In this method, you will treat the street weighting problem as a recommendation problem, and you will consider the final rating calculated as the `weight` that you can pass to 'shortest_path' method on nx!

Convert both pm value and street car density into a rating (from 1 to 5). Such that for example, for air quality 1 is the best, while 5 is the worst. For vehicle density, the higher the density the lower the rating and so on.

Linear weighting method to calculate the rating from the combination of mobility and air quality data.

$$\hat{r}_{uiqm} = p\left(v_i = r_q\right).\hat{r}_{uiq} + \left(1 - p\left(v_i = r_q\right)\right).\hat{r}_{uim}$$

Where $\hat{r}_{uiqm}$ is the predicted rating for item i (street segment i) considering air quality value (pm) by user u given surrounding mobility density conditions. $\hat{r}_{uiq}$ is the rating for the same item by the same user in that air quality condition without considering the neighboring mobility density. On the contrary, $\hat{r}_{uim}$ is the predicted rating considering only neighboring mobility density without considering the air quality. $p\left(v_i = r_q\right)$ is the probability that user u has rated item i with rating r_q in air quality condition q (pm value). It is calculated by dividing the total number of times similar user rated item i in air quality condition q over total number of times similar users rated item i in all air quality conditions.