

## Bean Town to Green Town

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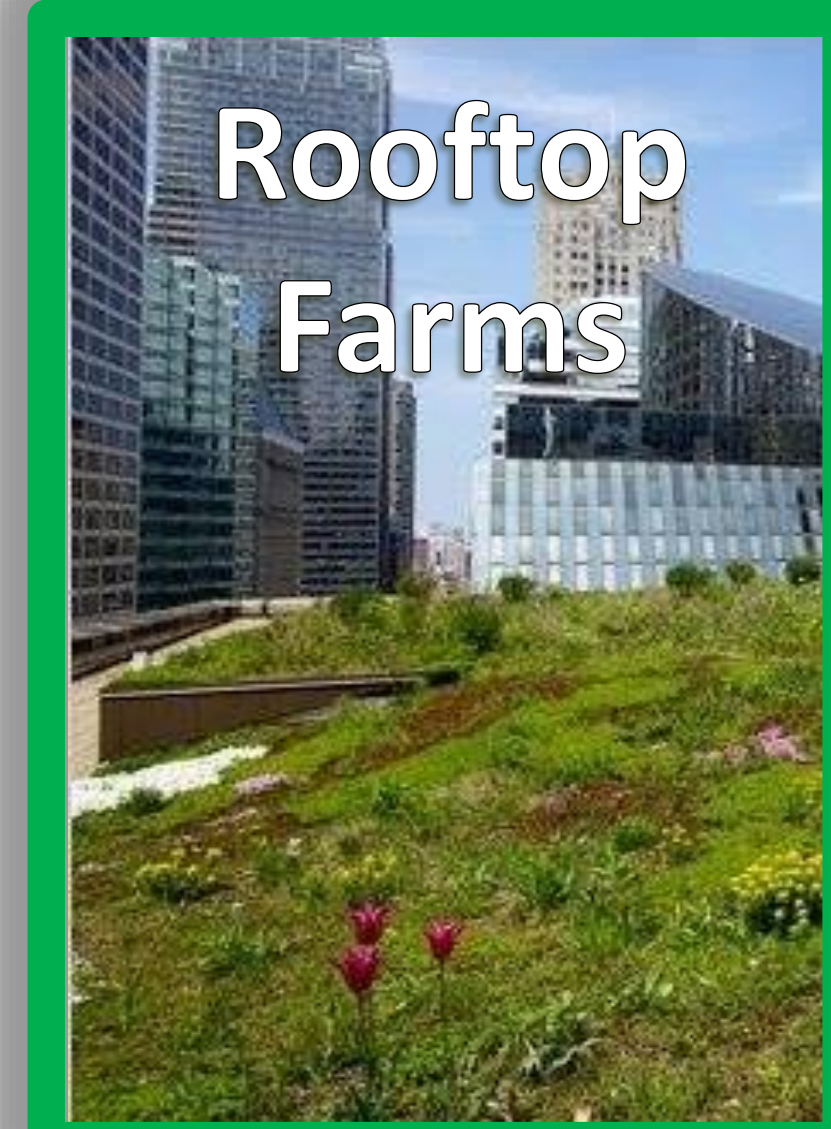
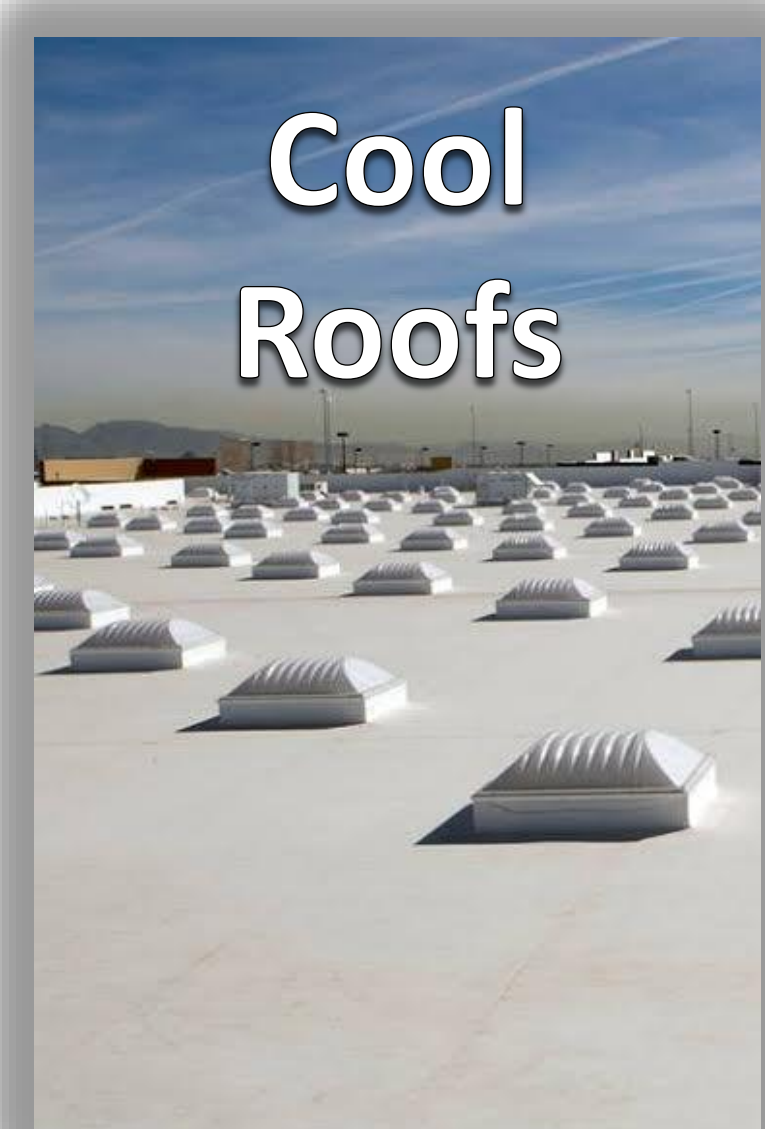
### Our Goal

To choose the best solution for reducing the urban heat island effect in Boston in terms of environmental, economic, and social implications.

### Background

Temperatures in cities are higher than surrounding areas. This is known as the urban heat island effect (UHI). UHI poses a threat to the environment, human health, and biodiversity. We looked at strategies to reduce the UHI effect for the city of Boston by looking at data from previous studies, conducting interviews, and performing cost analyses. These address economic, environmental, social and political aspects to find the optimal solution.

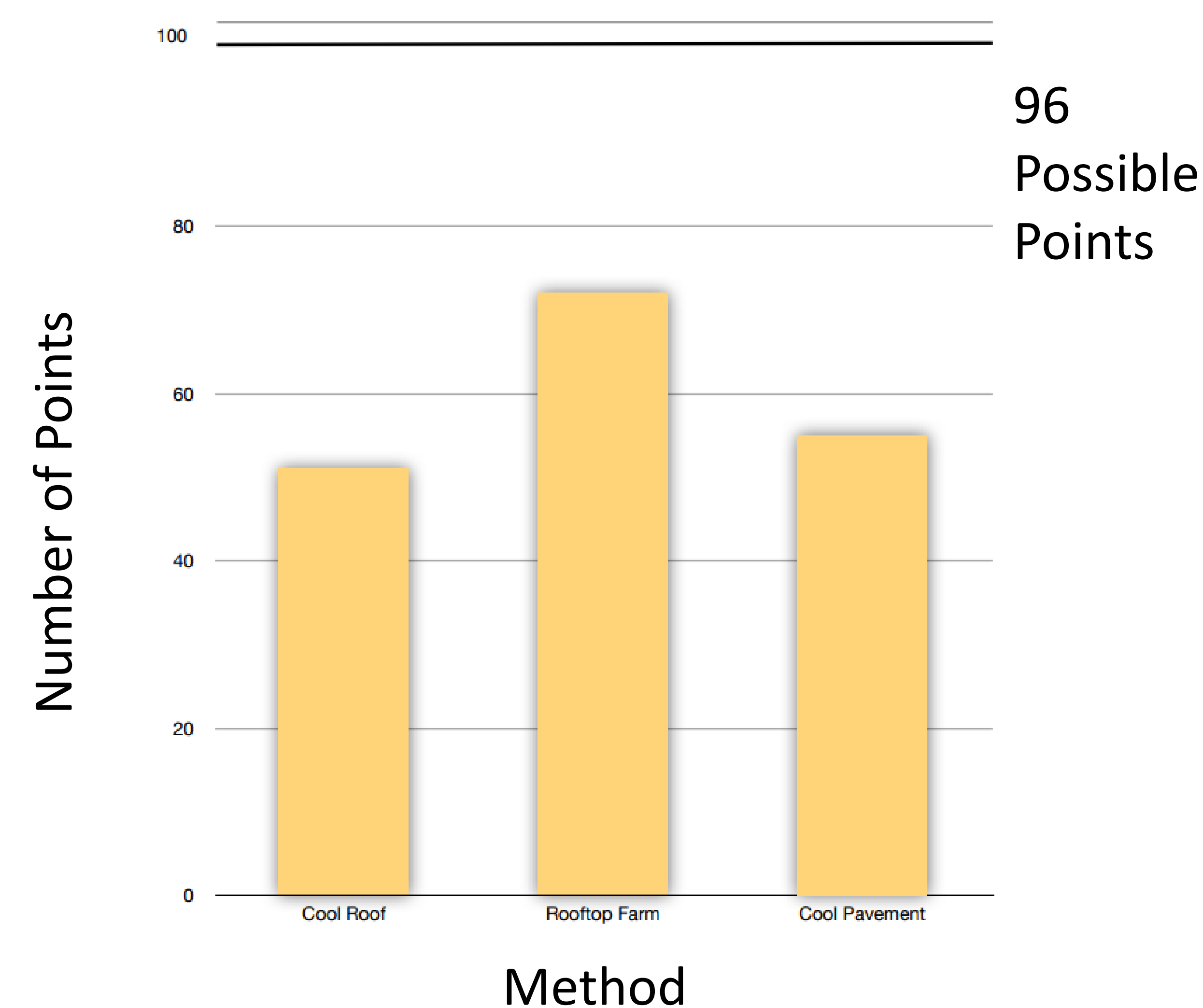
### Possible Solutions



### Decision Matrix Contents

Categories to Evaluate	Cool Roofs	Rooftop Gardens	Cool Pavement
Albedo	0.65	0.85	0.24
Cost Per Square Foot	\$4-\$6	\$25-\$200	\$0.30-\$1
Percent Energy Cost Reduction to Building	40-50%	20%	75%

### Decision Matrix Results



Methods

Initial Research

Review Case Studies

Additional Research on Possible Solutions

Interviews & Surveys

Create Decision Matrix

Determine Best Solution

### Best Solution

According to the modified decision matrix, **rooftop farms** scored a total 72 points from three categories: environmental, economic, and social factors. Therefore, it is the optimal solution for reducing the urban heat island effect.

### Rooftop Farm at Fenway Park



### Acknowledgements

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### References

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