

# Single Family Property Value as a Function of Walking Distance to Residential Treatment Facilities

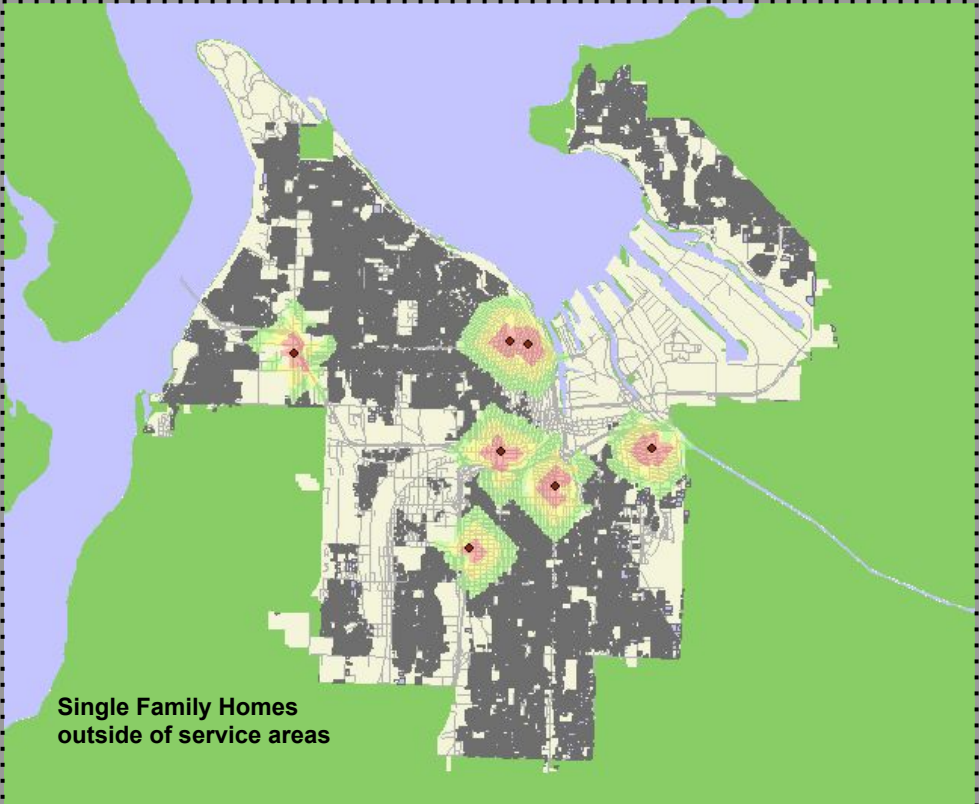
## Introduction

In Tacoma there has been an influx of substance abuse within the last several years. This problem has left many residents seeking help for their addiction. For instance, between 2002-2015 there was an increase of 340% in people seeking treatment for their opioid addiction. When seeking help, many will be admitted into a residential treatment center. Residential treatment facilities help their patients regain control of their lives and health. In this analysis we attempted to find a correlation between walking distances from residential treatment facilities and taxable single-family property values.



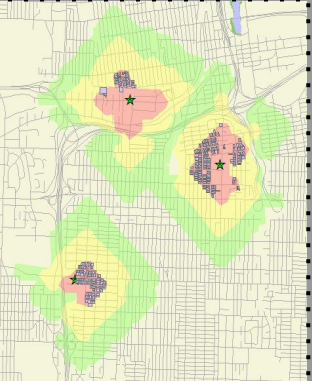
## Methods

Beginning with the network analyst tool in ArcGIS, 5, 10 and 15-minute walking service areas were delineated around previously identified residential treatment facilities in the city of Tacoma. Using select by location, the single family home parcels within each of the three individual service areas were chosen. The selection was switched in the attribute table to observe single family home parcels outside the service areas but within the boundary of Tacoma. The mean taxable property values were noted at each step.

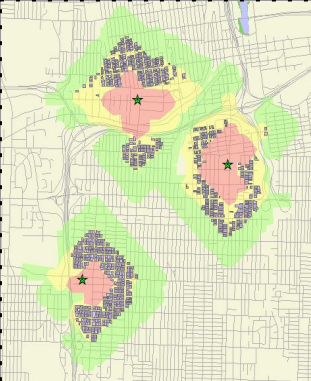


## Results

When the taxable values for single family homes were analyzed for each of the 5, 10, and 15-minute service areas, as well as the rest of Tacoma outside of the service areas, a trend of increased home values farther from residential treatment facilities was found. The average taxable home value within residential treatment facility service areas were: within a 5-minute walk: \$165,840; within a 10-minute walk: \$174,020; and within a 15-minute: \$186,410. This can be compared with average taxable home values within Tacoma but outside of the walkable service areas of \$246,670 (figure 1).



Homes 0 to 5 minutes walking distance



Homes 5 to 10 minutes walking distance



Homes 10 to 15 minutes walking distance

## Conclusions

The analysis of single family home values surrounding residential treatment facilities shows a clear trend of increased home values farther from residential treatment facilities. The starkest difference in mean taxable home values is apparent when comparing homes within a 5-minute walk of residential treatment facilities and homes outside the 15-minute walkable service area. Whether home values were depreciated before the treatment facilities were built or depreciated as a result of the placement of the treatment facilities, the trend of increasing home values outside a 15-minute walk of treatment facilities is clear.

Figure 1  
**Mean Home Values Surrounding Residential Treatment Facilities' Walk Zones**



Source: Addiction Facts about Tacoma Washington You Need to Know. (2017, February 01). Retrieved March 08, 2017, from <https://www.northpointrecovery.com/blog/addiction-facts-tacoma-washington-need-know/>  
GCS North American 1983 HARN; Projection: NAD\_1983\_HARN\_StatePlane\_Washington\_South\_FIPS\_4602\_Feet  
Date of Production: 3/8/2017  
By: Amy Boucher, William Collier, Sultana Shah, Gladys Espino, Charlotte Glen

## Method:

Beginning with the network analyst tool in ArcGIS, 5, 10 and 15-minute walking service areas were delineated around previously identified residential treatment facilities in the city of Tacoma. Using select by location, the single family home parcels within each of the three individual service areas were chosen. The selection was switched in the attribute table to observe single family home parcels outside the service areas but within the boundary of Tacoma. The mean taxable property values were noted at each step.

## Introduction

In Tacoma there has been an influx of substance abuse within the last several years. This problem has left many residents seeking help for their addiction. For instance, between 2002-2015 there was an increase of 340% in people seeking treatment for their opioid addiction. When seeking help, many will be admitted into a residential treatment center. Residential treatment facilities help their patients regain control of their lives and health. In this analysis we attempted to find a correlation between walking distances from residential treatment facilities and taxable single-family property values.

## Results

When the taxable values for single family homes were analyzed for each of the 5, 10, and 15-minute service areas, as well as the rest of Tacoma outside of the service areas, a trend of increased home values farther from residential treatment facilities was found. The average taxable home value within residential treatment facility service areas were: within a 5-minute walk: \$165,840; within a 10-minute walk: \$174,020; and within a 15-minute: \$186,410. This can be compared with average taxable home values within Tacoma but outside of the walkable service areas of \$246,670.

## Conclusions

The analysis of single family home values surrounding residential treatment facilities shows a clear trend of increased home values farther from residential