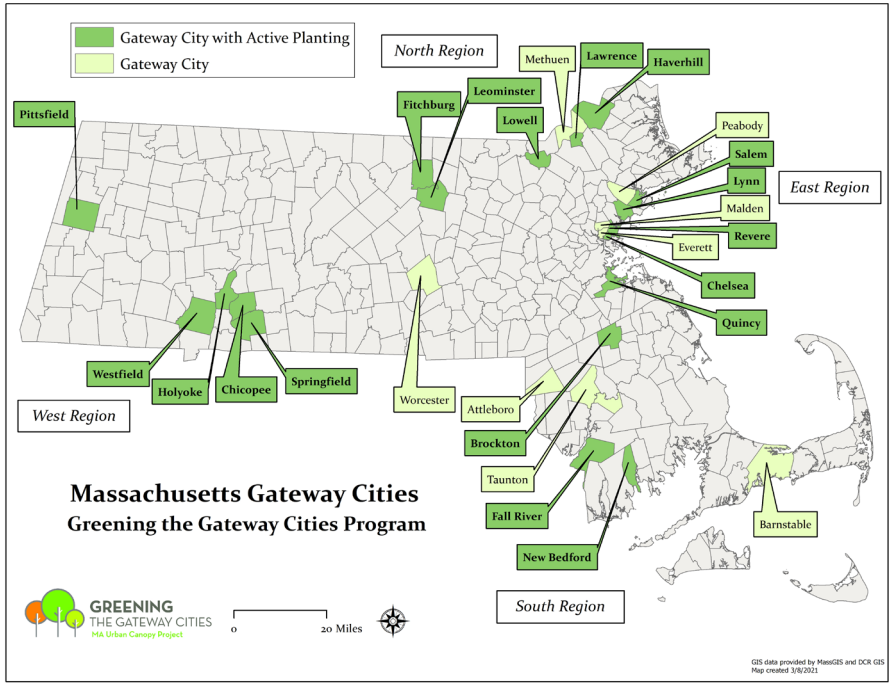
Greening the Gateway Cities Program – increase the number of trees planted in urban residential areas and decrease household heating & cooling energy use

Target areas of the city with lower tree canopy, older housing stock, large renter population, and EJ neighborhoods

Now planting in 18 participating cities
Over 28,000 trees planted




GREENING
THE GATEWAY CITIES
MA Urban Canopy Project

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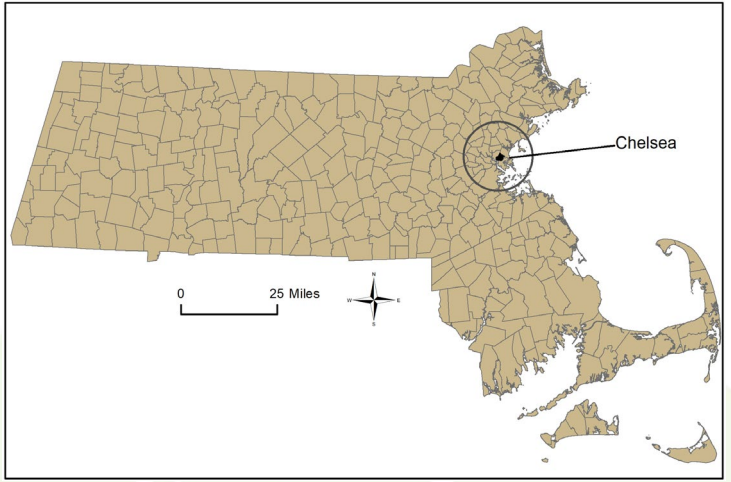
## Chelsea, MA

Across the Mystic River from Boston
Population of about 35,000 people
Smallest land area of any city in MA: 1.8 miles
Second most densely populated city in MA
26th most densely populated place in the country




Chelsea has been a participating GGCP city since 2014
2,206 trees planted

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i-Tree Eco was used to obtain tree benefits including household energy benefits

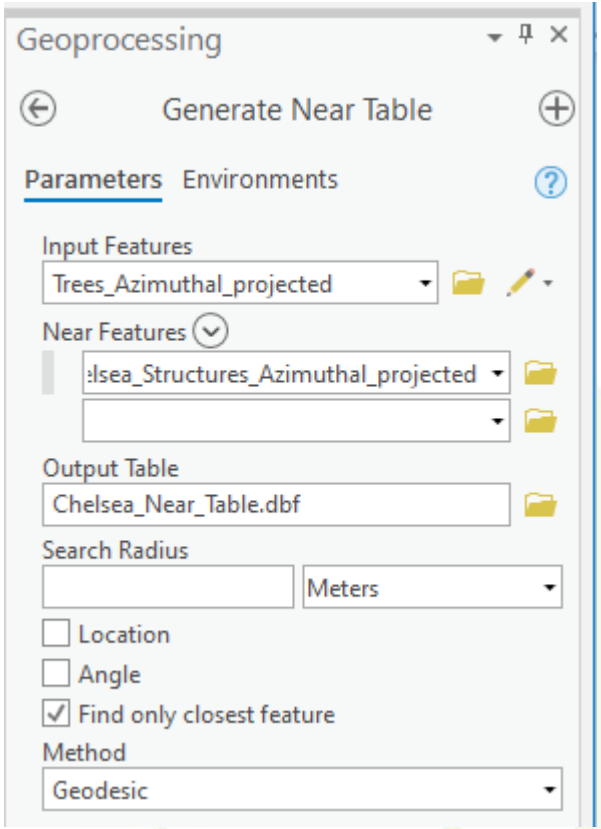
GGCP trees GIS layer
Statewide Structures layer

ArcPro ‘Generate Near Table’ to get direction & distance

Join Near Table to trees layer

Export attribute table to Excel

Import Excel to Eco

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## The Results and the 30 Year Forecast

Tree Cover: 0.4% - 8%
Most common species: Red maple, Japanese tree lilac, crab apple
Percentage of trees less than 6” diameter: 100%
Pollution Removal: 117.8 pounds/year ($2.06 thousand/year) - 7,500 pounds/year ($7,745 thousand/year)
Carbon Storage: 16.3 tons ($2.78 thousand) - 151.2 tons
Carbon Sequestration: 3.4 tons ($583/year) - 7.7 tons
Oxygen Production: 9.1 tons/year
Avoided Runoff: 2.648 thousand cubic ft/year ($177/year)
Building energy savings: $1,650/year
Carbon Avoided: -275.5 pounds/year ($-23.5/year)
Structural values: $256 thousand

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