticeable to the naked eye. This is further buttressed by the high correlations between the spatial effects (between 0.88 and 0.99 for all models, see the Section “Results” as well.)

The heat maps of Los Angeles in Figure 1 provide a clear picture. The highest values of the spatial random effects are in the CBD area and in Hollywood/Santa Monica, and generally speaking along the coast. Lower values are found in the North and the East of Los Angeles. Note that this is conditional on net operating income, which also varies over space.

The heat maps of Heemstede in Figure 2 give a less clear picture. This corresponds to the erratic pattern of the spatial effects over the TSP-route, see the lower panel of Figure 2 in the main text. Although clearly the north-east (south) of the map is dominated by high (low) values of the spatial effect $\theta$. It should be stressed though, that these heat maps represent the value of the spatial effect $\theta$, and not the total property values per se (or square foot values).

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Figure 1: Heat map of spatial effects for Los Angeles.

Every dot represents an individual property. A dark red color means a higher value for the (unobserved) spatial random effect ($\theta$), and a darker green color represents a lower value for the (unobserved) spatial random effect ($\theta$). For your orientation, North points up and the black line represents the Pacific coast line.
Figure 2: Heat map of spatial effects for Heemstede.

Every dot represents an individual property. A dark red color means a higher value for the (unobserved) spatial random effect (θ), and a darker green color represents a lower value for the (unobserved) spatial random effect (θ). For your orientation, North points up.