Optimizer: Linear Assignment
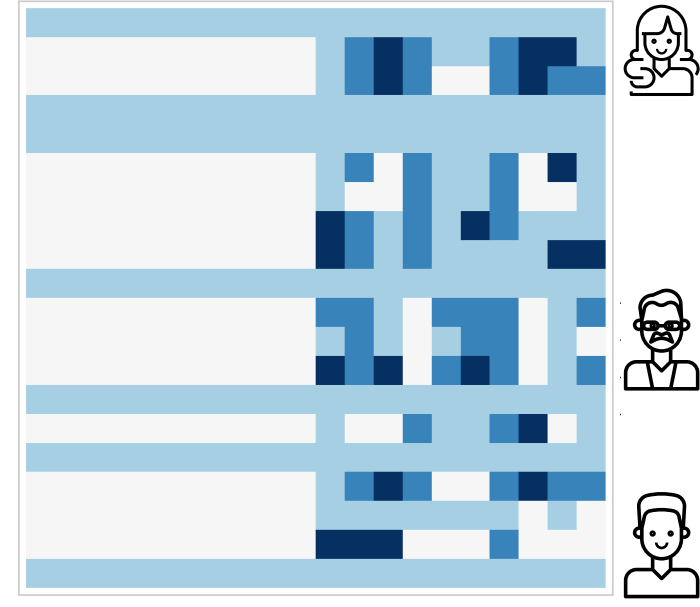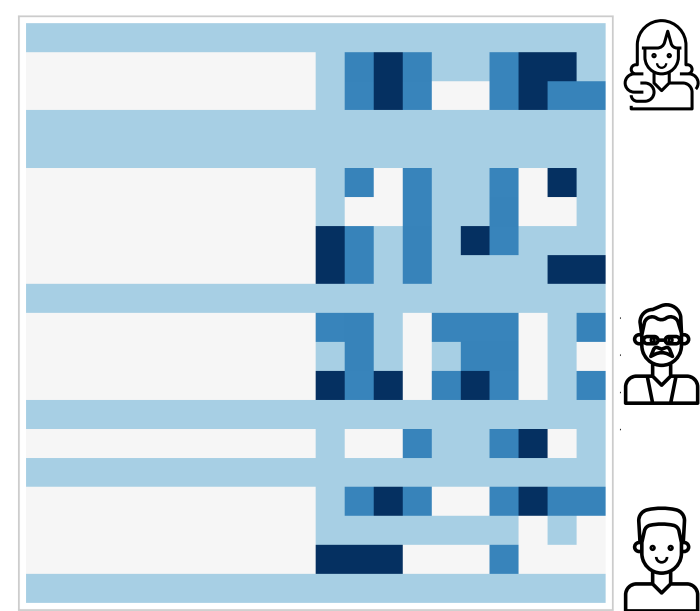
w_{ij} is health priority for given vaccination spot
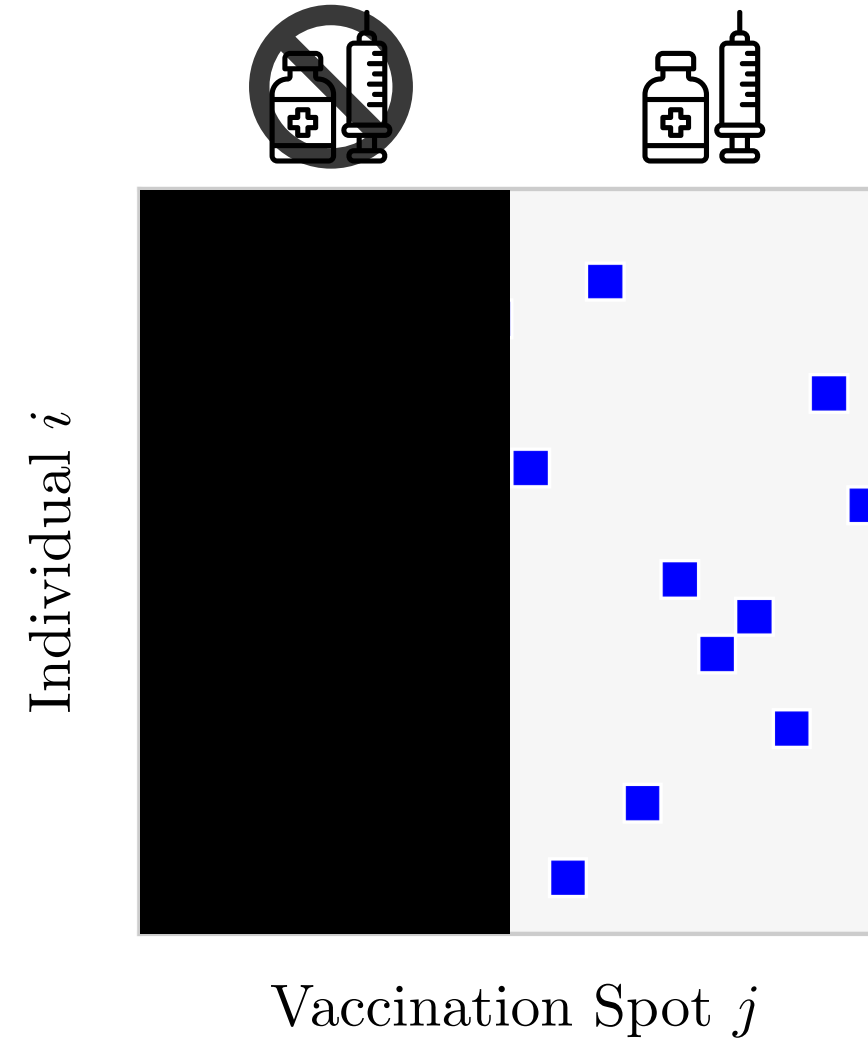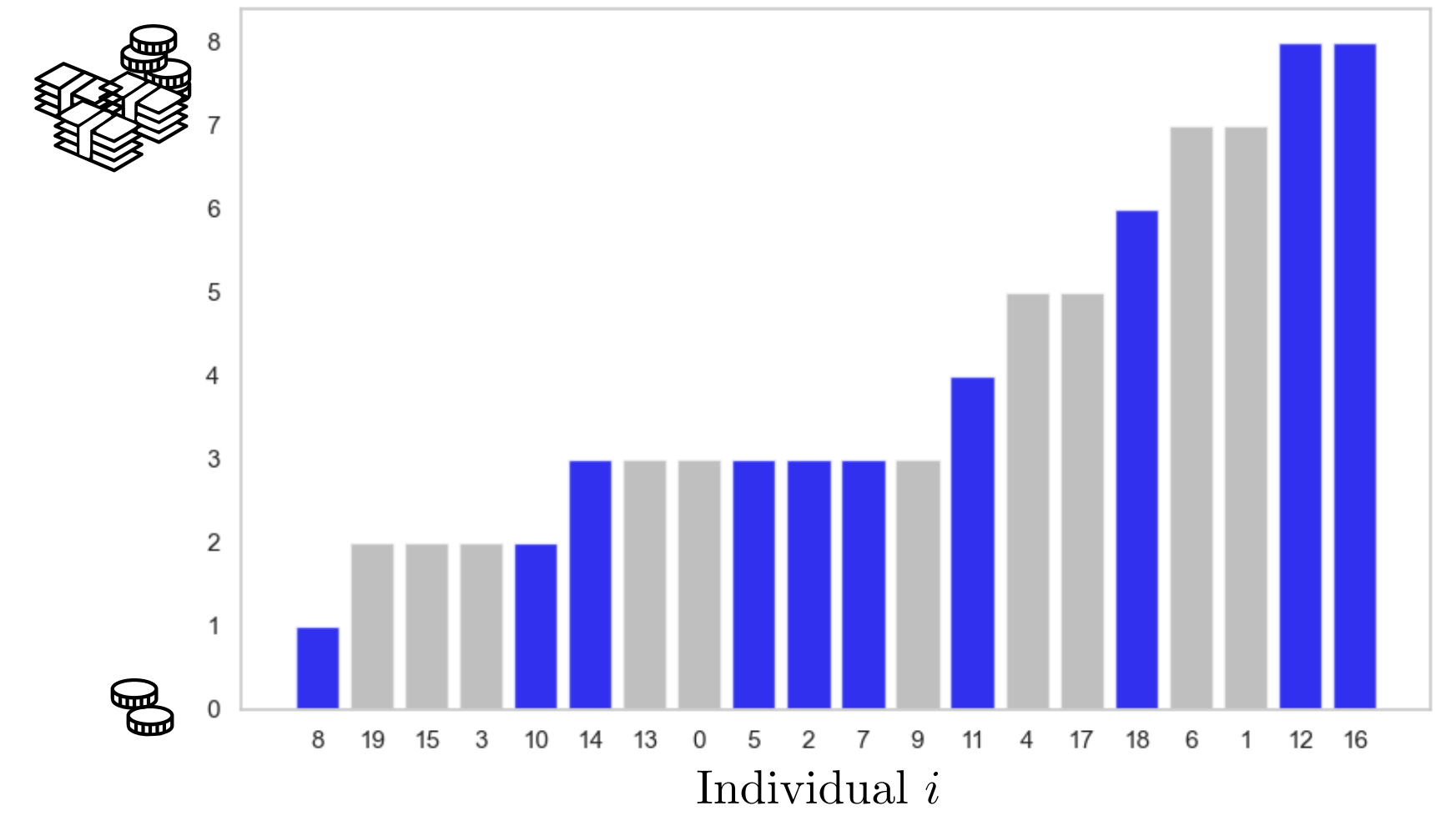
$$+ 0.01 * \text{sign}(\nabla_{\mathbf{w}} \|\mathbf{x}_P^*(\mathbf{w}) - \mathbf{x}^*(\mathbf{w})\|_2)$$

$\mathbf{w}$

$\hat{\mathbf{w}}$

$\mathbf{x}^*(\mathbf{w})$

Individual i

Vaccination Spot j

Wealth per individual with guaranteed vaccination

Individual i

$\mathbf{x}^*(\hat{\mathbf{w}})$

Individual i

Vaccination Spot j

Wealth per individual with guaranteed vaccination

Individual i

Optimizer: Shortest Path

w_{ij} is toll cost for road segment from i to j

$\mathbf{x}_P^*(\mathbf{w})$

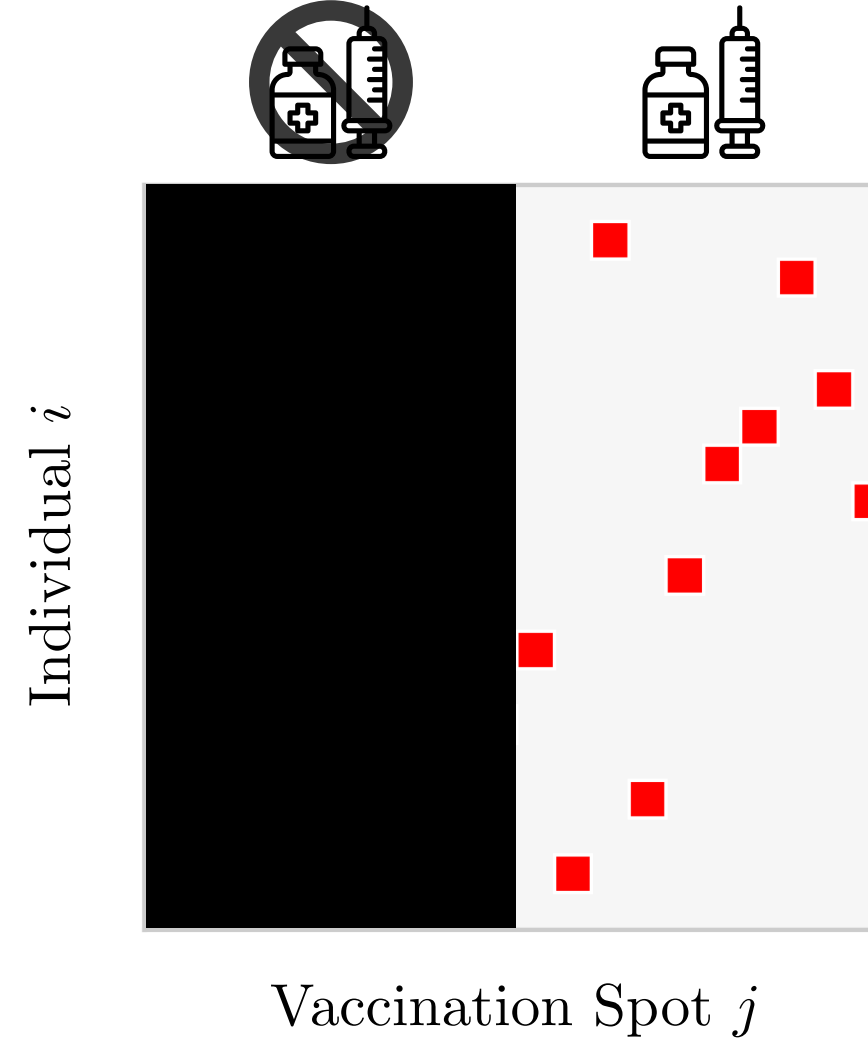$$+ 0.01 * \text{sign}(\nabla_{\mathbf{w}} \|\mathbf{x}_P^*(\mathbf{w}) - \mathbf{x}^*(\mathbf{w})\|_2)$$
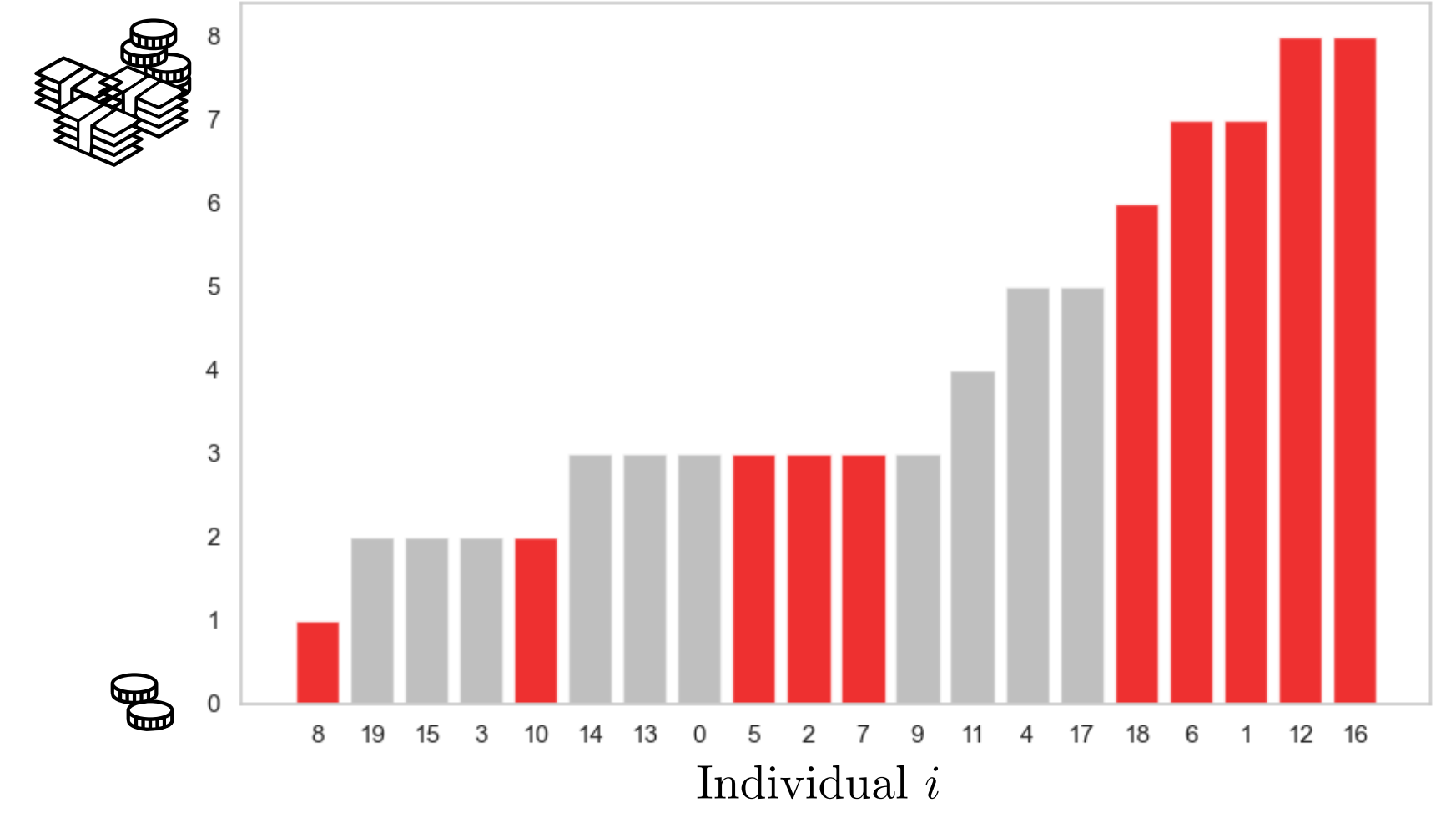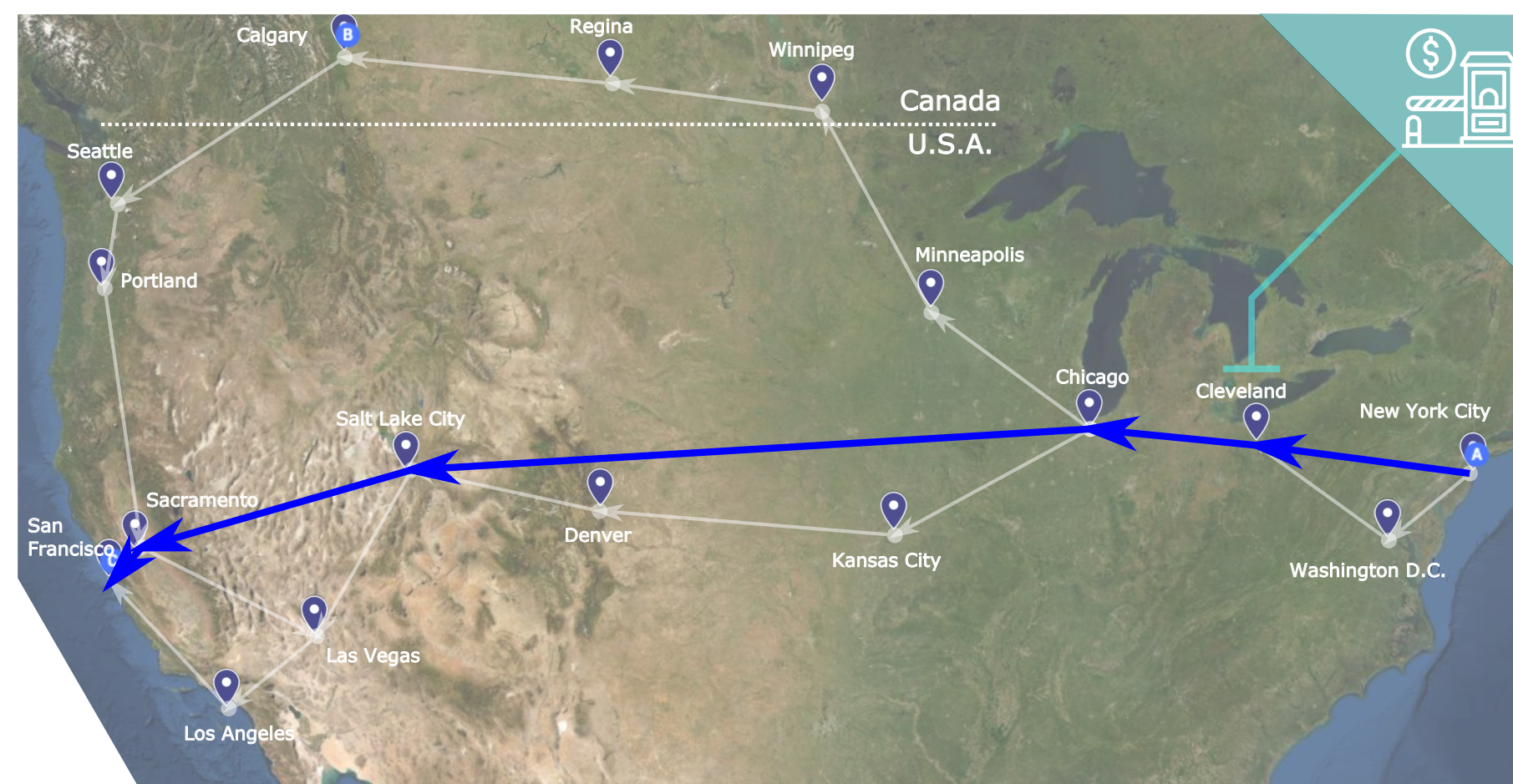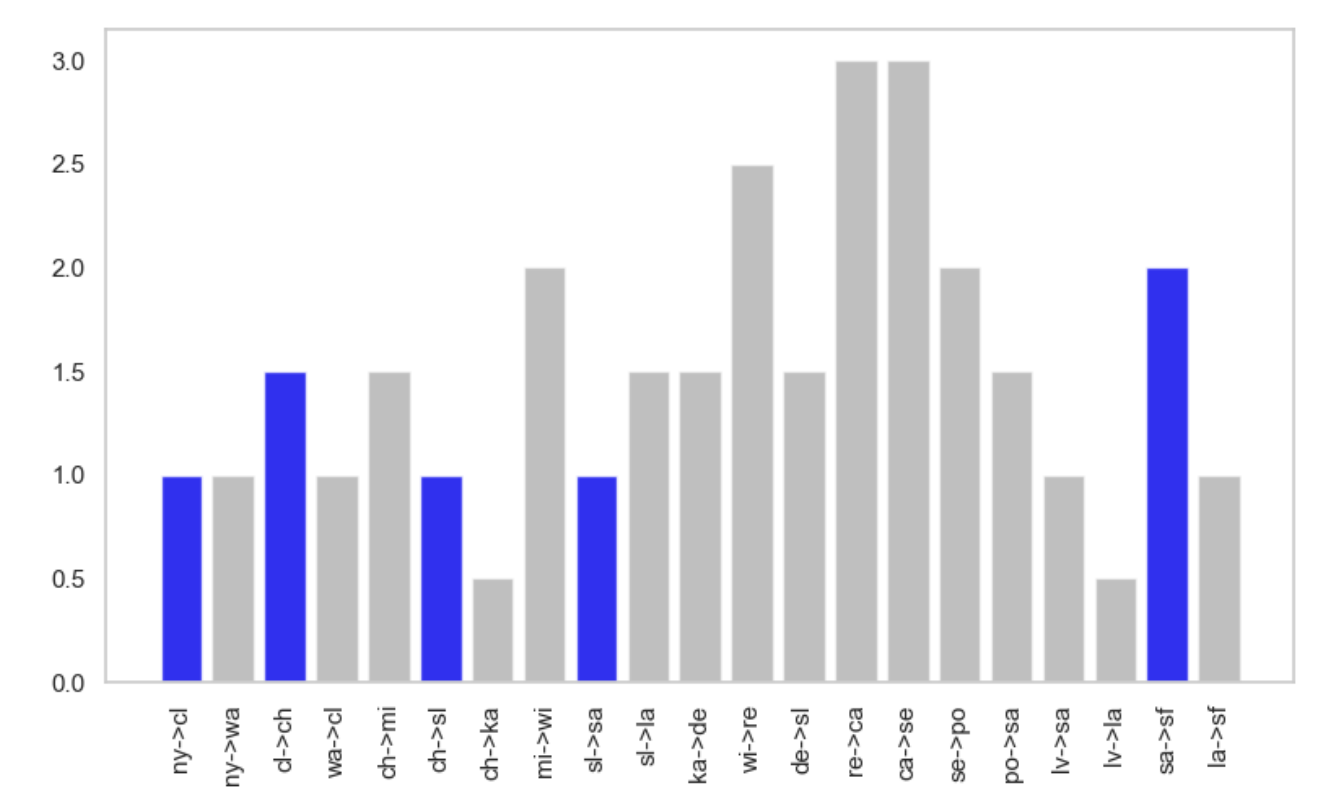
$\mathbf{w}$

$\hat{\mathbf{w}}$

$\mathbf{x}^*(\mathbf{w})$

CO_2 emissions per sel. segment

$\mathbf{x}^*(\hat{\mathbf{w}})$

CO_2 emissions per sel. segment