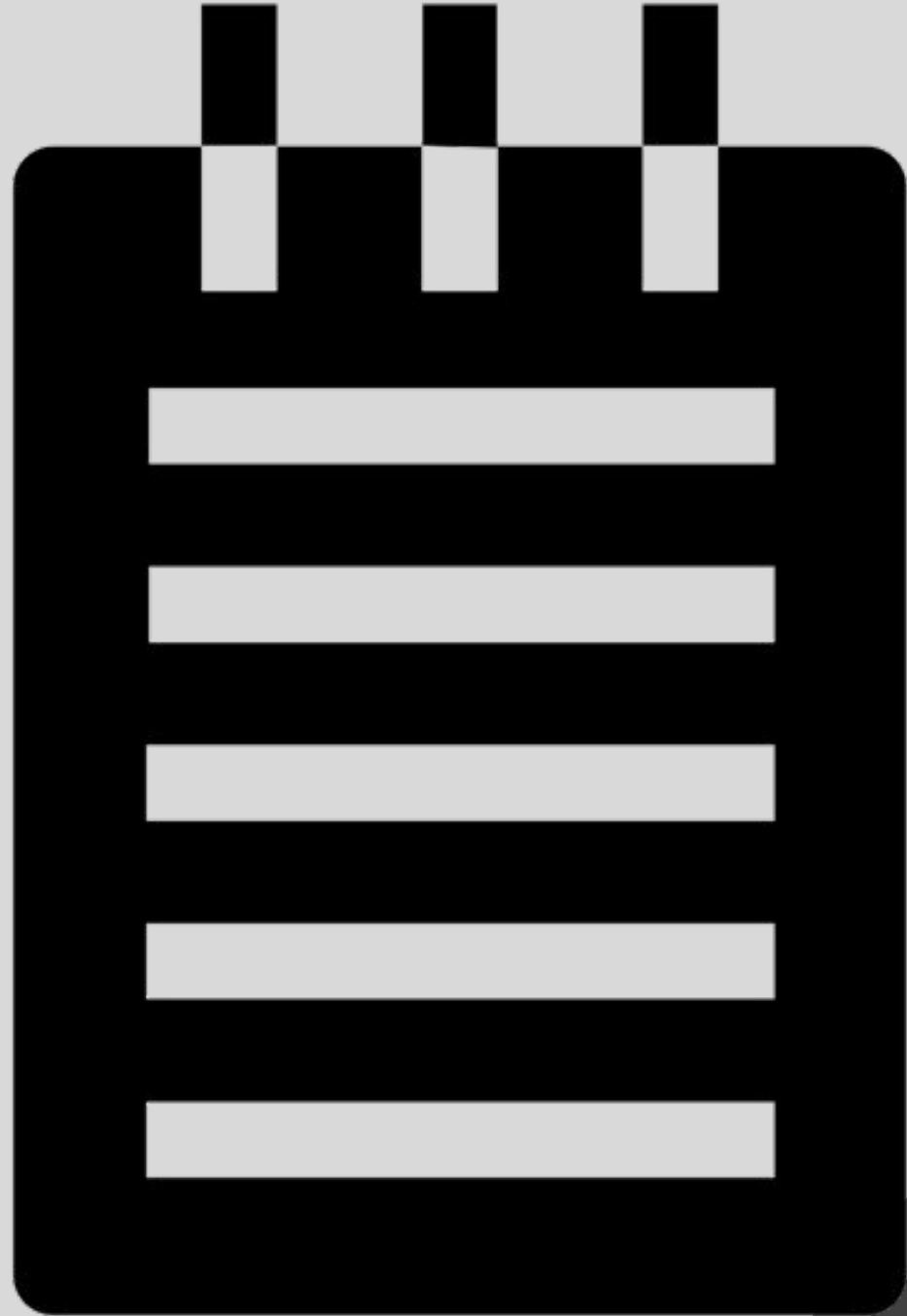


DRAFT

# Providence Tree Canopy Change 2011-2018

Jarlath O'Neil-Dunne

Nina Safavi



Summary



### **Tree Canopy is Increasing**

163 acres of net tree canopy  
25.8% in 2011 to 27.2% in 2018  
5% relative increase



### **Both Gains and Losses**

518 acres of gain  
335 acres of loss



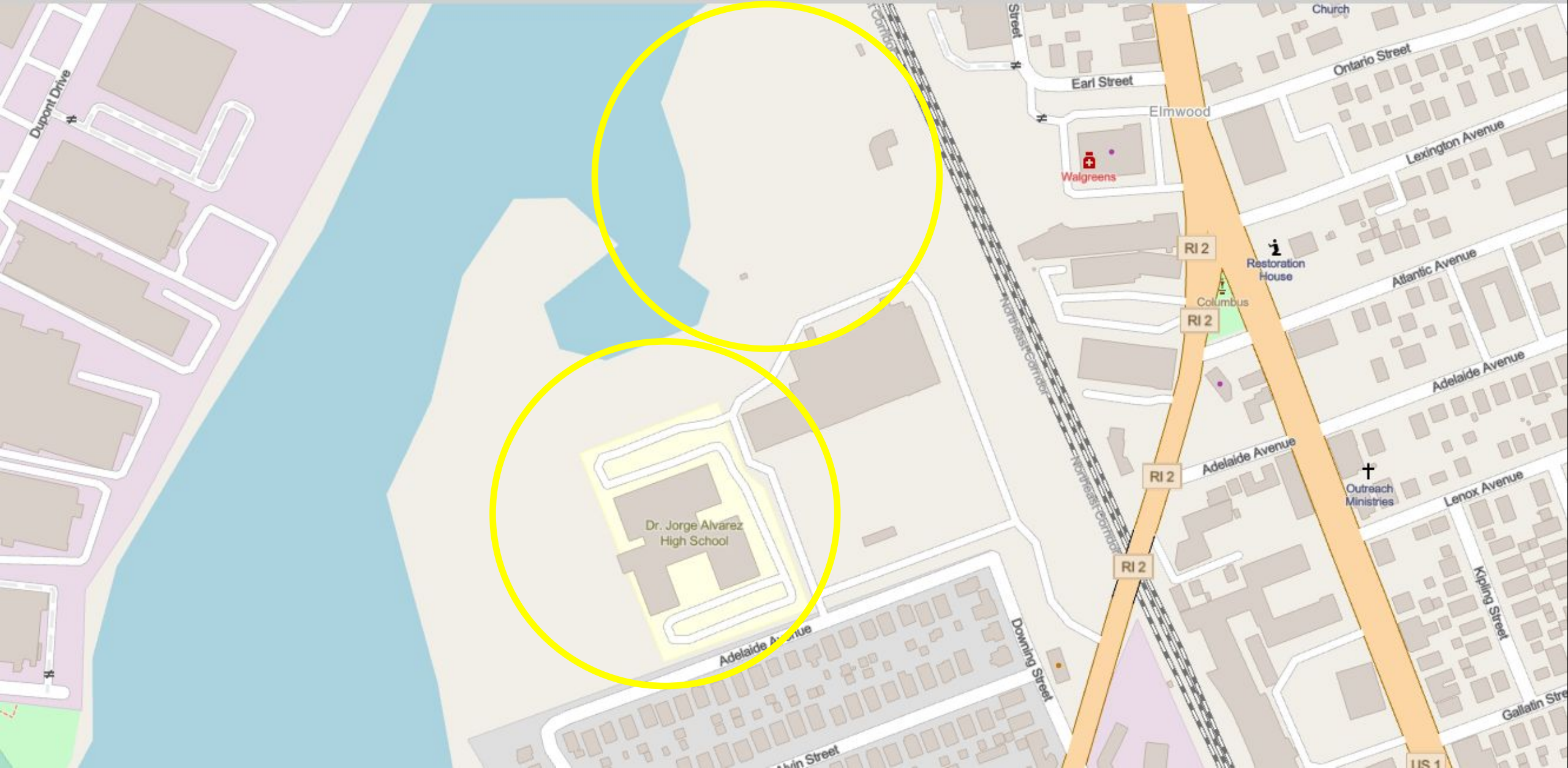
### **Residential Losses**

Tree canopy declined on 1-3  
family residential properties

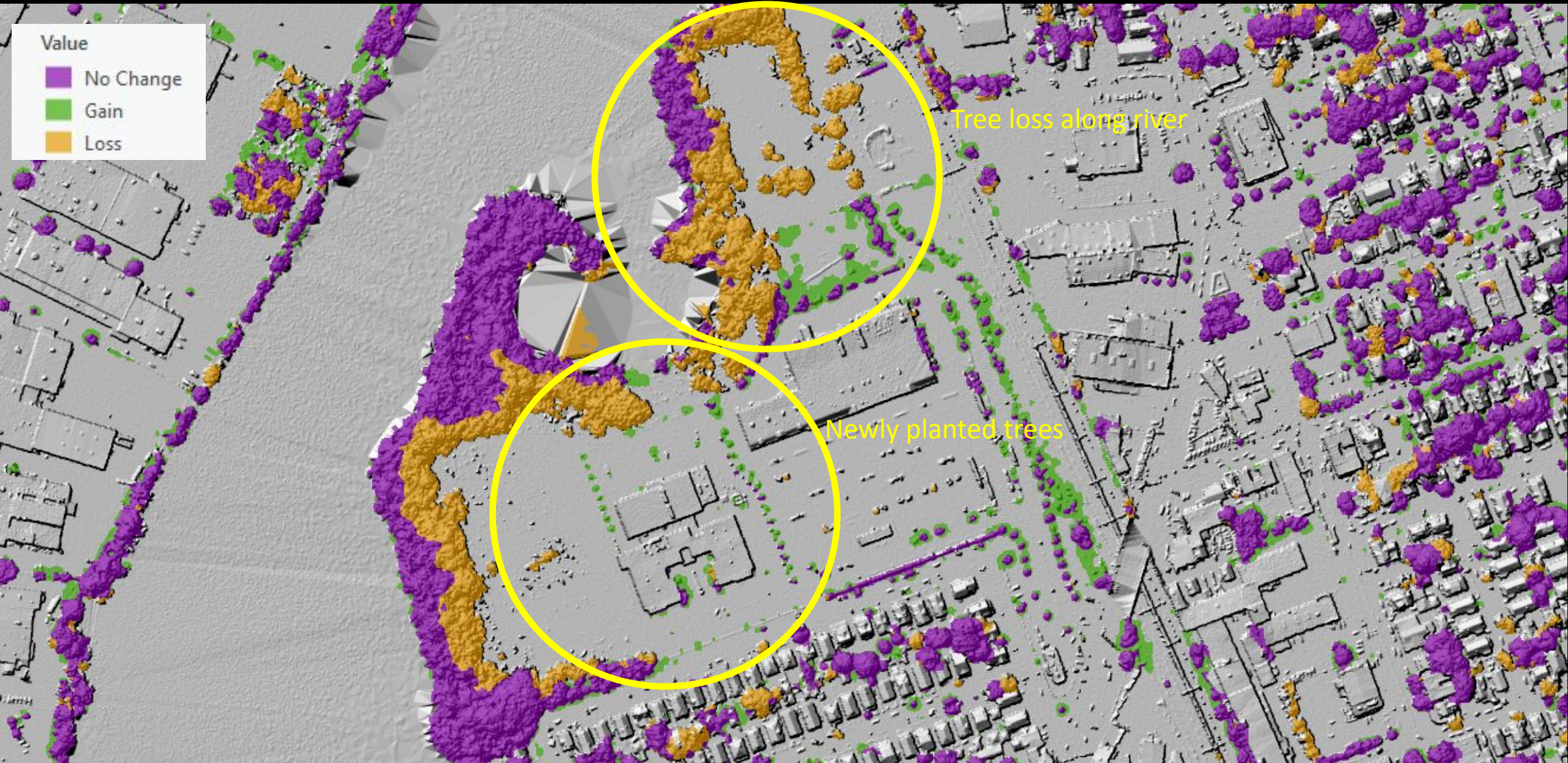


Examples

# Dr. Jorge Alvarez High School



# Dr. Jorge Alvarez High School- Canopy Change over 2011 LiDAR



# Dr. Jorge Alvarez High School- Canopy Change over 2018 LiDAR



Dr. Jorge Alvarez High School- 2012 Imagery





Dr. Jorge Alvarez High School- 2018 Imagery



Harwich Rd. Near Cemetery



Elm Grove Avenue

Cole Avenue

Harwich Road

Harwich Road

Cole Avenue

Blackstone Boulevard

Blackstone Boulevard Walking Path

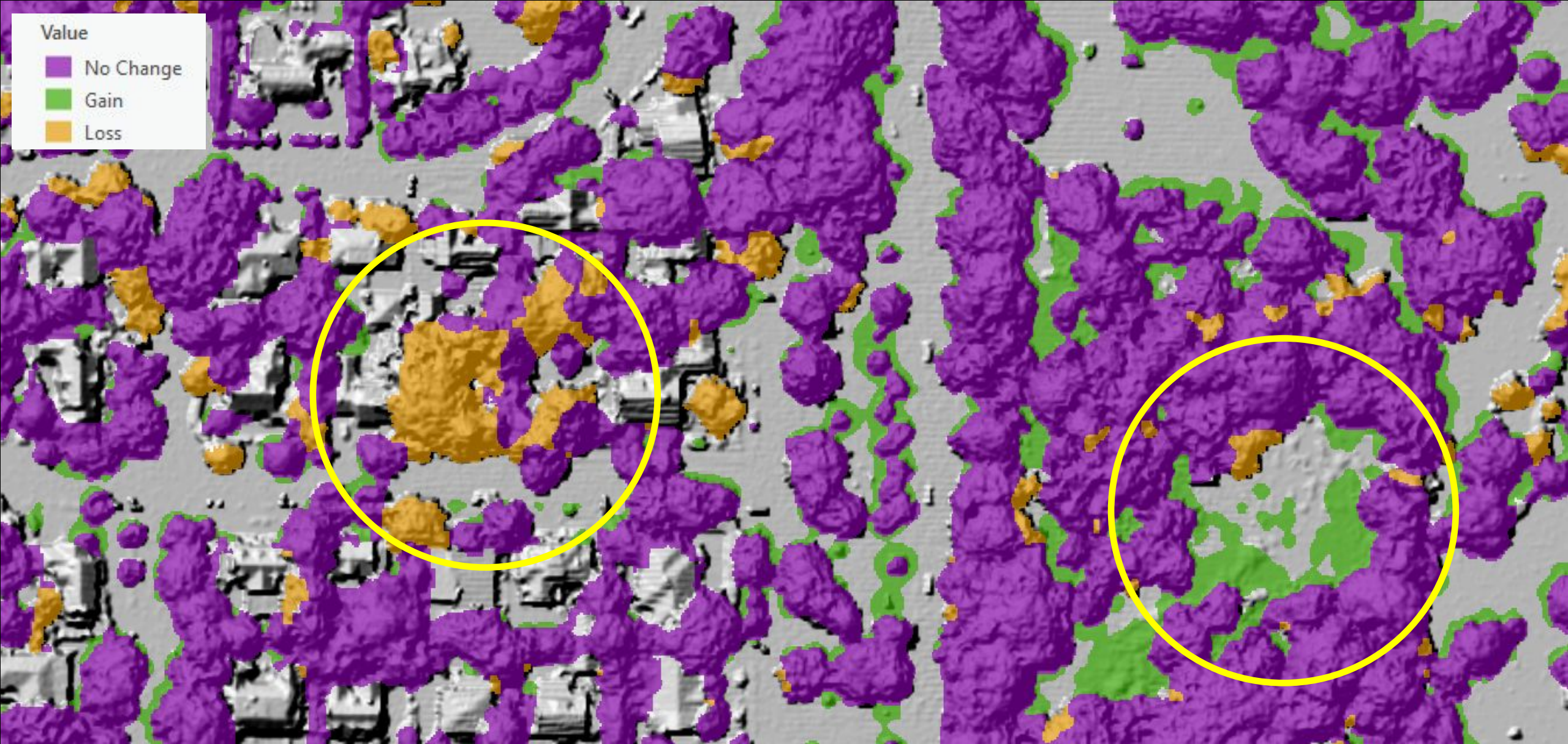
Blackstone Boulevard

Blackstone Boulevard

Blackstone Boulevard Walking Path

Blackstone Boulevard

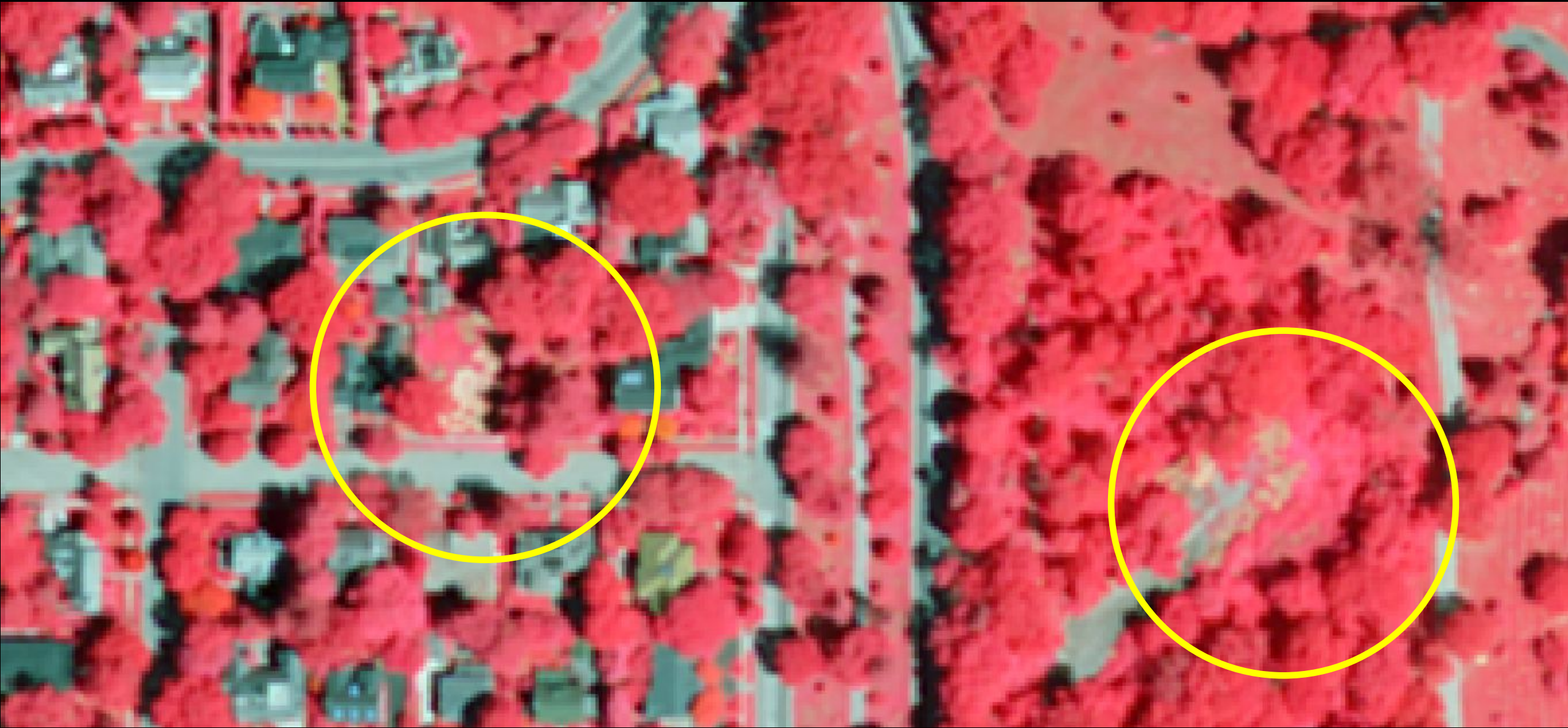
Harwich Rd. Near Cemetery: Canopy Change 2011 LiDAR



# Harwich Rd. Near Cemetery: Canopy Change Over 2018 LiDAR



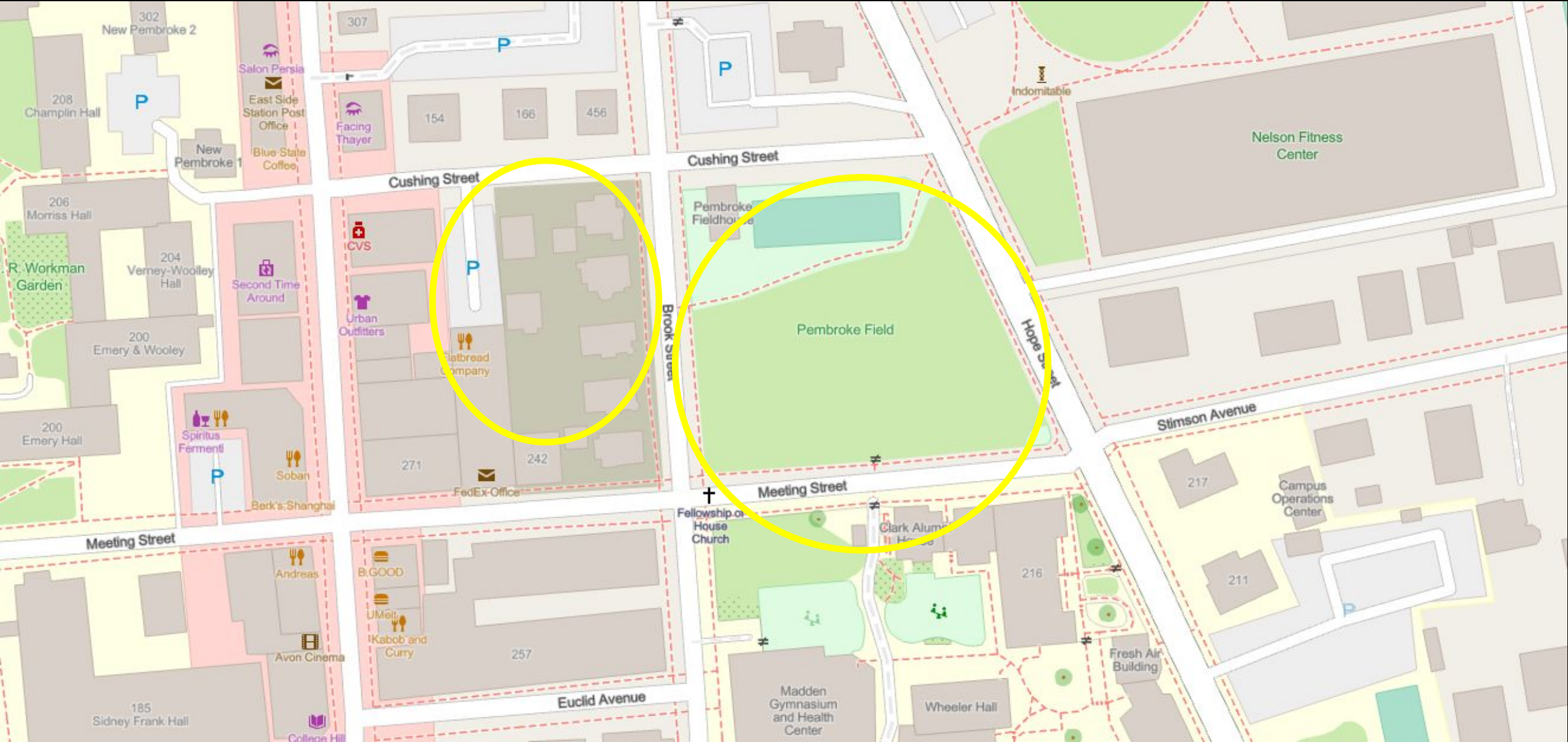
Harwich Rd. Near Cemetery: 2012 Imagery



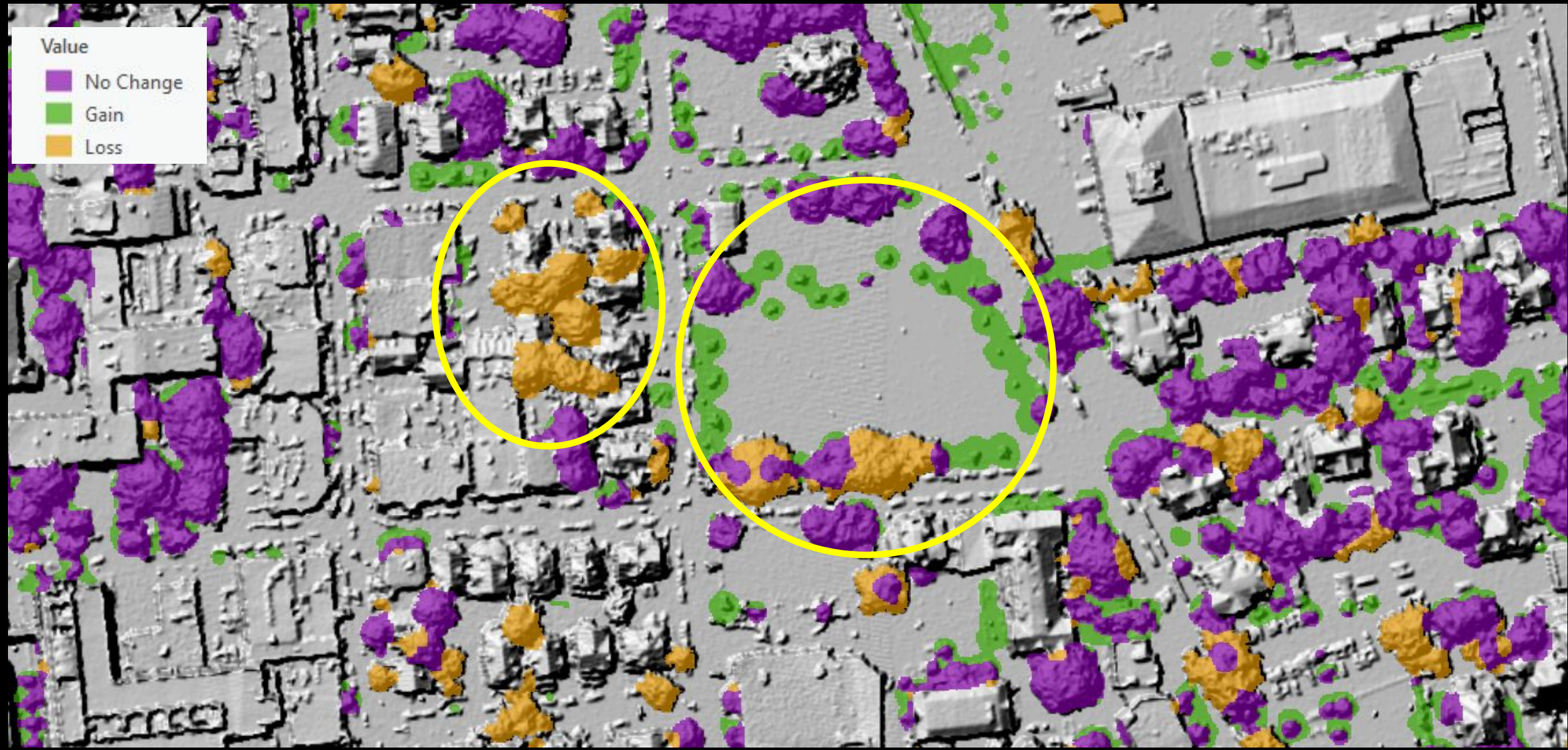
Harwich Rd. Near Cemetery: 2018 Imagery



# Pembroke Field

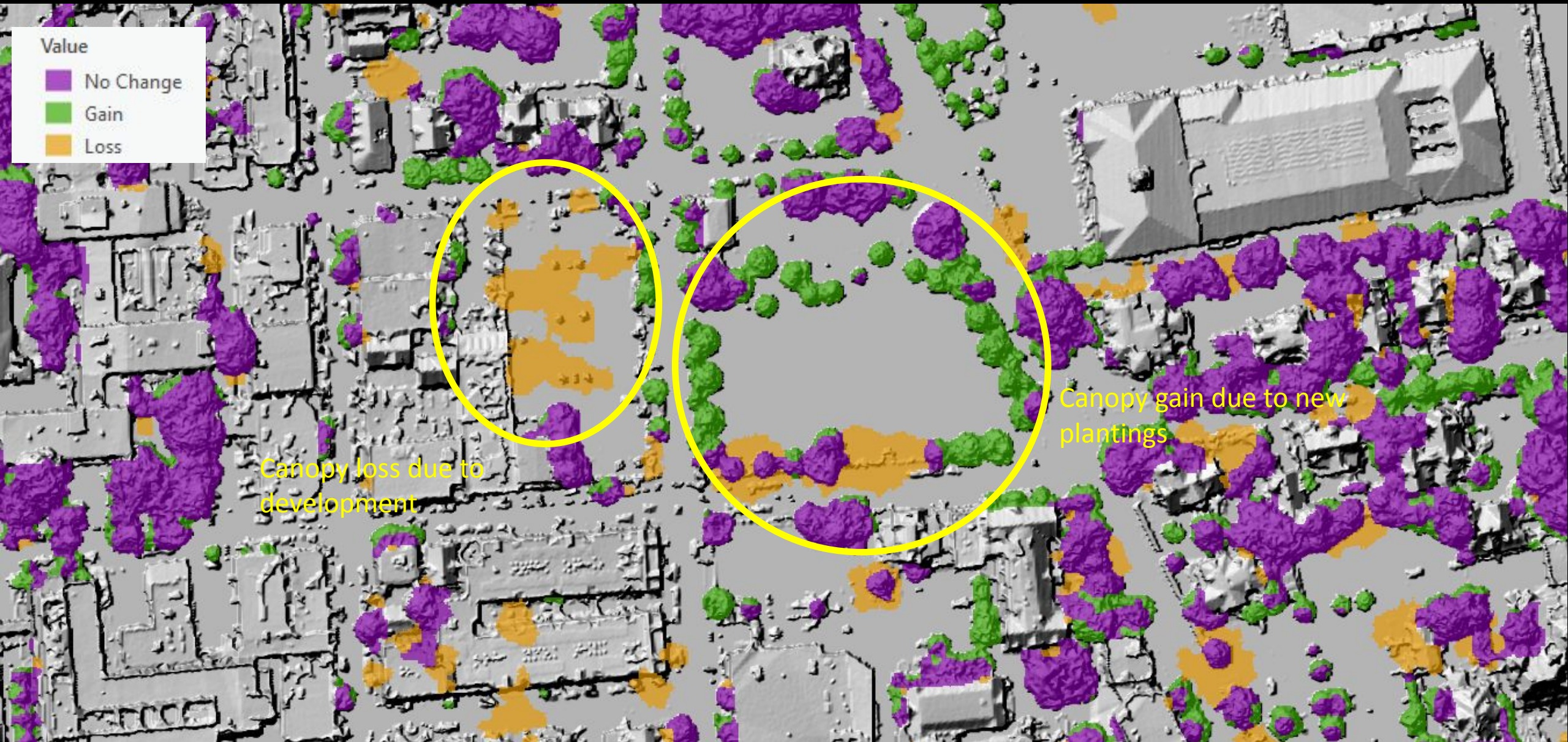


# Pembroke Field: Canopy Change Over 2011 LiDAR





# Pembroke Field: Canopy Change Over 2018 LiDAR



Pembroke Field: 2012 Imagery



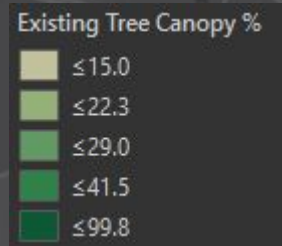
Pembroke Field: 2018 Imagery



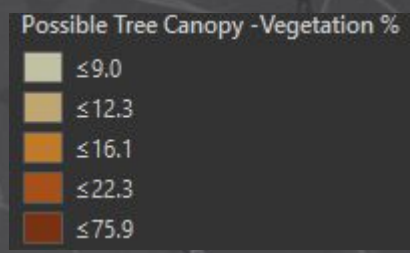
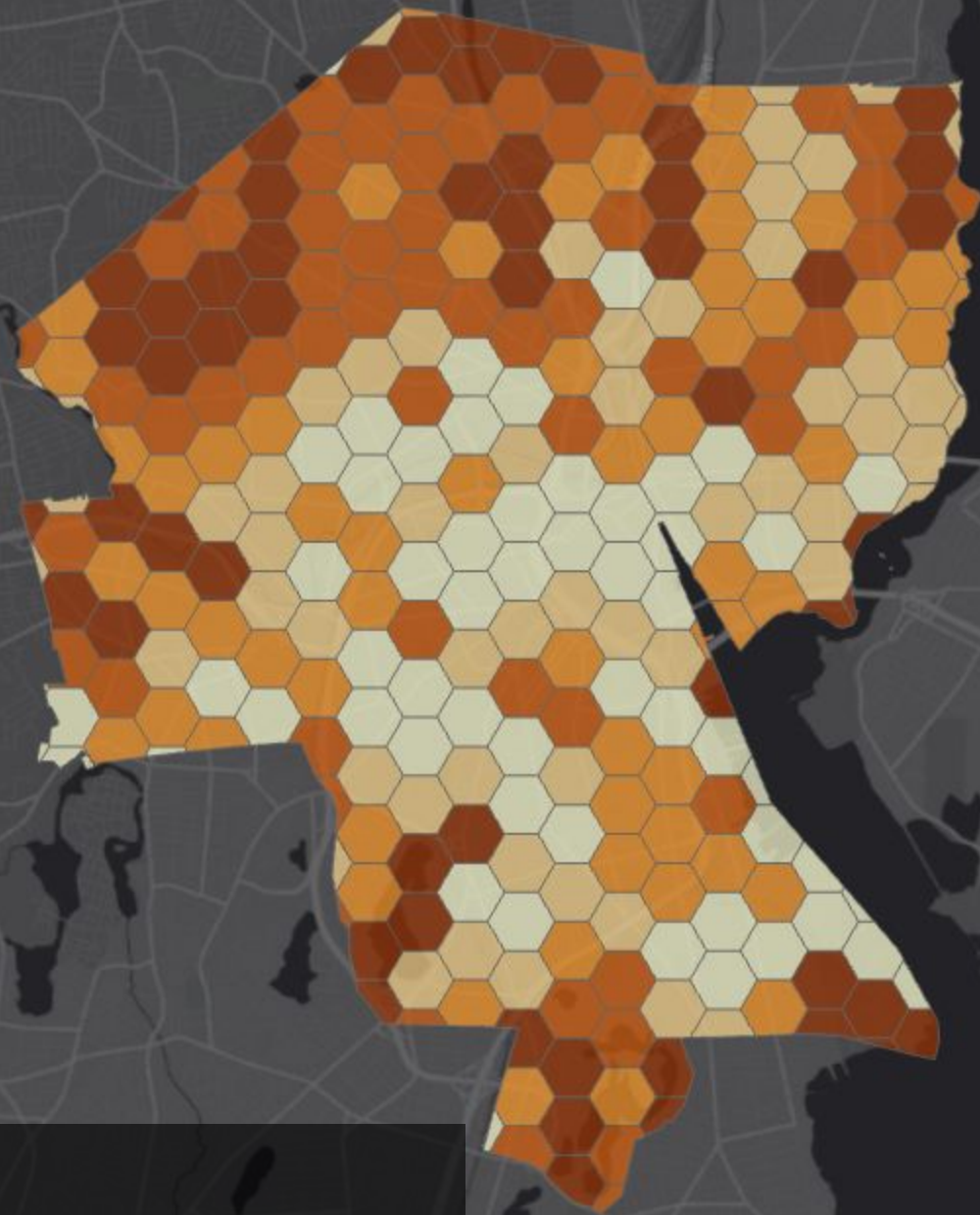


Distribution

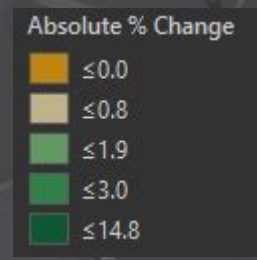
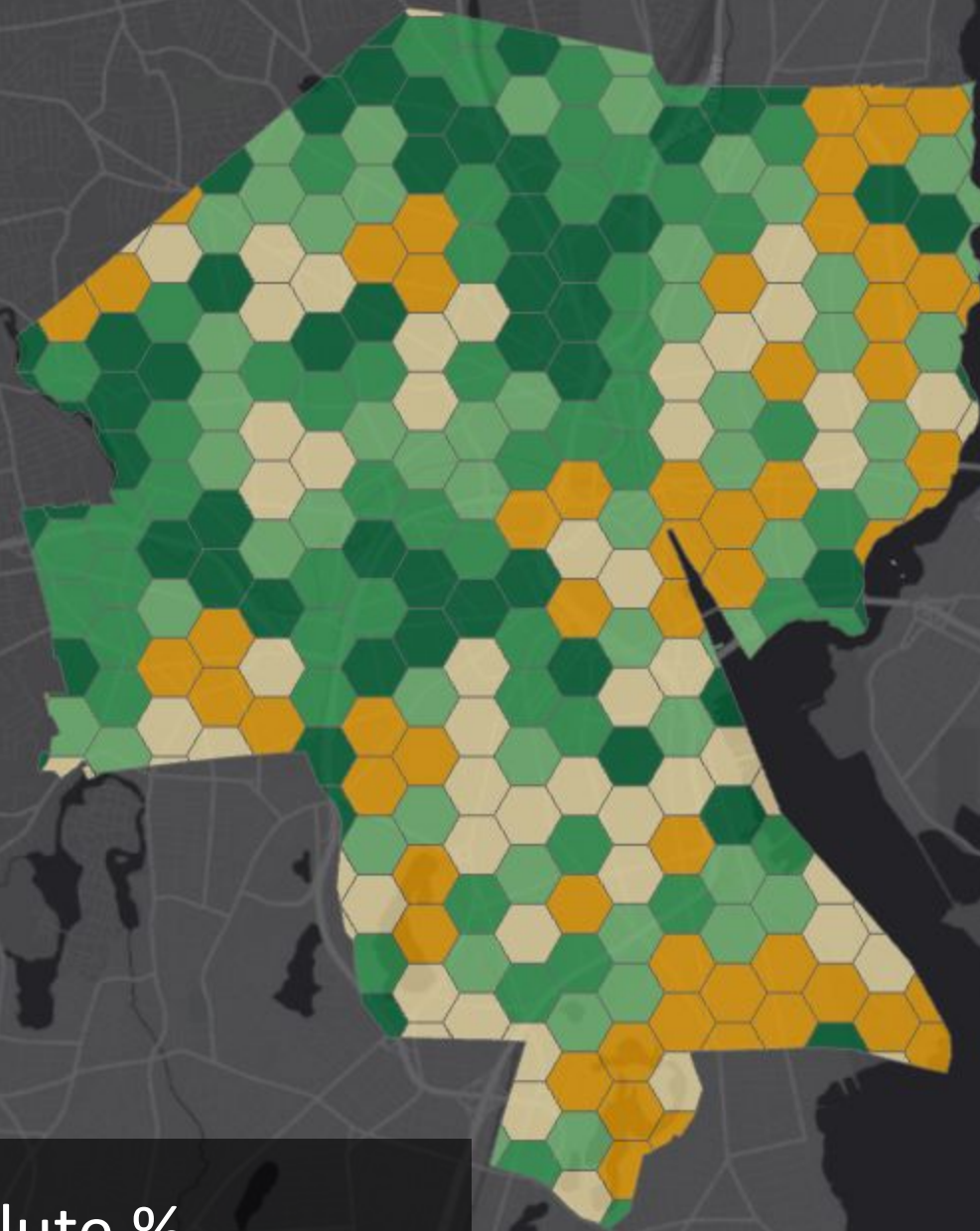
# Existing Tree Canopy %



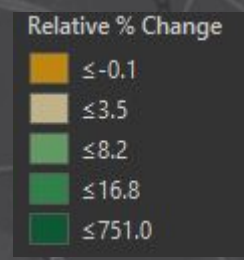
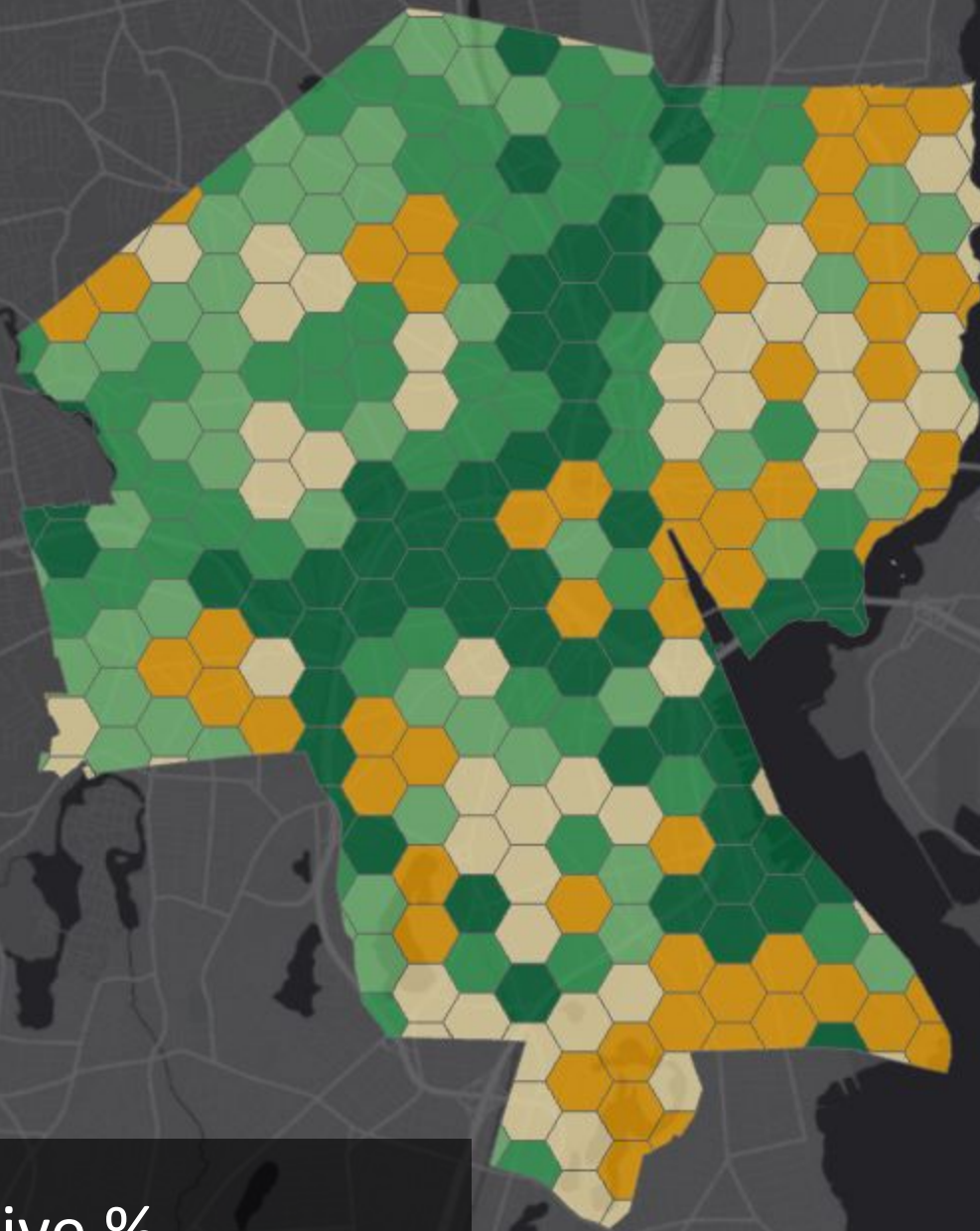
# Possible Tree Canopy %



# Tree Canopy Change Absolute %



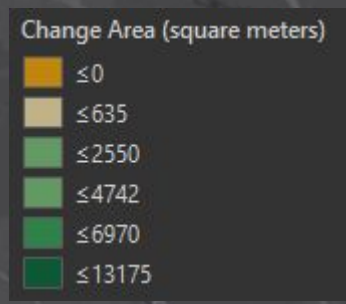
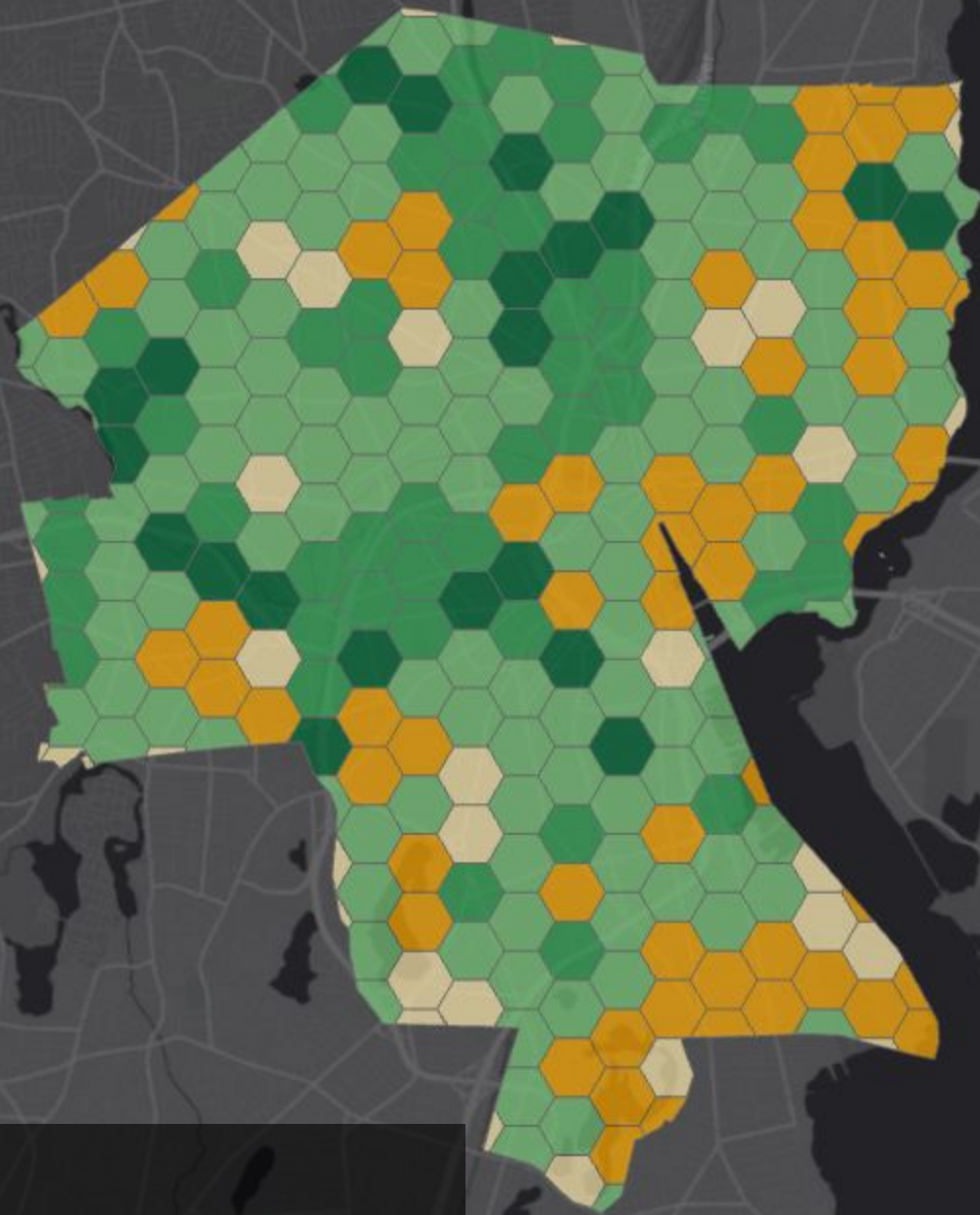
# Tree Canopy Change Relative %





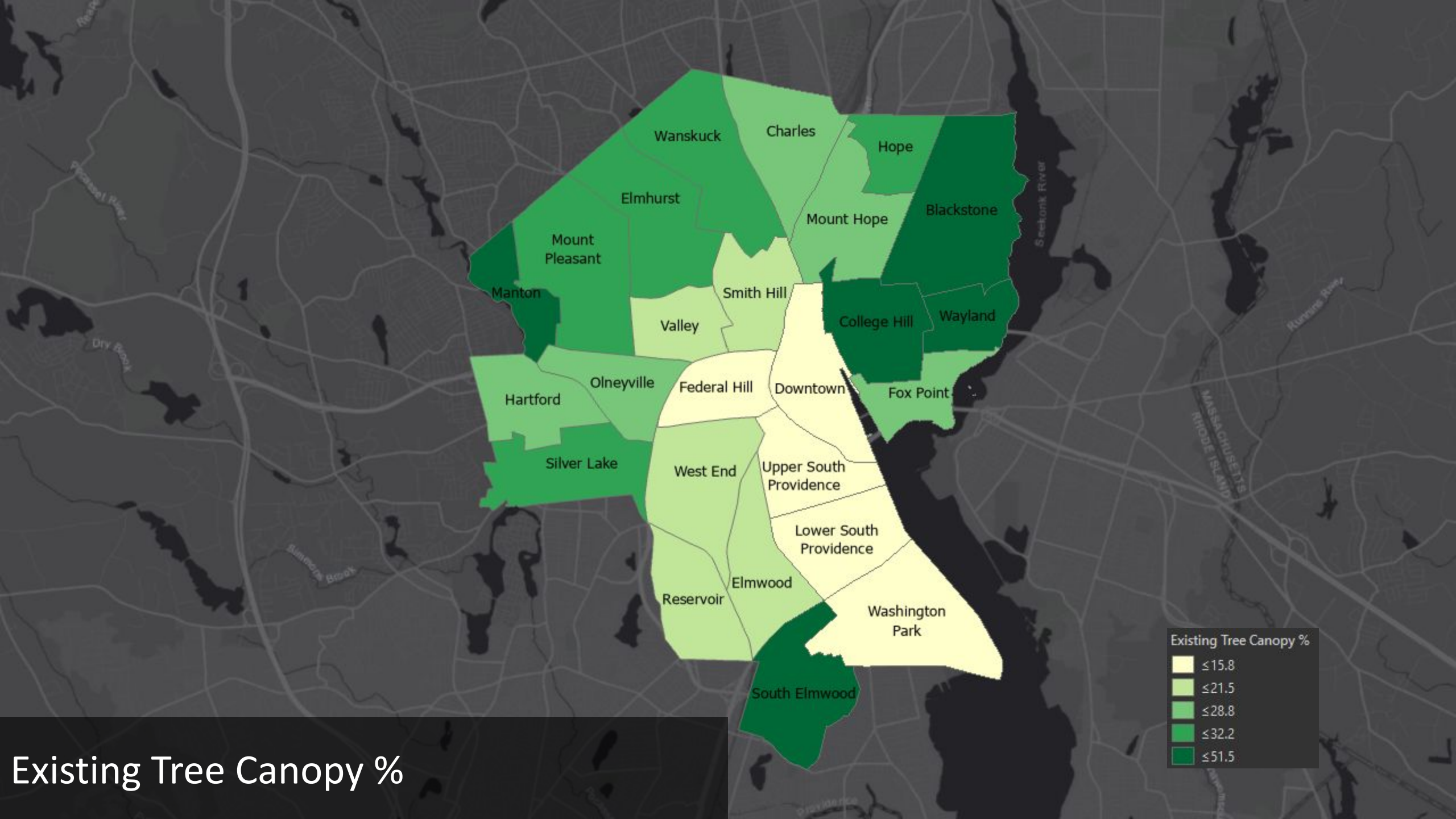


# Tree Canopy Change Area

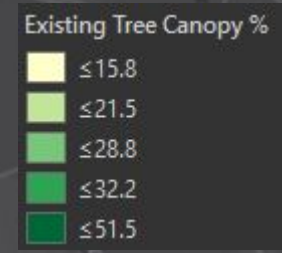


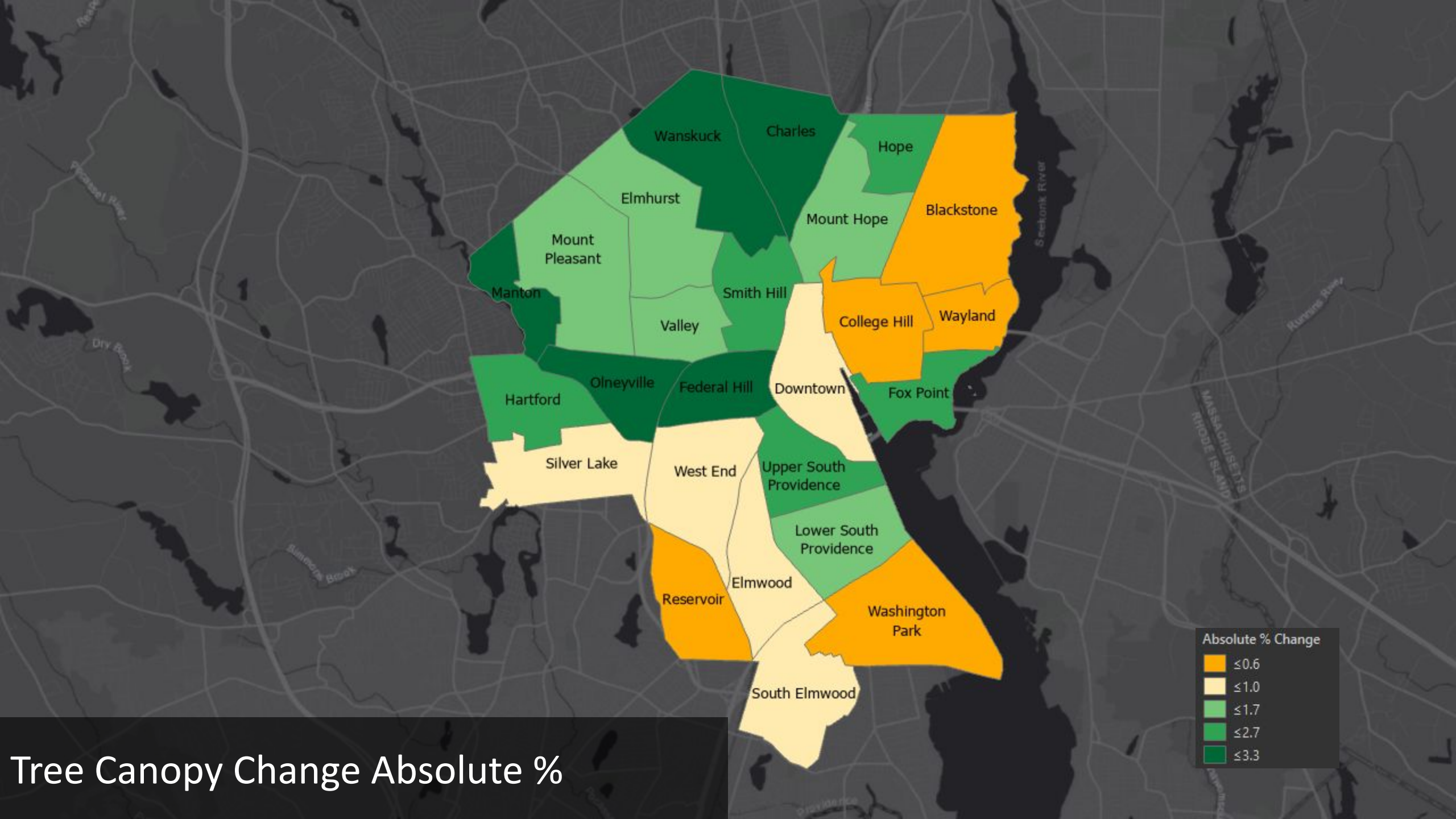


Neighborhoods

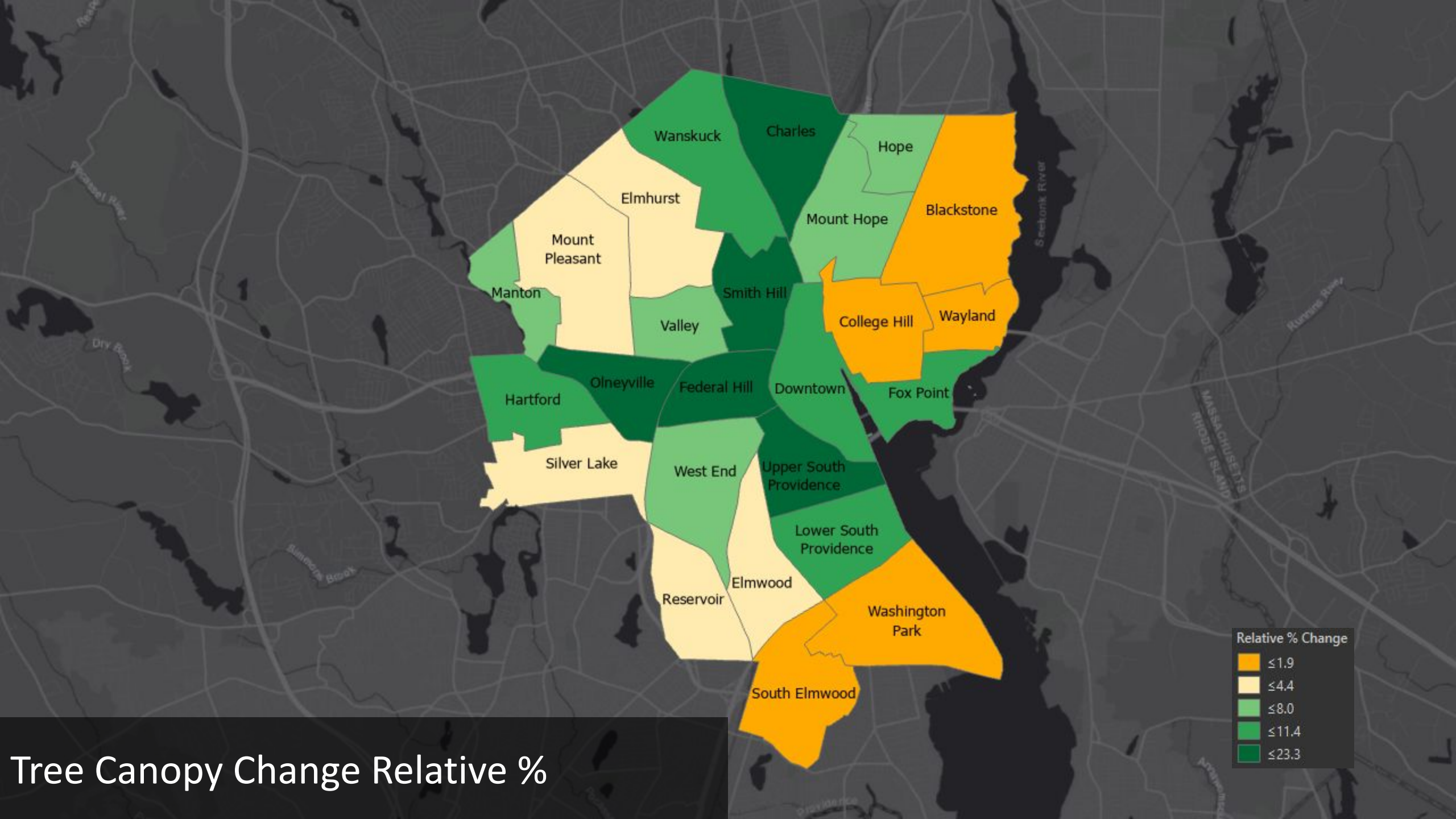


# Existing Tree Canopy %

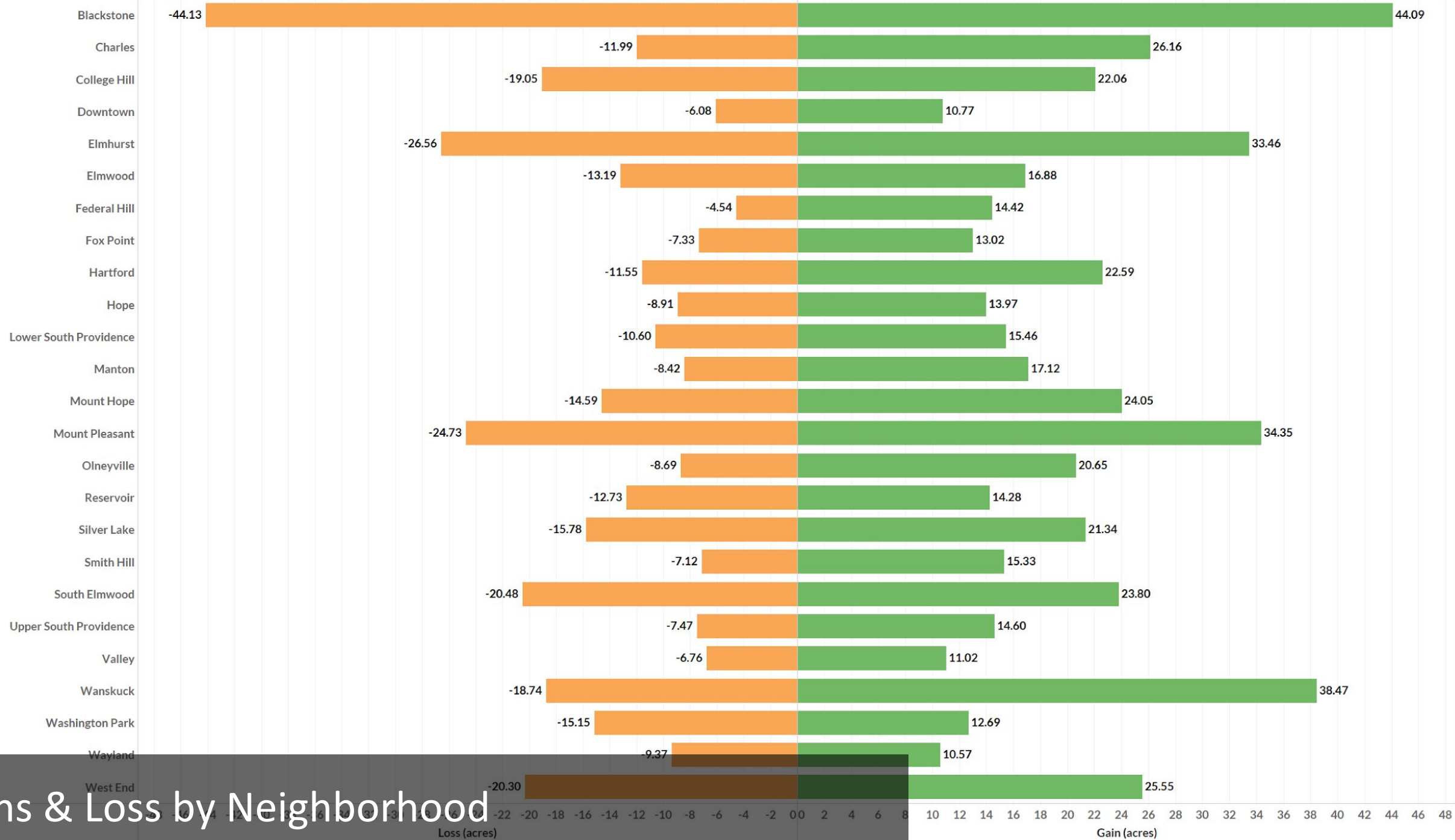




Tree Canopy Change Absolute %

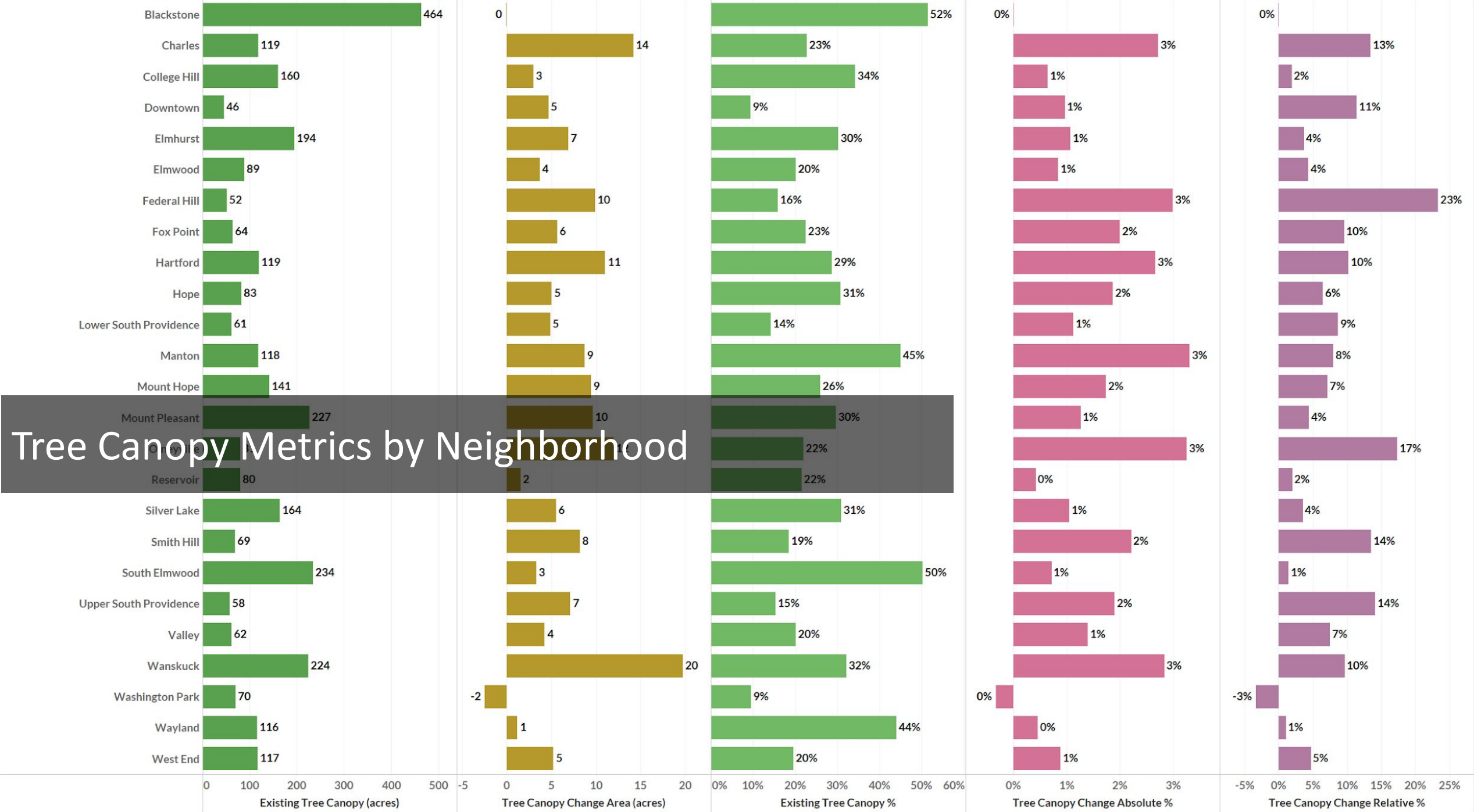


Tree Canopy Change Relative %

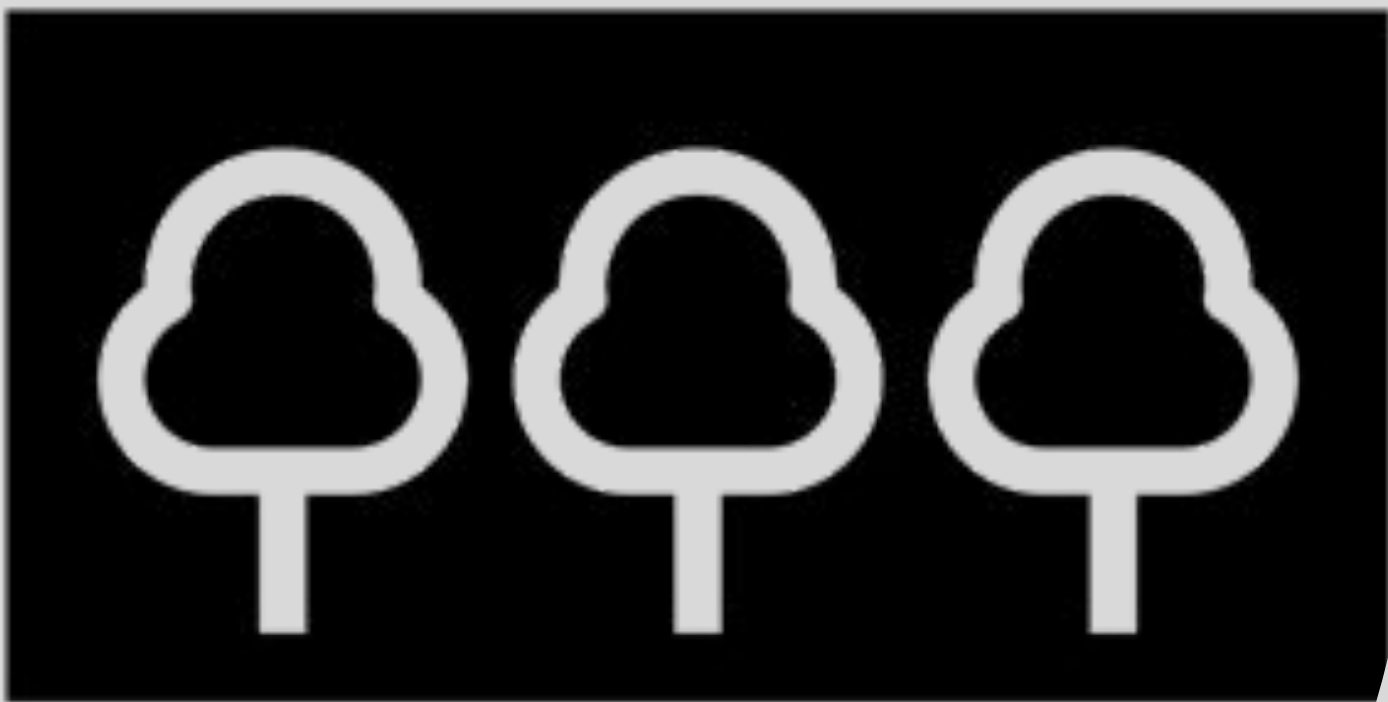


# Gains & Loss by Neighborhood

# Tree Canopy Metrics by Neighborhood

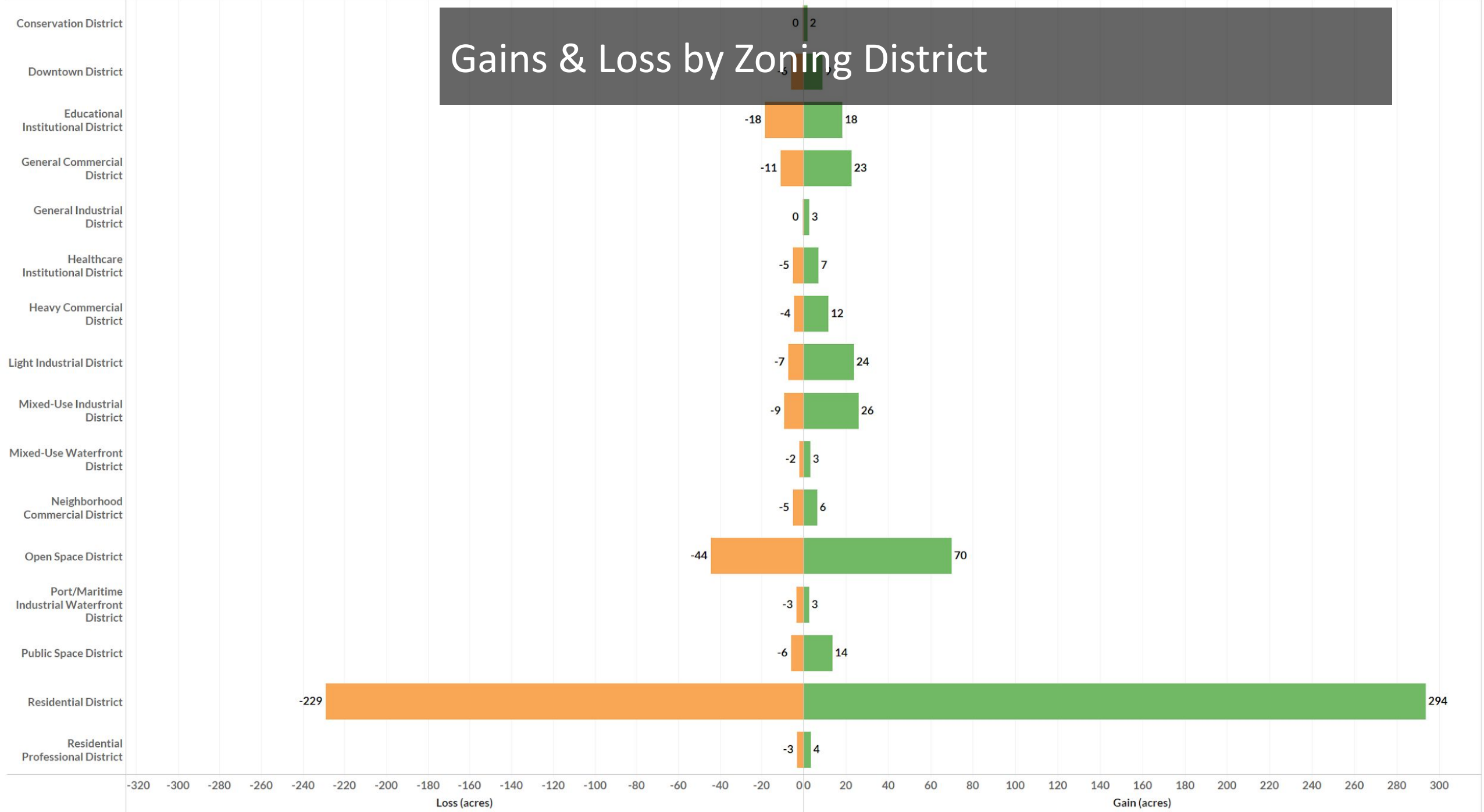






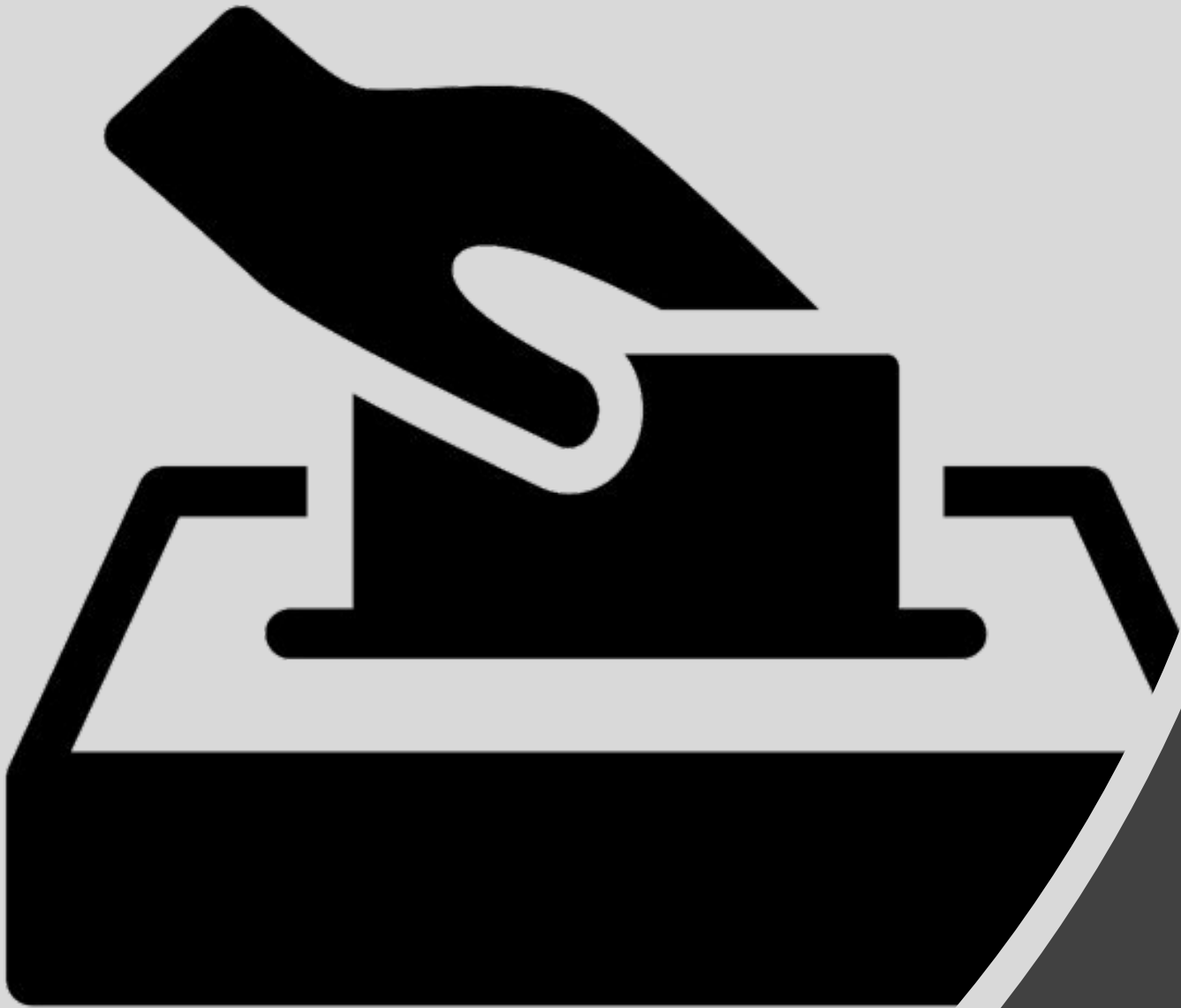
Zoning

# Gains & Loss by Zoning District



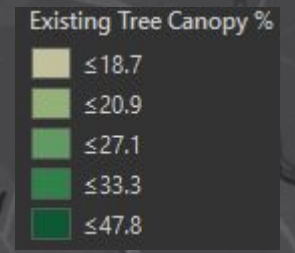
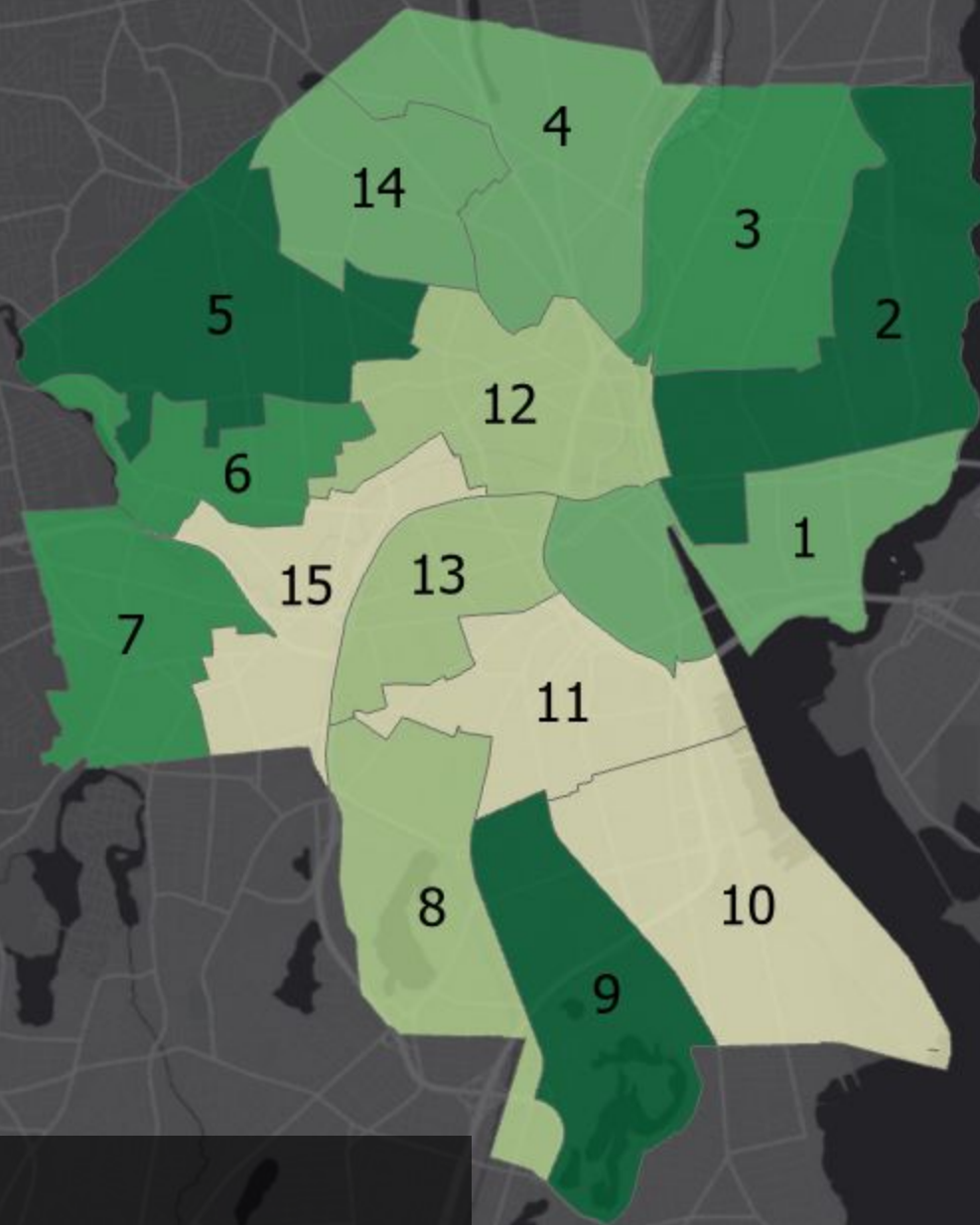


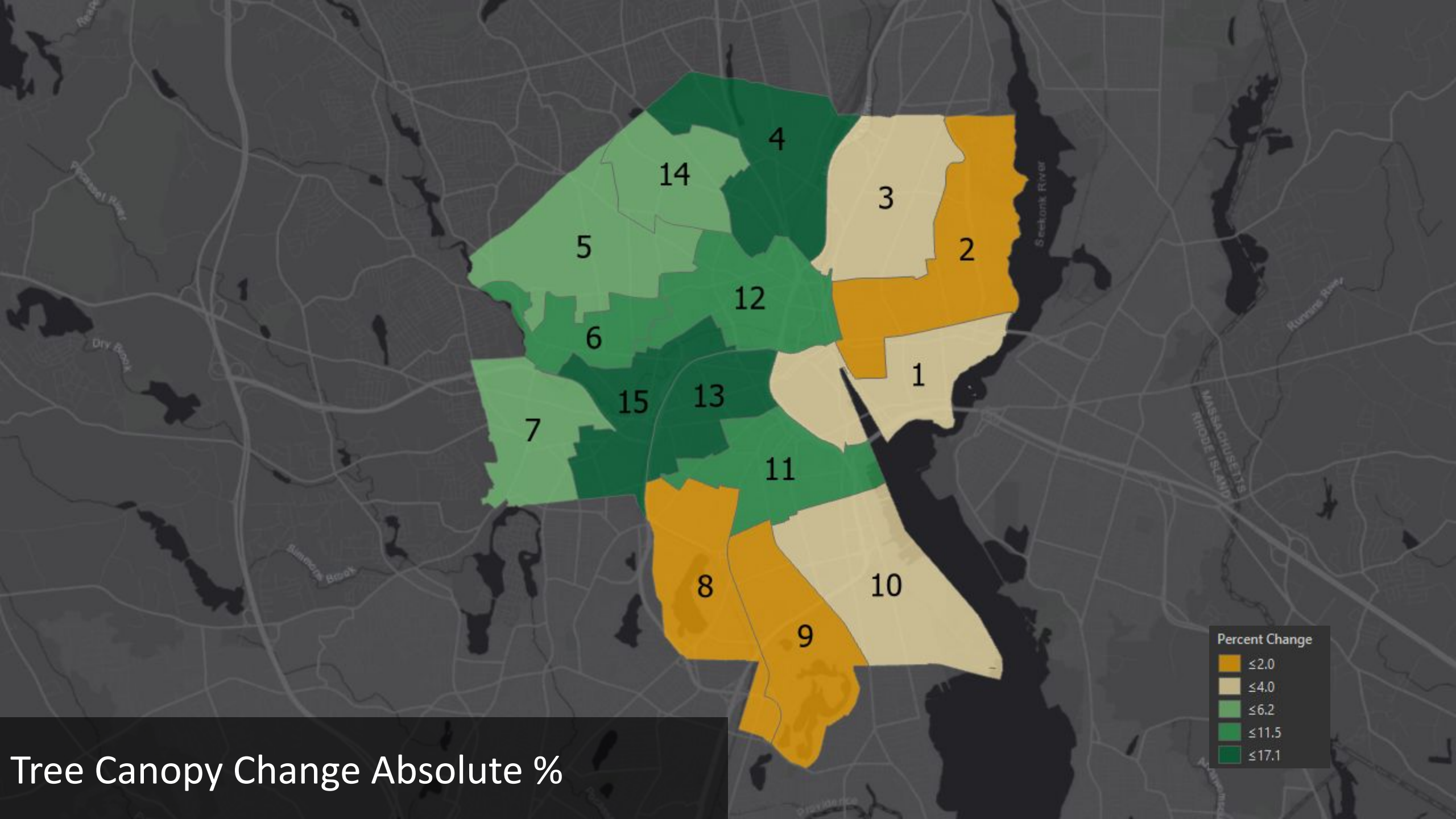




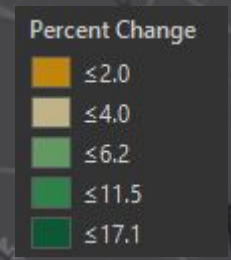
Wards

# Existing Tree Canopy %

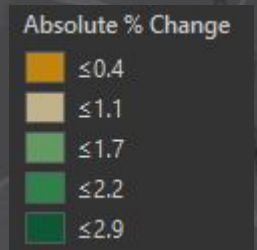
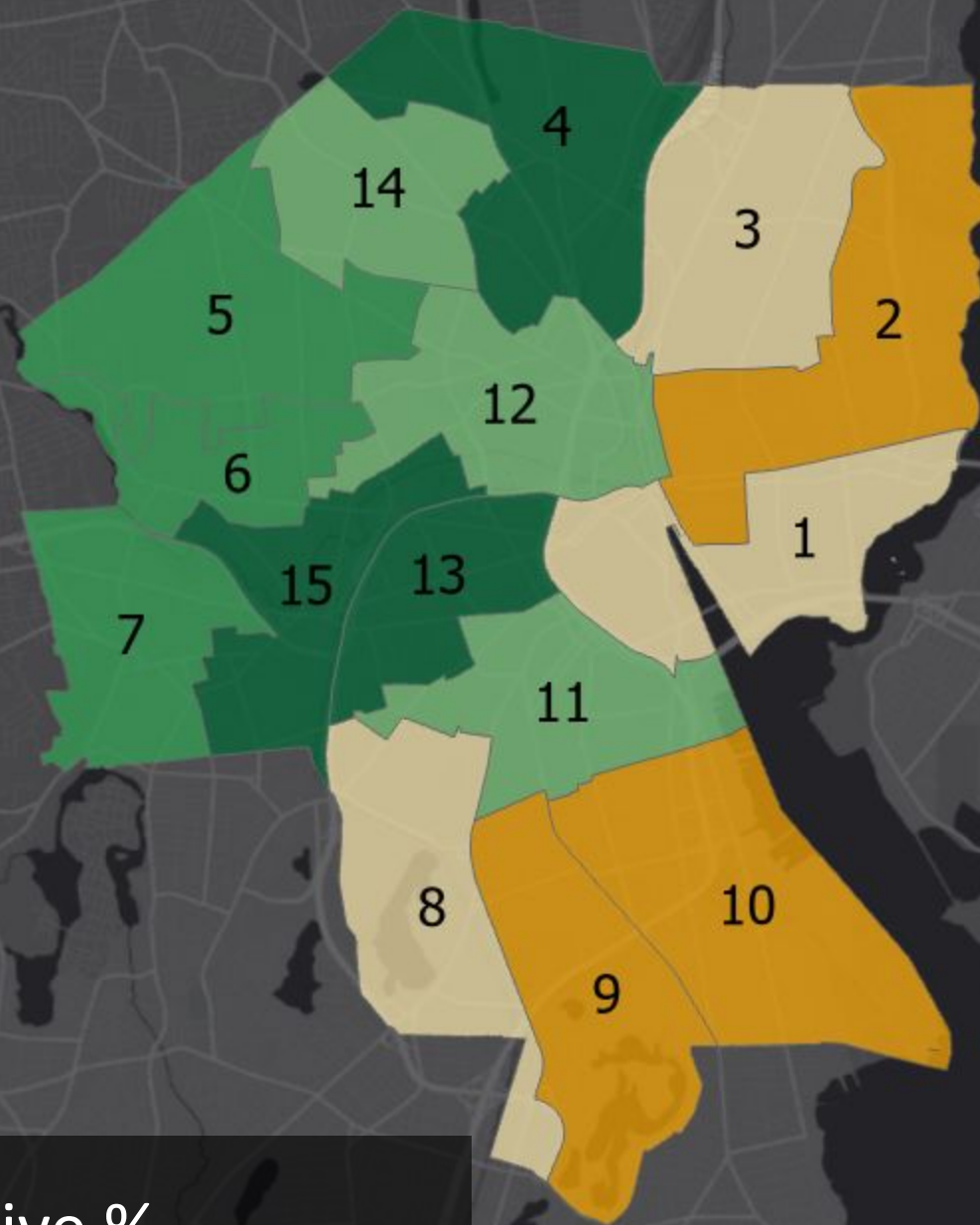




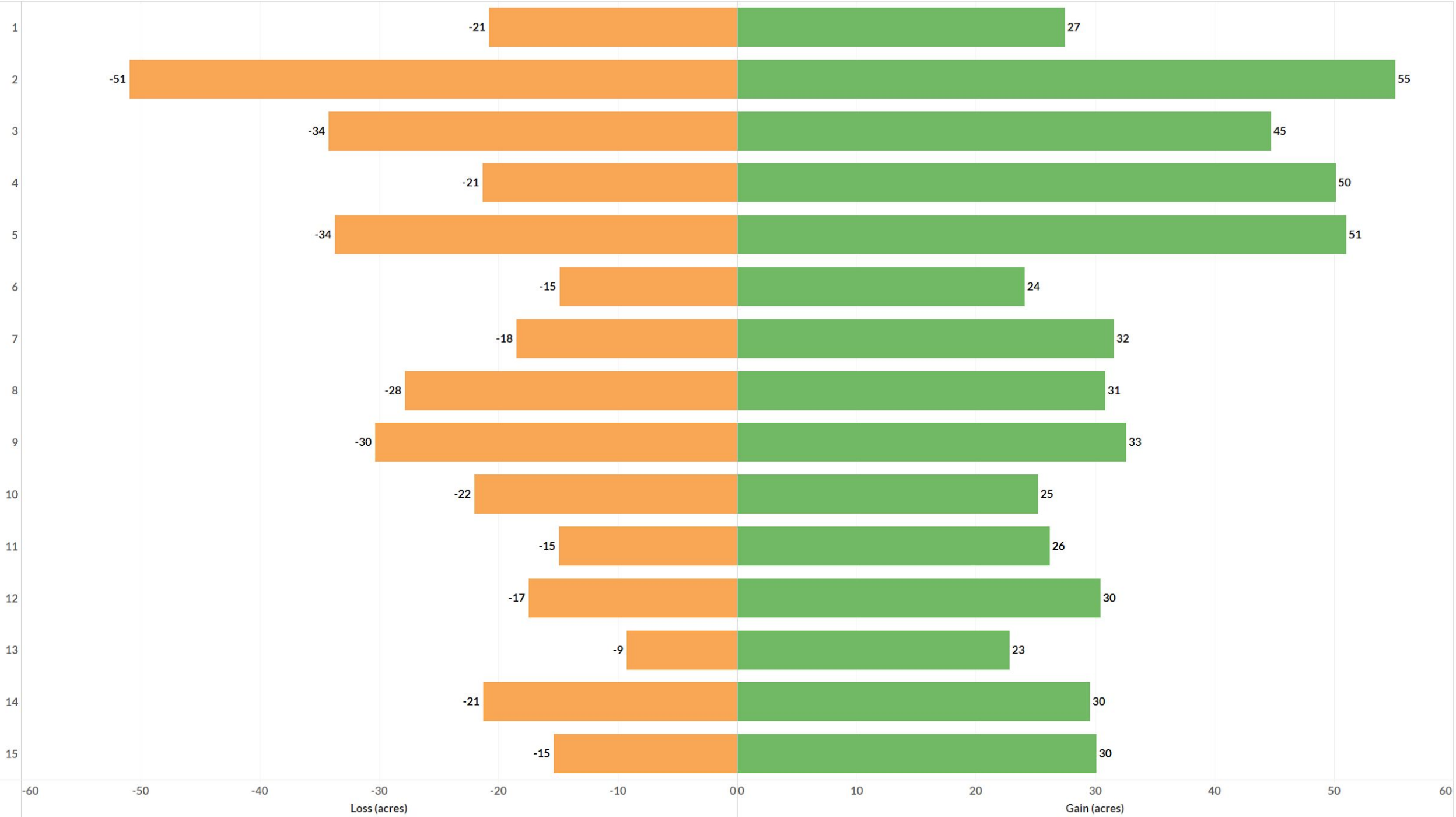
# Tree Canopy Change Absolute %



# Tree Canopy Change Relative %



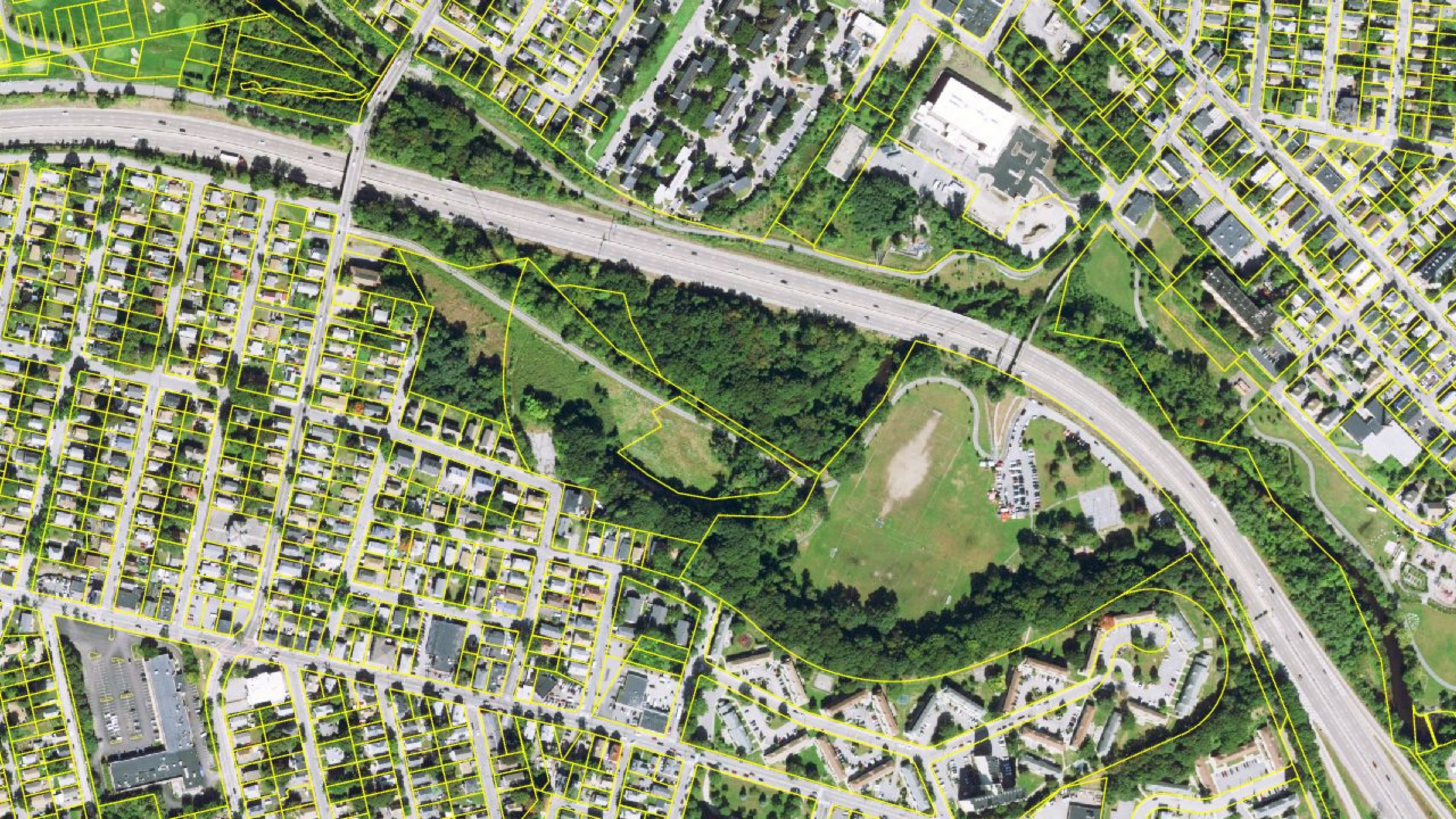


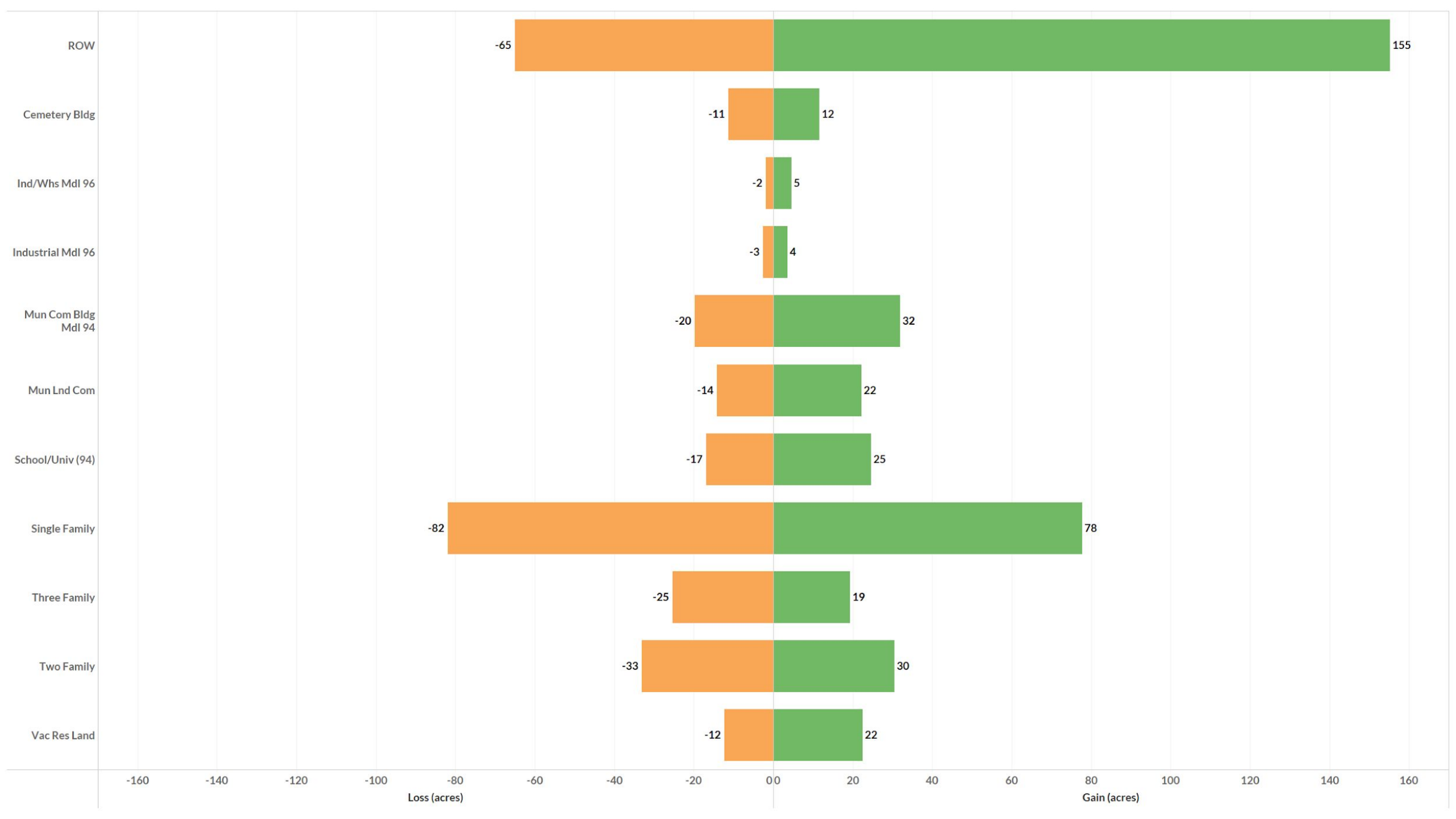


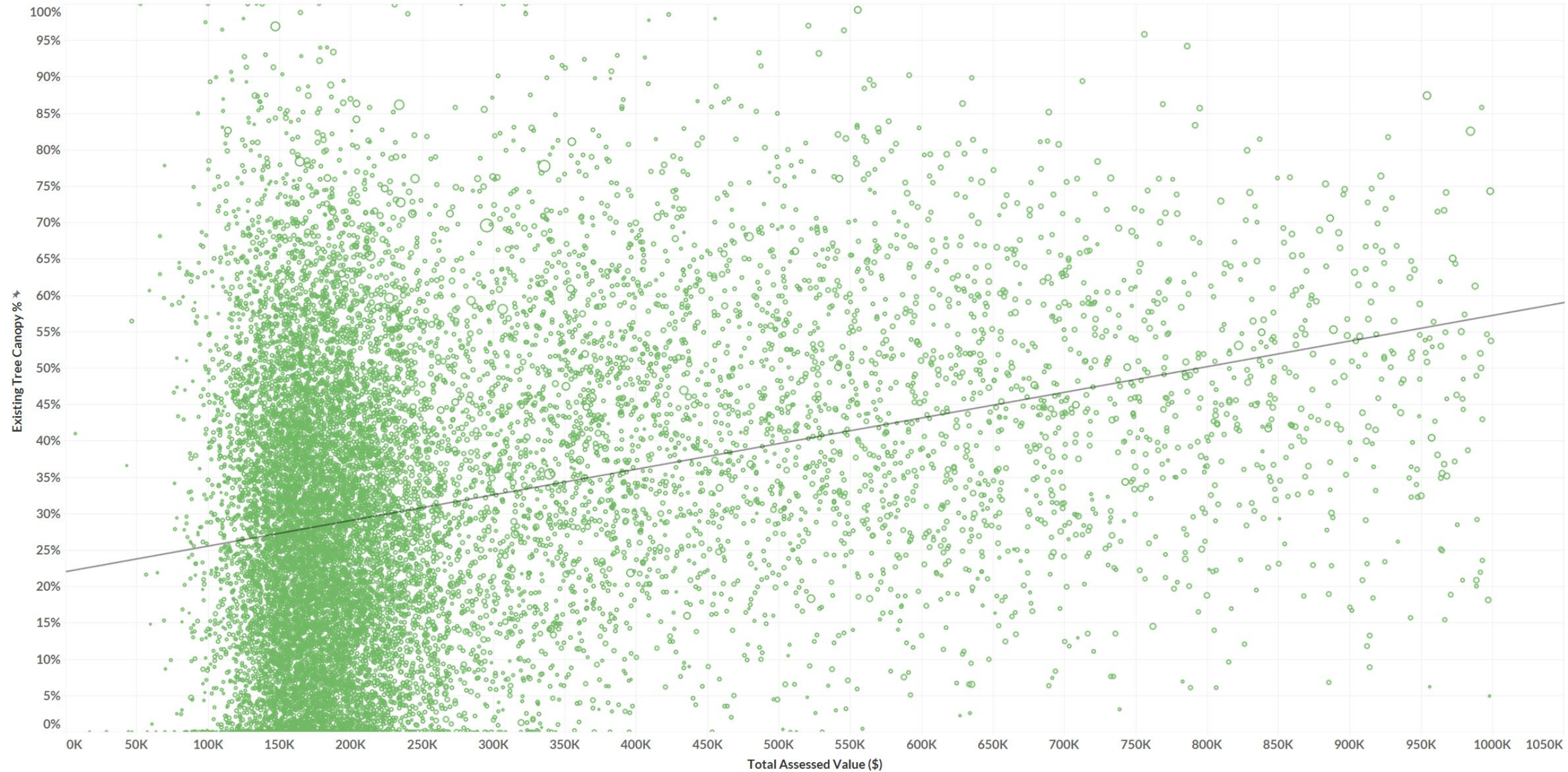




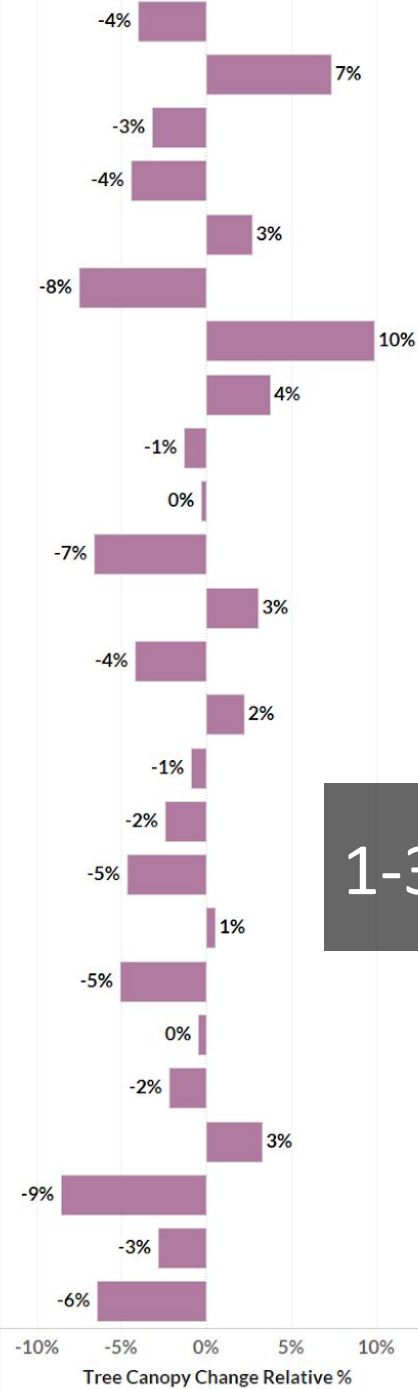
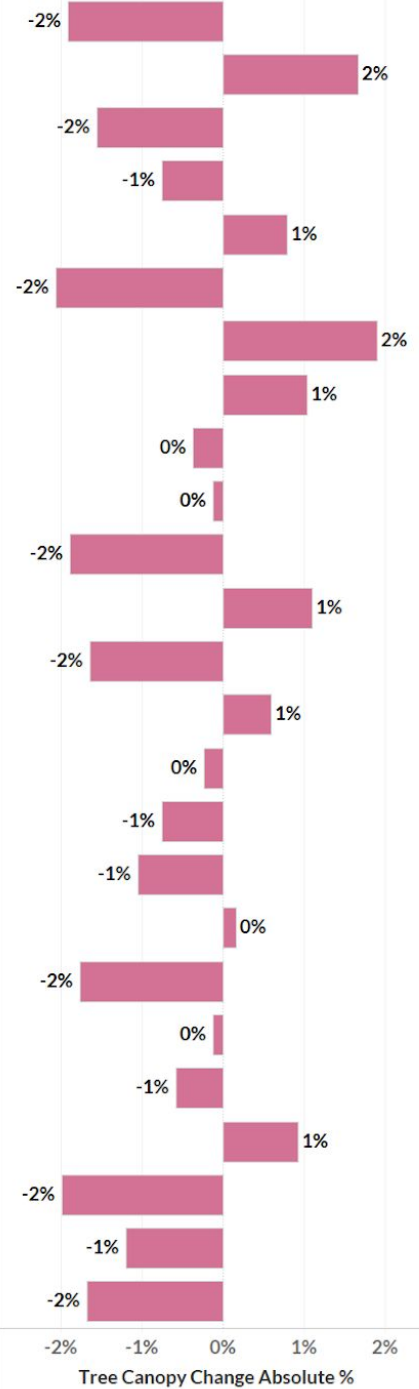
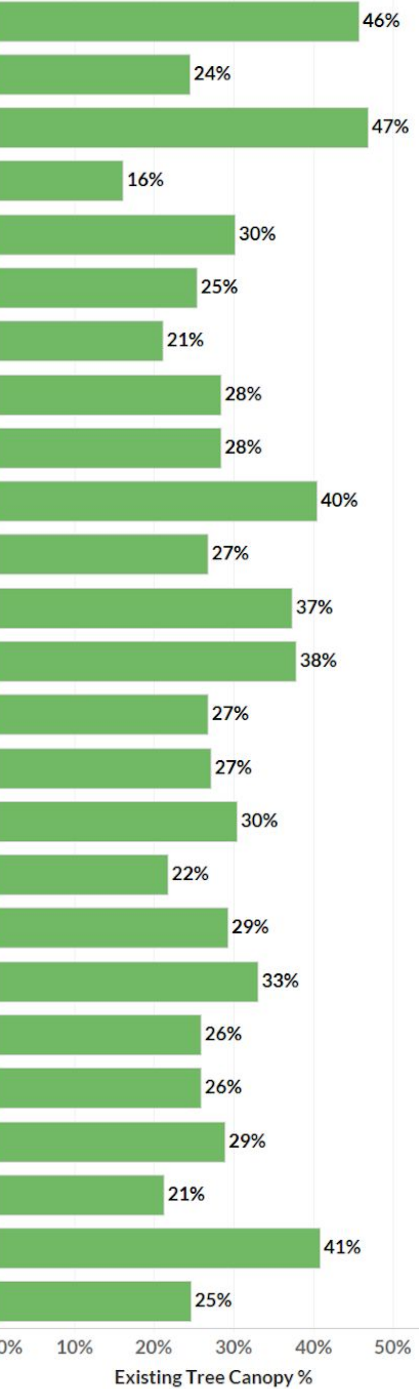
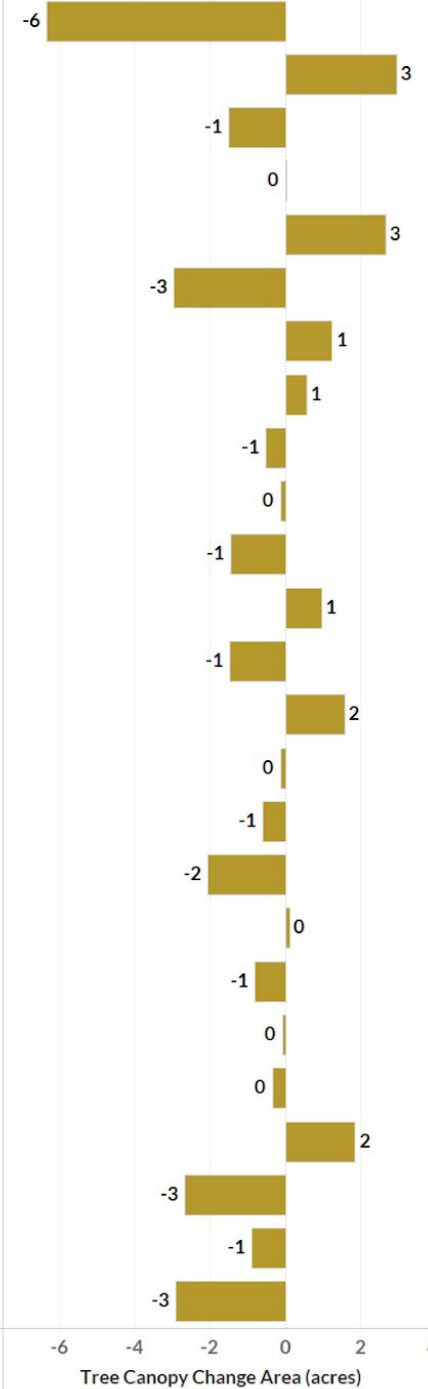
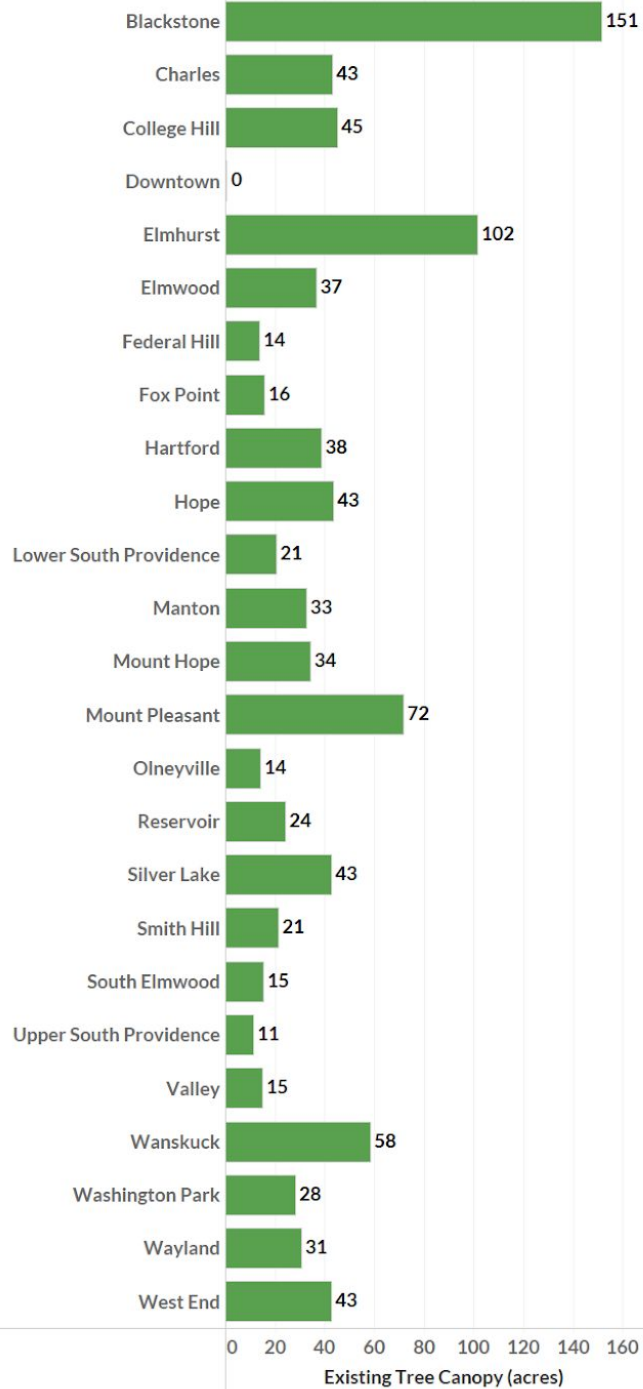
Parcels



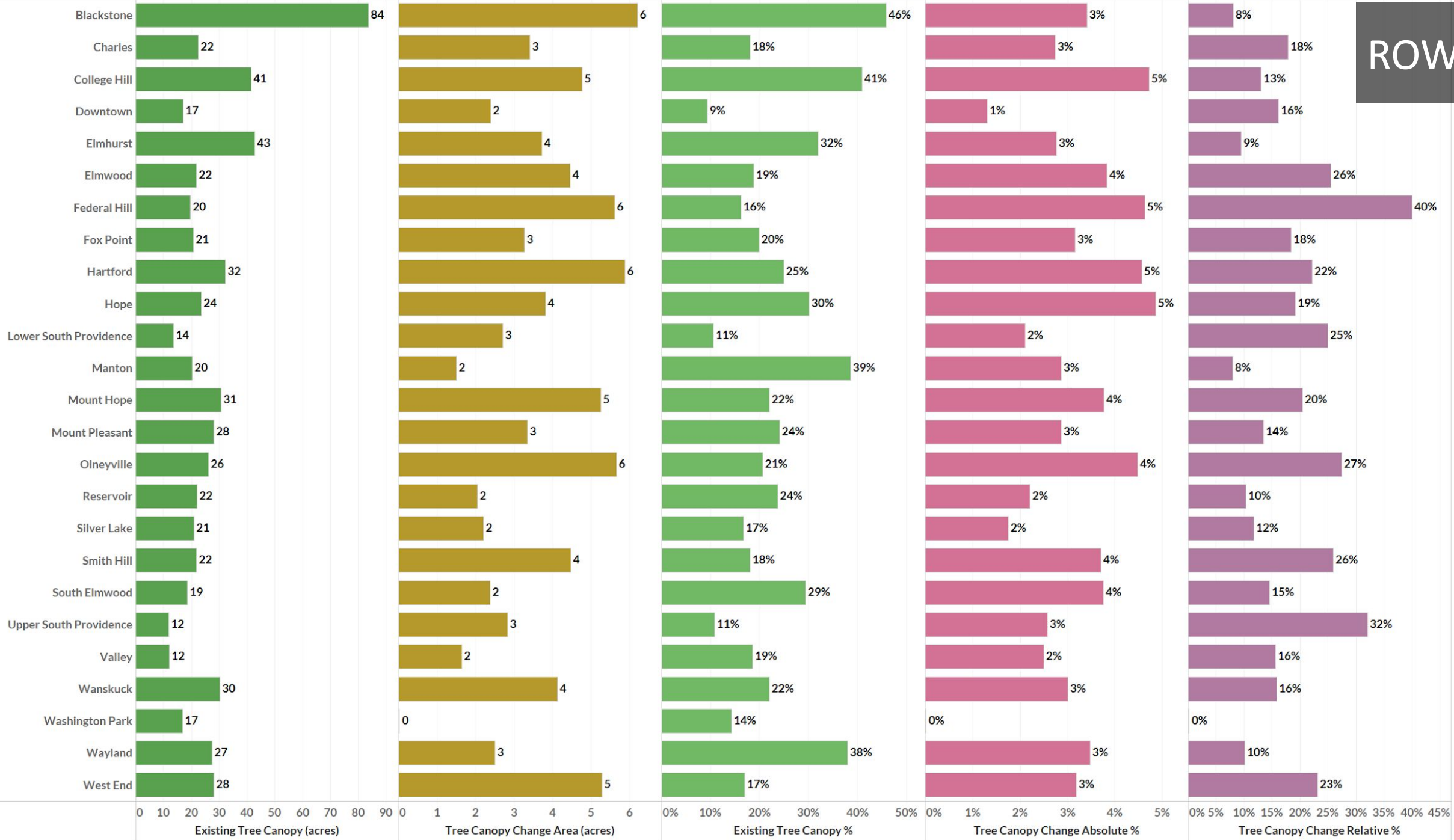




Single Family Assessed Value



# ROW



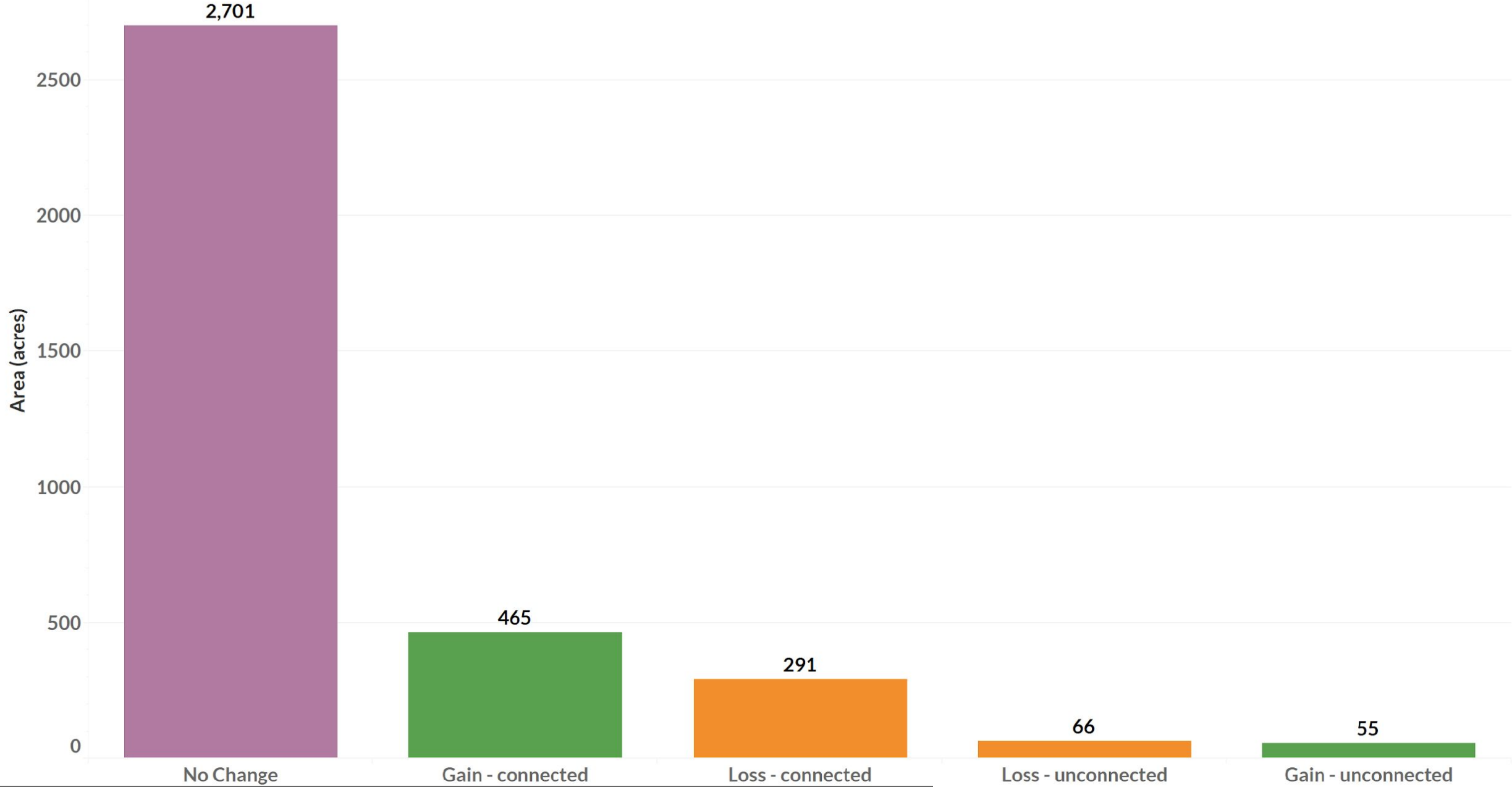




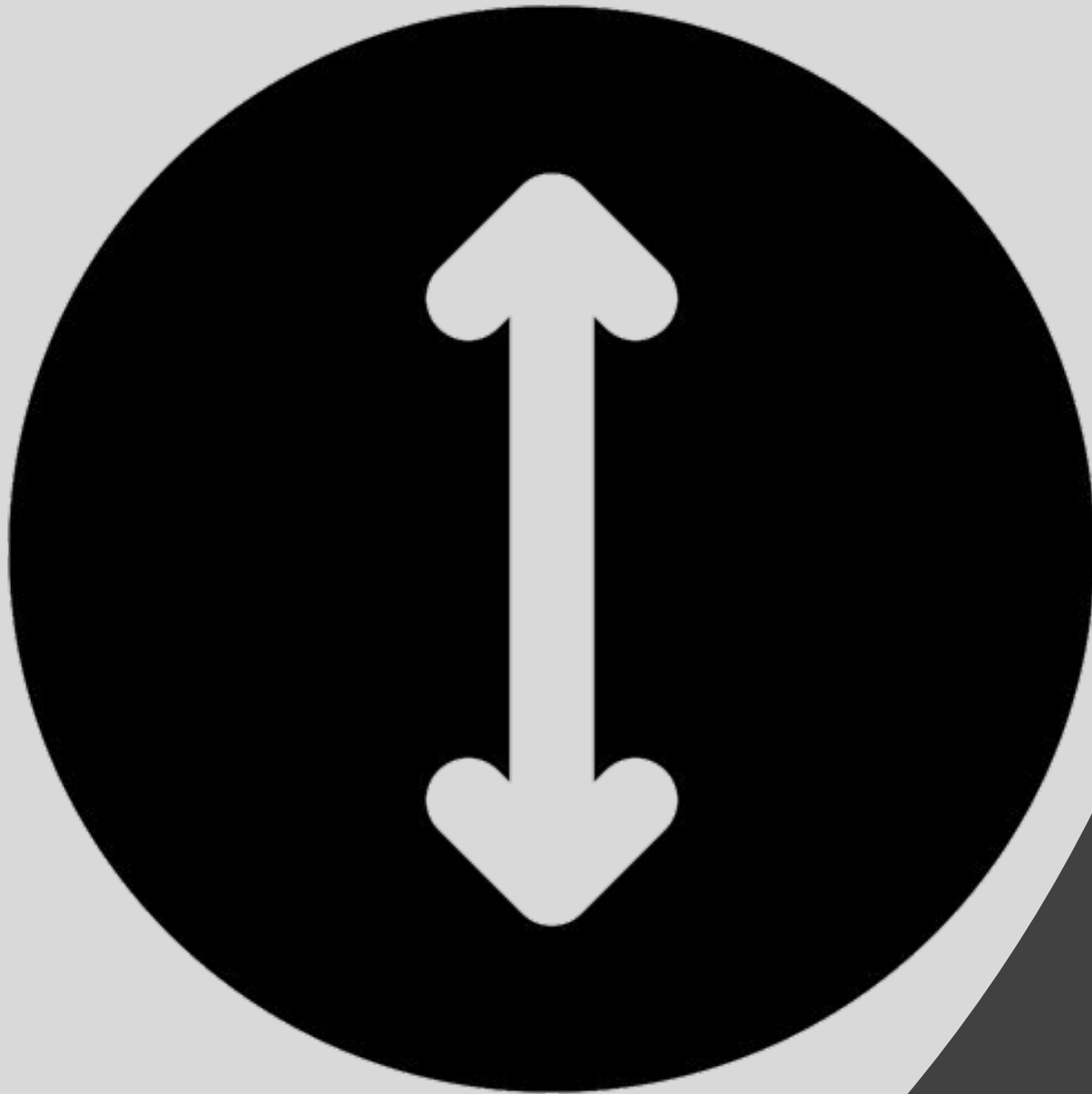
Change Type



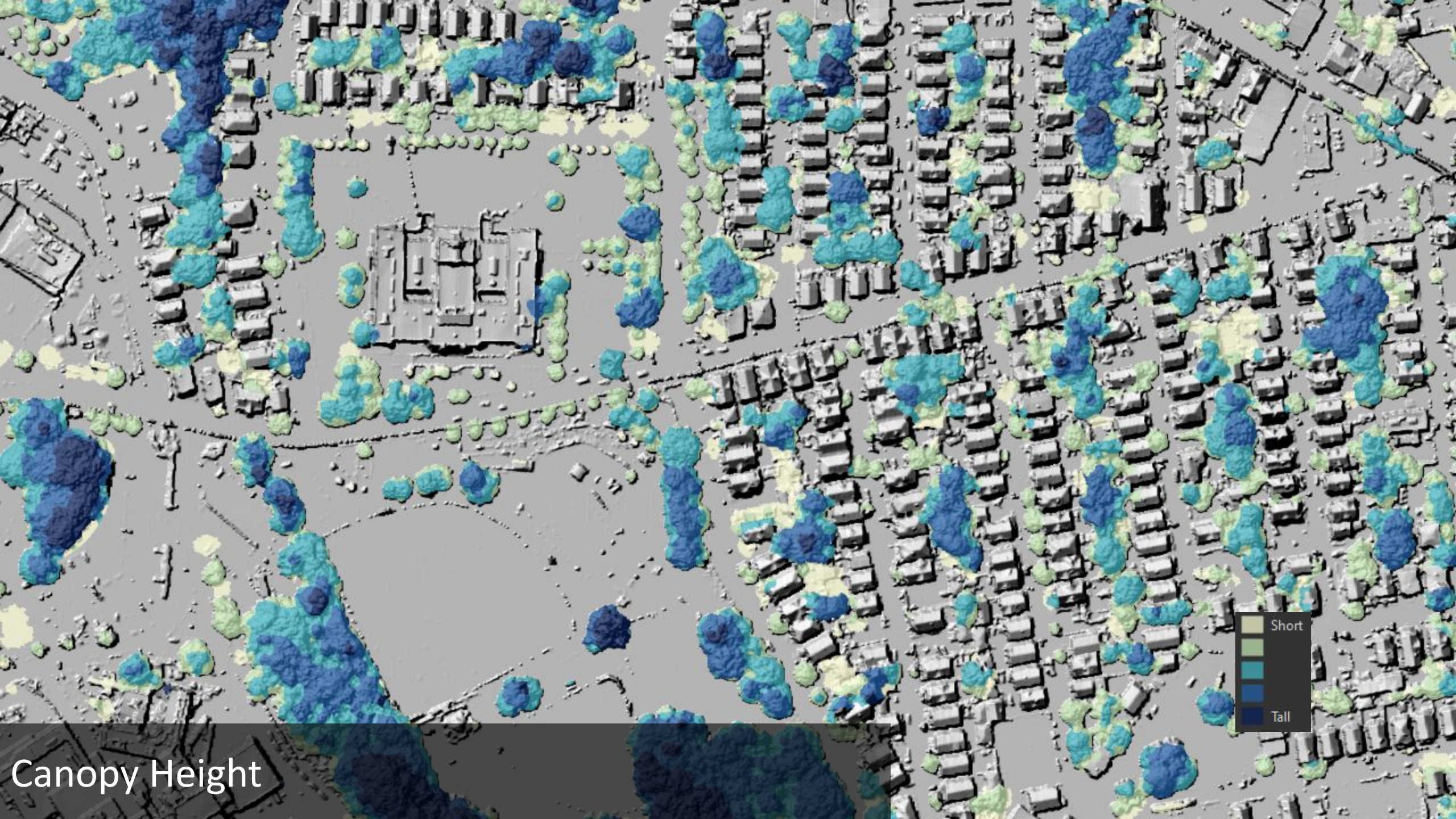
- Gain - connected
- Gain - unconnected
- Loss - connected
- Loss - unconnected
- No Change



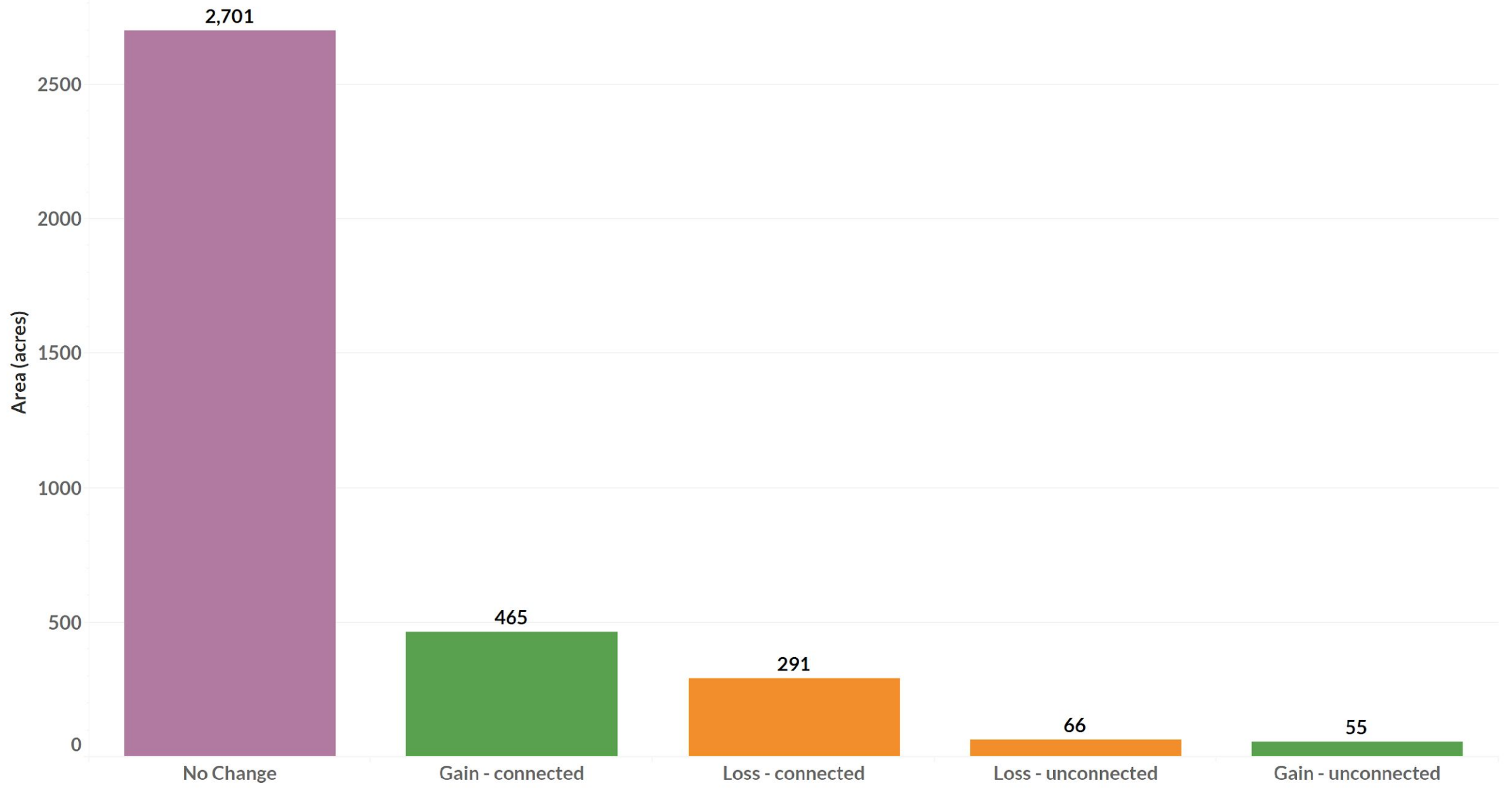
Change Type



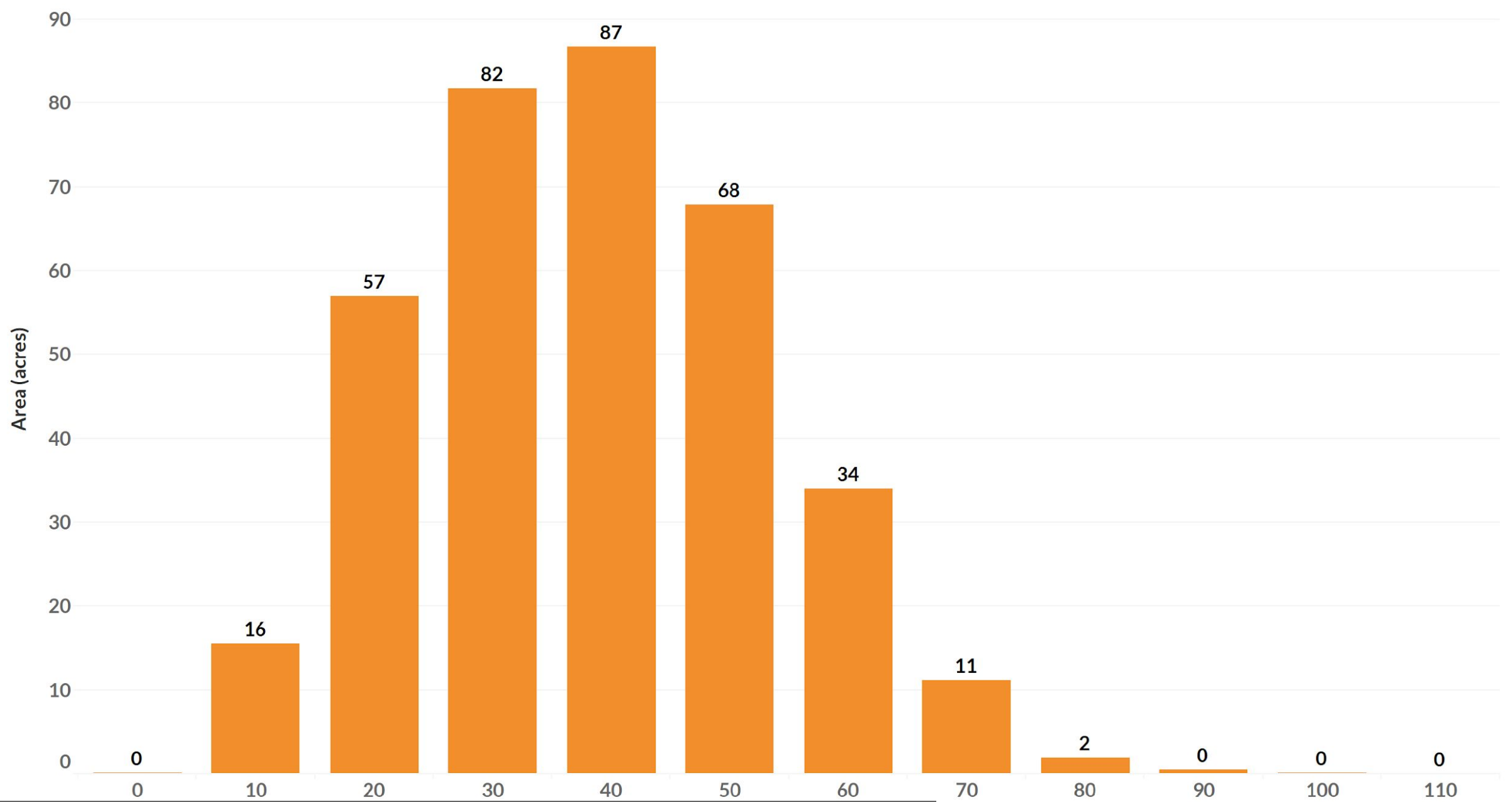
Height



Canopy Height



# Canopy Height Change 2018



Canopy Height Change 2011



# Providence Tree Canopy Change 2011-2018

Jarlath O'Neil-Dunne  
Nina Safavi