

Metadata Report For:

Location: Springfield, Hampden, Massachusetts, United States of America

Project: Springfield Squares, Series: Parks, Year: 2018

Generated: 3/16/2020



i-Tree Eco v6.0.19

Project created: 3/16/2020

Project location: C:\Users\alxz7\Documents\Davey\i-Tree_Academy\ITA2020\ITA2020-Session5\Springfield Squares project UPDATED 16Mar2020.ieco

Model HAS been run

Project Type: Complete Inventory

- Project: Springfield Squares
- Series: Parks
- Year: 2018
- 44 trees

Project Info:

- Location: Springfield, Hampden, Massachusetts, United States of America
 - Leaf on day (day of year, 1 - 365, when frost ends): 113
 - Leaf off day (day of year, 1 - 365, when frost begins): 280
 - Frost-free days: 150
 - Longitude: -72.547455
 - Latitude: 42.112411
 - Elevation: 210.4 (ft)
- Area: 3.10 acres
- Population: 153,060
- Study area is treated as Urban: Yes
- Units: English

Pollution Details:

- Year: 2015

CO	O3	NO2	SO2	PM2.5	Location	Station ID
				Yes	Hartford, Connecticut, United States of America	1003
	Yes				Hampden, Massachusetts, United States of America	0008
Yes		Yes	Yes		Hampden, Massachusetts, United States of America	0016

Weather Station Details:

- Year: 2015
- USAF: 744915
- WBAN: 14775
- Name: N/A

* see avoided runoff report for annual precipitation total used for analysis

Benefit Prices:

- Electricity \$ (USD)/kWh: 0.15 (Eco default value: 0.21 for 2018)
- Fuels \$ (USD)/Therm: 1.56 (Eco default value: 1.38 for 2018)
- Carbon \$ (USD)/ton: 129.73 (Eco default value: 170.55 for 2020)

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- Avoided Runoff \$ (USD)/gallon: 0.0089 (Eco default value: 0.0089 for 2004)

Models:

- Forecast v6.0.19
- UFORE-D v1.1.0

Processing History:

Date/Time	File Name	Retrieved
Wednesday, April 10, 2019 7:06 AM	_001_25_013_67000_Springfield_Squares_project.ieco.2019_4_10_25586.zip	Yes
Wednesday, April 3, 2019 9:50 PM	_001_25_013_67000_Springfield_Squares_project.ieco.2019_4_3_78626.zip	Yes
Wednesday, June 20, 2018 5:45 AM	_001_25_013_67000_DWTN_Squares.ieco.2018_6_20_20652.zip	Yes
Tuesday, June 19, 2018 12:12 PM	_001_25_013_67000_DWTN_Squares.ieco.2018_6_19_43928.zip	Yes
Tuesday, June 19, 2018 10:38 AM	_001_25_013_67000_DWTN_Squares.ieco.2018_6_19_38304.zip	Yes

Report Availability

Formatted Reports

Written Report
Composition and Structure
Structure Summary
By Species
By Stratum and Species
Population Summary
By Species
By Stratum
By Stratum per Unit Area
Public and Private by Stratum (Unavailable: "Public/private" not checked)
Street Trees by Stratum (Unavailable: "Street tree/non-street tree" not checked)
Species Distribution
By DBH Class (chart)
By DBH Class (vertical table)
By DBH Class (horizontal table)
By DBH Class and Stratum (vertical table)
By DBH Class and Stratum (horizontal table)
Importance Values
By Species
Diversity Indices (Unavailable for this project type or location)
By Stratum (Unavailable for this project type or location)
Species Range
Native Status by Stratum
Condition
By Species
By Stratum and Species
Crown Health
By Species
By Stratum and Species
Leaf Area
By Stratum

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By Stratum per Unit Area
Leaf Area and Biomass
Of Shrubs by Stratum (Unavailable for this project type or location)
Of Trees and Shrubs by Stratum
Ground Cover Composition (Unavailable for this project type or location)
By Stratum (Unavailable for this project type or location)
Land Use Composition
By Stratum
Relative Performance Index
By Species
Maintenance (Unavailable: "" not checked)
Recommended (Unavailable: "Maintenance recommended" not checked)
Recommended by Species (Unavailable: "Maintenance recommended" not checked)
Recommended by Species and DBH (Unavailable: "Maintenance recommended" not checked)
Task (Unavailable: "Maintenance task" not checked)
Task by Species (Unavailable: "Maintenance task" not checked)
Task by Species and DBH (Unavailable: "Maintenance task" not checked)
Sidewalk Conflicts (Unavailable: "Sidewalk conflict" not checked)
Sidewalk Conflicts by Species (Unavailable: "Sidewalk conflict" not checked)
Sidewalk Conflicts by Species and DBH (Unavailable: "Sidewalk conflict" not checked)
Utility Conflicts (Unavailable: "Utility conflict" not checked)
Utility Conflicts by Species (Unavailable: "Utility conflict" not checked)
Utility Conflicts by Species and DBH (Unavailable: "Utility conflict" not checked)
Other (Unavailable: "Custom Field One name:", "Custom Field Two name:", "Custom Field Three name:" not checked)
Field One (Unavailable: "Custom Field One name:" not checked)
Field One by Species (Unavailable: "Custom Field One name:" not checked)
Field One by Species and DBH (Unavailable: "Custom Field One name:" not checked)
Field Two (Unavailable: "Custom Field Two name:" not checked)
Field Two by Species (Unavailable: "Custom Field Two name:" not checked)
Field Two by Species and DBH (Unavailable: "Custom Field Two name:" not checked)
Field Three (Unavailable: "Custom Field Three name:" not checked)
Field Three by Species (Unavailable: "Custom Field Three name:" not checked)
Field Three by Species and DBH (Unavailable: "Custom Field Three name:" not checked)
Benefits and Costs
Benefits Summary of Trees
By Species
By Stratum and Species
Carbon Storage of Trees
By Species
By Stratum
By Stratum per Unit Area
Annual Carbon Sequestration of Trees
By Species
By Stratum
By Stratum per Unit Area
Annual Net Carbon Sequestration of Trees (Unavailable for this project type or location)
By Species (Unavailable for this project type or location)
By Stratum (Unavailable for this project type or location)
By Stratum Per Unit Area (Unavailable for this project type or location)

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Energy Effects (Unavailable: "Energy (building interactions)" not checked)
Of Trees (Unavailable: "Energy (building interactions)" not checked)
Hydrology Effects of Trees
By Species
By Stratum
Oxygen Production of Trees
By Stratum
By Stratum per Unit Area
Pollution Removal by Trees and Shrubs
Monthly Removal
Monthly Removal (chart display)
Pollution Removal by Grass/Herbaceous (Unavailable for this project type or location)
Monthly Removal (Unavailable for this project type or location)
Monthly Removal (chart display) (Unavailable for this project type or location)
VOC Emissions of Trees
By Species
By Stratum
UV Effects of Trees
By Stratum
Avian Habitat Suitability (Unavailable for this project type or location)
By Plot (Unavailable for this project type or location)
By Stratum (Unavailable for this project type or location)
Management Costs
By Expenditure
Net Annual Benefits
Net Annual Benefits for All Trees
Foodscape Benefits of Trees
By Species
Individual Level Results
Composition and Structure
Of Plots
Of Trees
Of Trees By Species
Of Trees By Stratum
Tree Benefits and Costs
Summary
Carbon Storage
Carbon Sequestration
Energy Effects
Energy Avoided Pollutants
Hydrology Effects
Pollution Removal
Oxygen Production
VOC Emissions
Miscellaneous
Plot Comments
Tree Comments
Shrub Comments
Air Quality Health Impacts and Values

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By Trees
By Shrubs (Unavailable for this project type or location)
By Grass/Herbaceous (Unavailable for this project type or location)
Summary (Unavailable for this project type or location)
Pest Analysis
Susceptibility to Pests
By Stratum
Primary Pest (Unavailable: "Pests (IPED)" not checked)
Impacts by Stratum (Unavailable: "Pests (IPED)" not checked)
Impacted Tree Details (Unavailable: "Pests (IPED)" not checked)
Signs and Symptoms (Unavailable: "Pests (IPED)" not checked)
Totals by Species (Unavailable: "Pests (IPED)" not checked)
Summaries by Species (Unavailable: "Pests (IPED)" not checked)
Details by Species (Unavailable: "Pests (IPED)" not checked)
Totals by Stratum (Unavailable: "Pests (IPED)" not checked)
Summaries by Stratum (Unavailable: "Pests (IPED)" not checked)
Details by Stratum (Unavailable: "Pests (IPED)" not checked)
Impacted Tree Finder (Unavailable: "Pests (IPED)" not checked)
Pest Review (Unavailable: "Pests (IPED)" not checked)
Of Assessed Trees (Unavailable: "Pests (IPED)" not checked)
Charts
Pollution and Weather
Raw and Source Data
Air Pollutant Concentration
Photosynthetically Active Radiation
Rain
Temperature
UV Index
Air Quality Improvement
By Trees
By Shrubs (Unavailable for this project type or location)
By Grass/Herbaceous (Unavailable for this project type or location)
Air Pollutant Flux (Dry Deposition)
Per Unit Tree Cover
Per Unit Shrub Cover (Unavailable for this project type or location)
Per Unit Grass/Herbaceous Cover (Unavailable for this project type or location)
Transpiration
By Trees
By Shrubs (Unavailable for this project type or location)
Evaporation
By Trees
By Shrubs (Unavailable for this project type or location)
Water Intercepted
By Trees
By Shrubs (Unavailable for this project type or location)
Avoided Runoff
By Trees
By Shrubs (Unavailable for this project type or location)
Potential Evapotranspiration

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By Trees
By Shrubs (Unavailable for this project type or location)
UV Index Reduction by Trees
Effects in Tree Shade
Effects Overall
Isoprene
By Trees
By Shrubs (Unavailable for this project type or location)
Monoterpene
By Trees
By Shrubs (Unavailable for this project type or location)
Forecast Reports
Composition and Structure
Population Summary
Number of Trees
Number of Trees by Stratum
Percent Tree Cover
Percent Tree Cover by Stratum
Tree Cover Area
Tree Cover Area by Stratum
Average DBH Growth
Average DBH Growth by Stratum
Yearly DBH Distributions
Basal Area
Basal Area by Stratum
Leaf Area and Biomass
Leaf Area
Leaf Area by Stratum
Leaf Area Index
Leaf Area Index by Stratum
Leaf Biomass
Leaf Biomass by Stratum
Leaf Biomass per Unit Area
Leaf Biomass by Stratum per Unit Area
Tree Biomass
Tree Biomass by Stratum
Benefits
Carbon Storage and Sequestration
Carbon Storage
Carbon Storage by Stratum
Carbon Sequestration
Carbon Sequestration by Stratum
Pollutant Removal by Trees
Value for All Pollutants
CO
NO2
O3
SO2
PM2.5