



# FINAL PROJECTS

# Problem

- A small bicycle company is looking to relocate to Portland, Oregon. The primary goal is to find manufacturing space that is within 200 feet of established bike routes and bus routes. A secondary consideration is proximity to the freeway to facilitate shipping and receiving.



# Project Workflow

- Create a basemap and identify the following:
  - Manufacturing tax lots in the Portland Metro area
  - Identify bike routes
  - Identify bus lines
  - Identify major highways
- Select Manufacturing TL by location
  - Mfg  $\leq$  200ft to established bike route
  - Mfg  $\leq$  200ft to bus line

# Project Workflow, cont.

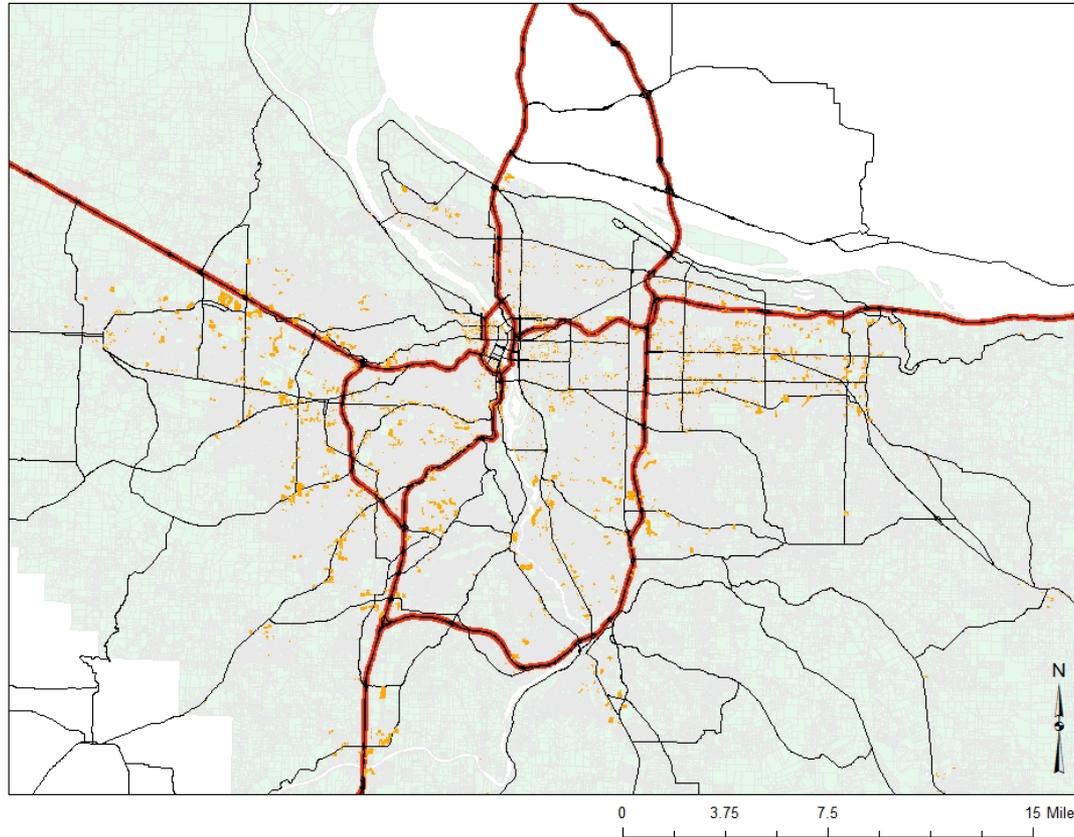
- Join Mfg that is within 200 ft of both bus and bike routes (AND logic)
- Find which manufacturing tax lots are within  $\frac{3}{4}$  mile of freeway
- Create a series of maps and present them to Bike Friday, and suggest feasibility of moving on with the move to Portland.



# Manufacturing Tax Lots Results

- Of the 600,000 tax lots, less than 60,000 are zoned for manufacturing
- Manufacturing falls nearest the intersections of Interstates 205, 5, and 84

# Manufacturing Tax Lots in Portland



# Tax Lots Within 200 Feet of Bike or Bus: Using Select by Location

Select By Location

Select features from one or more target layers based on their location in relation to the features in the source layer.

Selection method:  
select features from

Target layer(s):

- Near Bus Lines
- Near Bike Routes
- bikeandbus2
- Manufacturing Lots
- Arterial Road
- Freeway
- arterial
- Arterial Streets
- streets
- All Streets
- Major Arterial Streets

Only show selectable layers in this list

Source layer:  
Near Bus Lines

Use selected features (0 features selected)

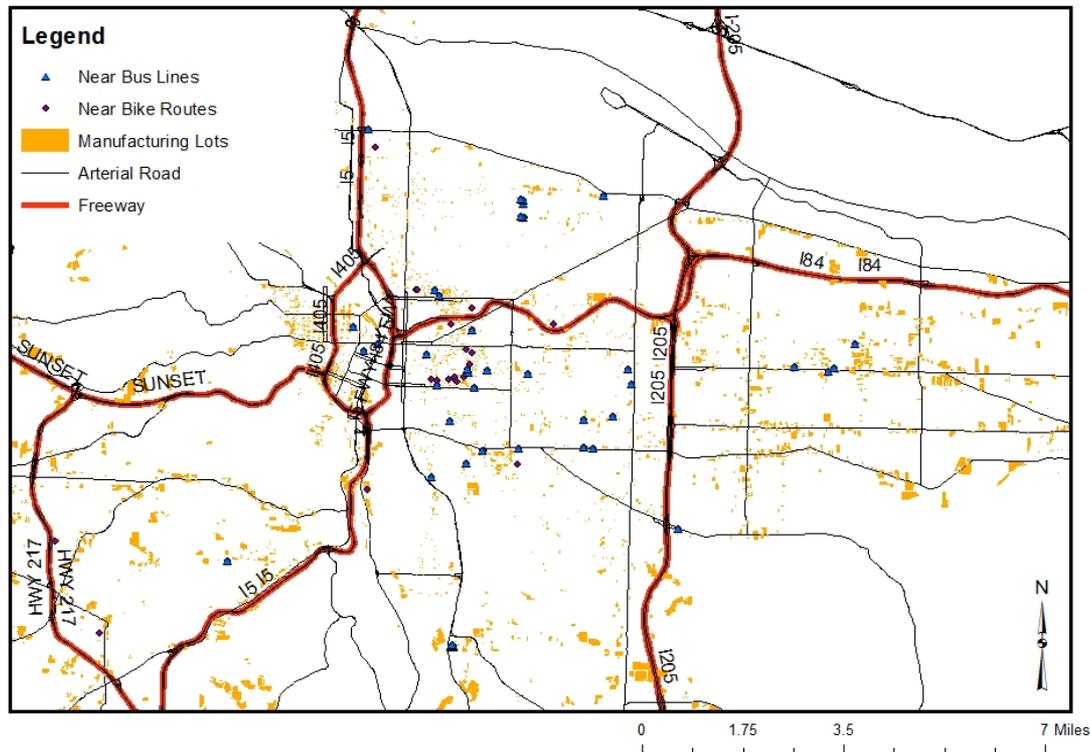
Spatial selection method for target layer feature(s):  
are within a distance of the source layer feature

Apply a search distance  
200 Feet

[About select by location](#) OK Apply Close

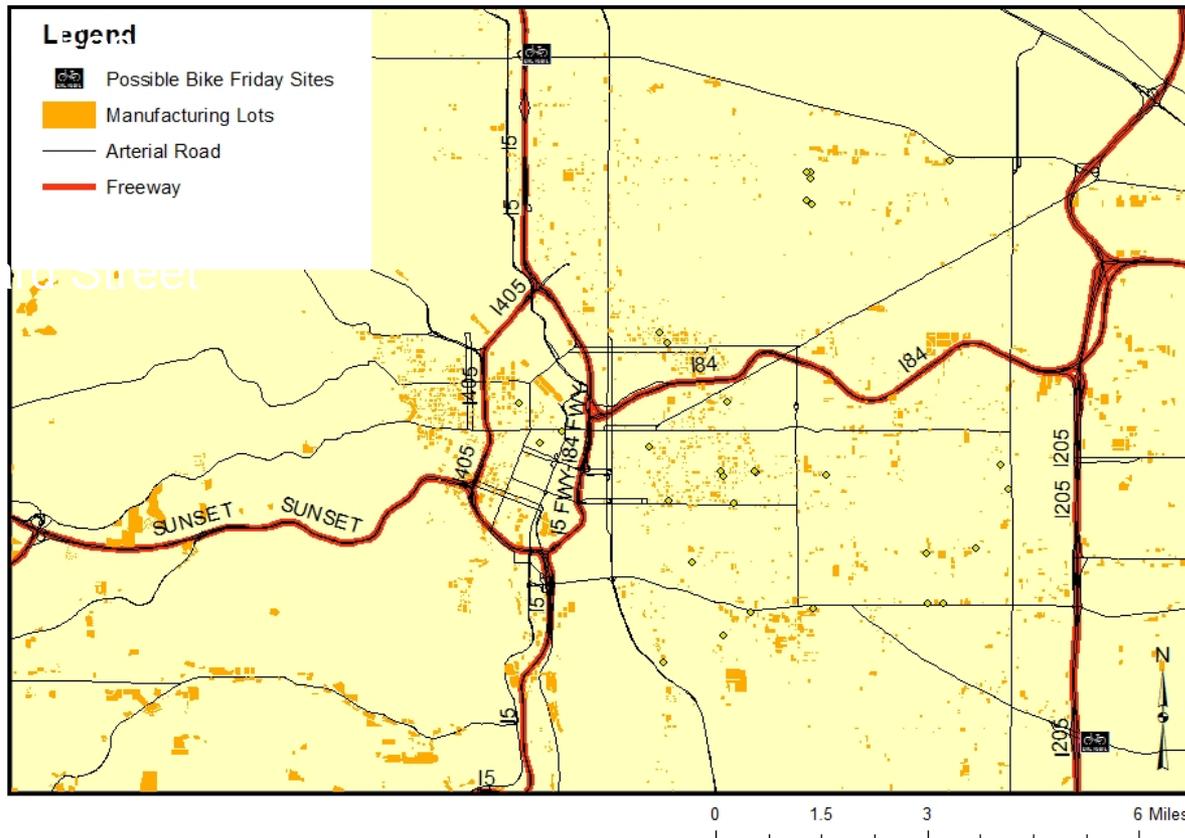
# Narrowing the Definition further...

Commutable Manufacturing Tax Lots in Portland, Oregon



# Bike Friday, it's time to call the U-Haul!

## Possible Bike Friday Manufacturing Sites in Portland, OR



# Recommendation

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- Portland, Oregon has several sites that meet the criteria of Bike Friday. Based on this analysis, it is suggested that Bike Friday move forward in their consideration to move manufacturing operations to Portland.



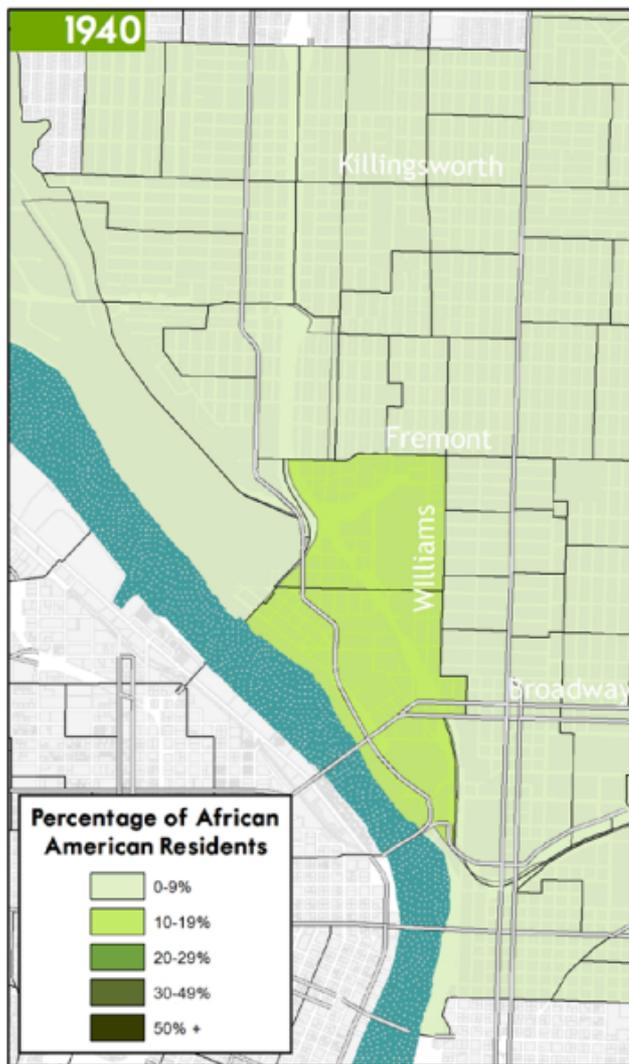


# FINAL PROJECT MAP EXAMPLES

# ALBINA

## A History of African American Settlement and Displacement in Inner North and Northeast Portland (1940-2010)

“The term ‘Albina’ means different things to different people. To many Portland residents Albina means any area on Portland’s east side where there is a large percentage of African Americans. It is important to note that the boundaries of Albina change throughout history.”  
*-History of Portland’s African American Community (1993, City of Portland)*



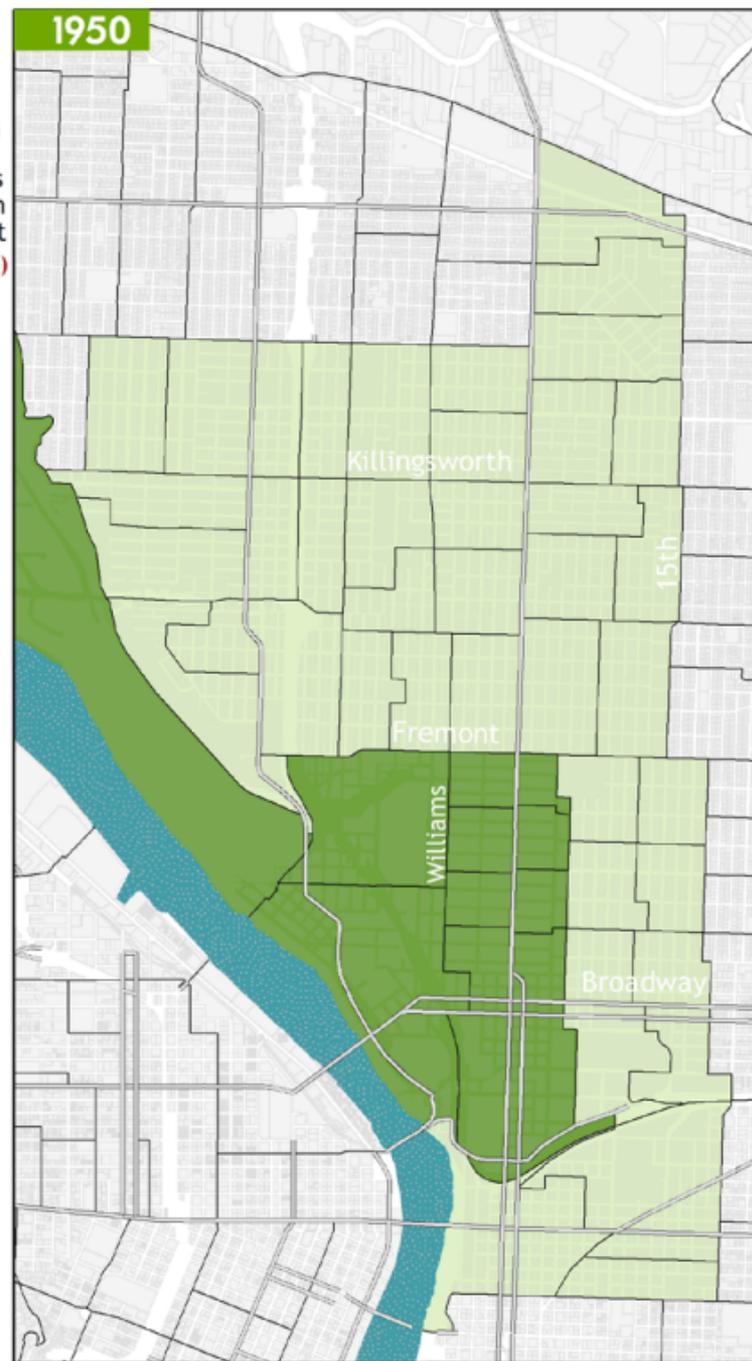
African American neighborhoods in Portland were forcefully shifted due to segregation, urban renewal, development, and gentrification. These maps attempt to follow these changes, focusing on external factors that influenced displacement.

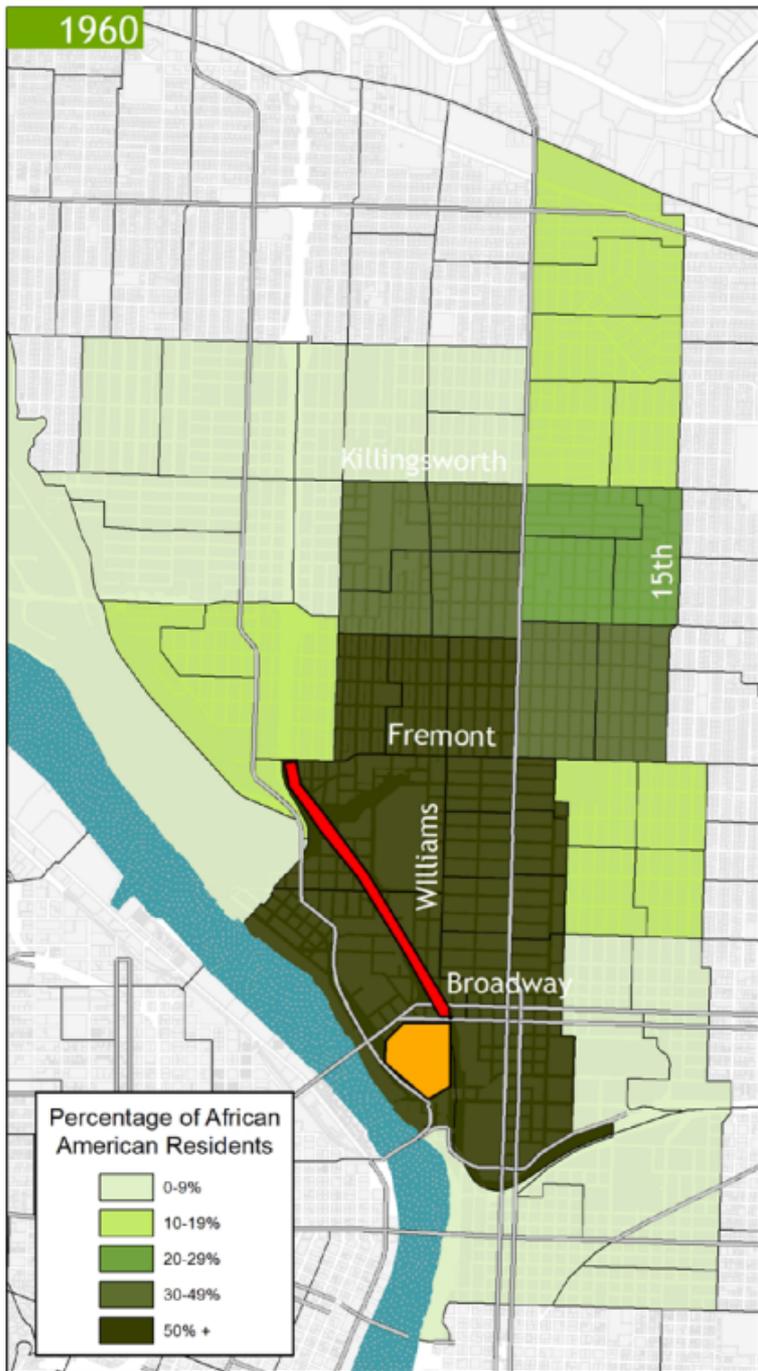
The boundaries highlighted in these maps combine the shifting definition of this neighborhood; from the inner east side Albina (the present day site of the Rose Quarter) of the 40s and 50s, to the city designated Albina Community Plan of 1993 (north to Columbia Blvd., south to Broadway, east to 33rd, and west to Chautauqua)

Deliberate housing segregation began in earnest in 1919, when the Portland Realty Board prohibited its members from selling houses to African or Asian Americans. By 1940, nearly 80% of Portland’s black population lived within 2 census tracts, in an area bounded by Russel St., the Willamette River, Martin Luther King (Union Ave.), and Holladay Street.

Portland’s African American population rapidly grew in the 1940s due to the importing of workers for local war industries. Most of these workers lived in a large housing project called Vanport (located near the present day Portland International Raceway).

When Vanport was destroyed due to flooding in 1948, the segregated housing boundaries were expanded to Fremont to the north. Official housing segregation by the Portland Realty Board continued until 1952.





“Urban renewal, largely clearance, appears to be the only solution to, not only the blight that presently exists in central Albina, but also to avoid the spread of that blight to other surrounding areas.”  
 -Central Albina Study, Portland Development Commission, 1962

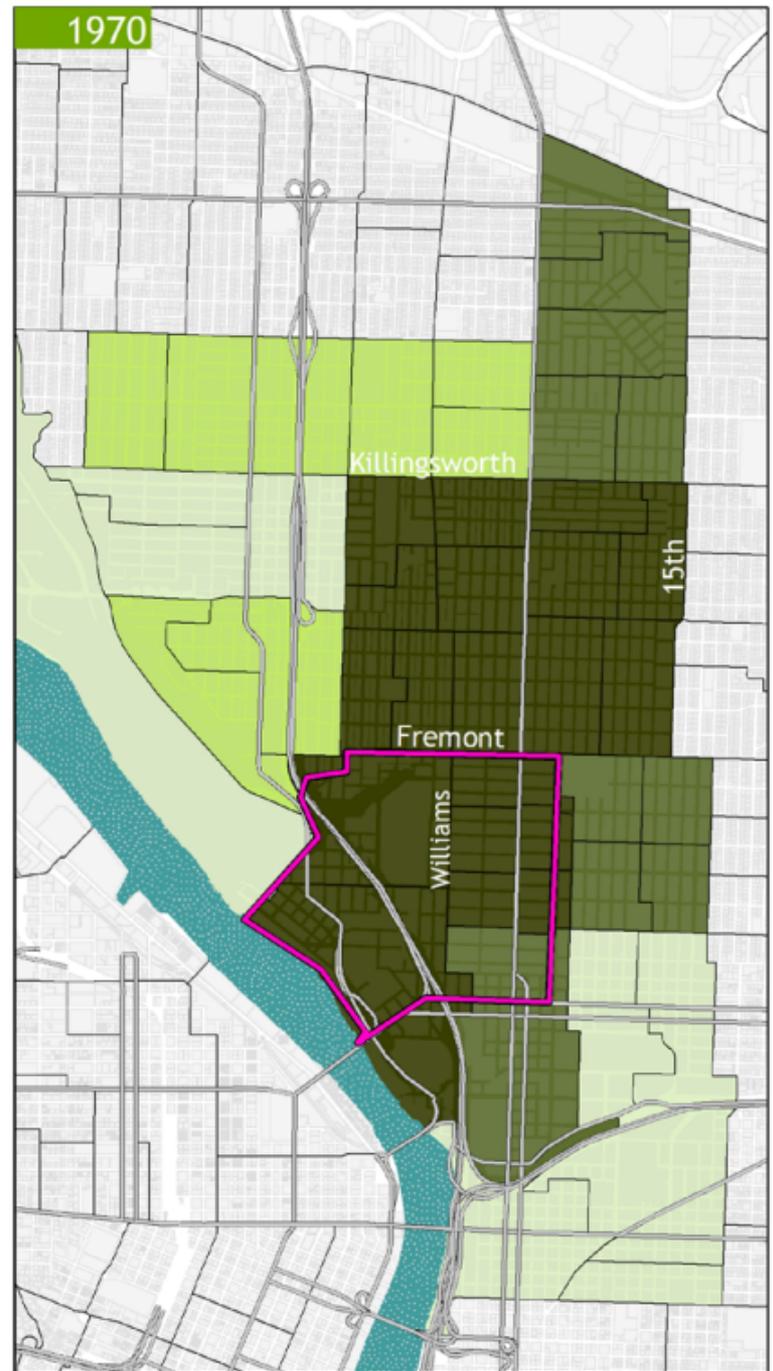
By the 1960s, Albina was one of the poorest areas of Portland. It also had some of the oldest housing stock in the city. ‘White flight’ in Albina led to increasingly concentrated Black neighborhoods. Albina became a target of urban renewal.

The Memorial Coliseum was completed in 1960. It was built in central Albina and an estimated 150 people, mostly Black, were displaced by this project. The area of this construction is highlighted on the left in orange.

The Minnesota Avenue freeway (Interstate 5) was completed in 1962. 125 homes (with approximately 300 residents) were removed from Albina for this project. This area is highlighted on the left in red.

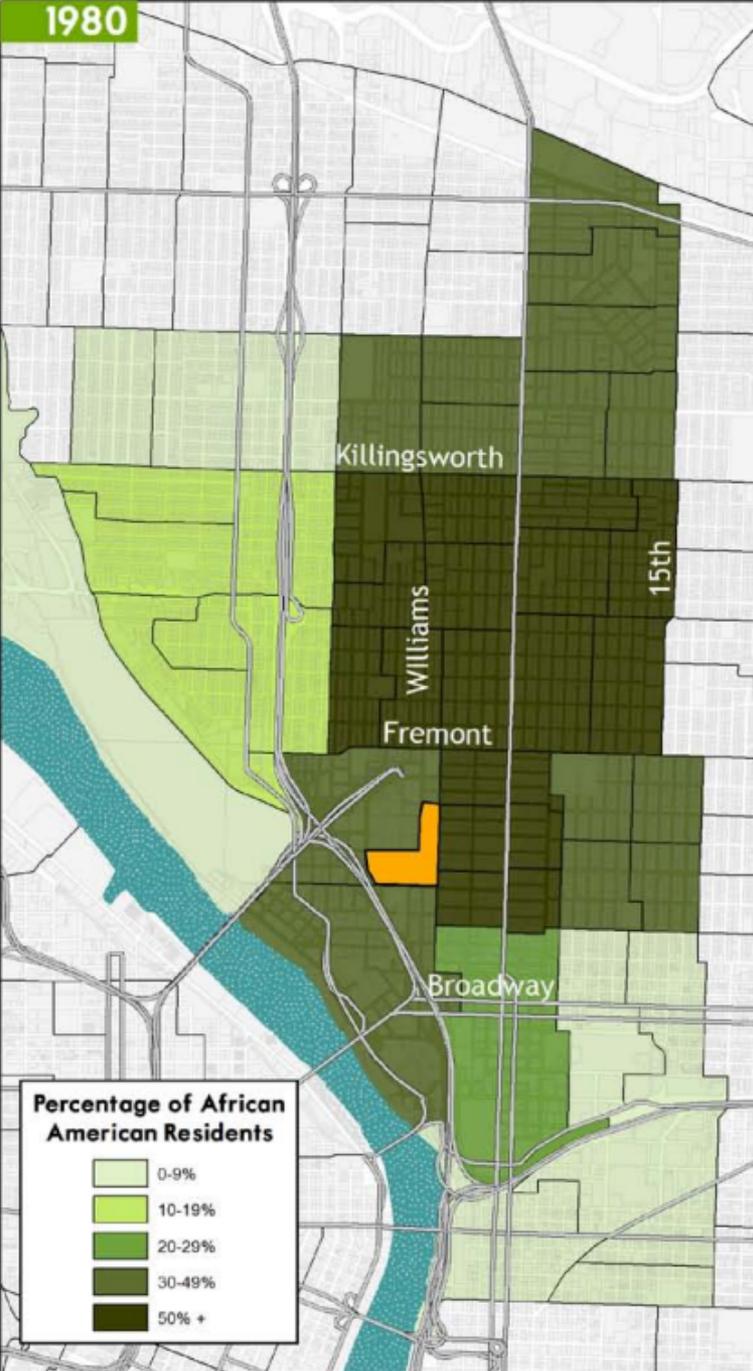
In 1962 the Portland Development Commission completed the Central Albina Study. This study designated much of Albina as un-salvageable, and recommended rezoning for industrial use and clearance.

Between 1960 and 1970 the Eliot neighborhood (outlined on the right in pink) lost half of its population (roughly 3000 people).



Source: U.S. Census Bureau; 1960 and 1970 Census

1980



**Percentage of African American Residents**

- 0-9%
- 10-19%
- 20-29%
- 30-49%
- 50% +

“Didn’t they have a long range plan? After all, if your life’s investment was smashed to splinters by a bulldozer to make room for a hospital, you could at least feel decent and perhaps tolerable about it, but to have it all done for nothing! Well, what is there to feel?”  
 -Mrs. Leo Warren, quoted in the Portland Observer

In 1973 Emanuel Hospital (as part of the Portland Development Com-missions’s Albina plan) cleared 10 blocks and 188 houses for an expansion project. This area was located west of Vancouver Ave., between Russel and Cook Streets. Emanuel’s funding for this project stalled after clearance, leaving mostly empty lots in the place of buildings until this day. This area is highlighted to the left in orange.

1973 also saw the completion of the Fremont Bridge and its Kerby Avenue exit ramp, which cut a path through the Eliot neighborhood,

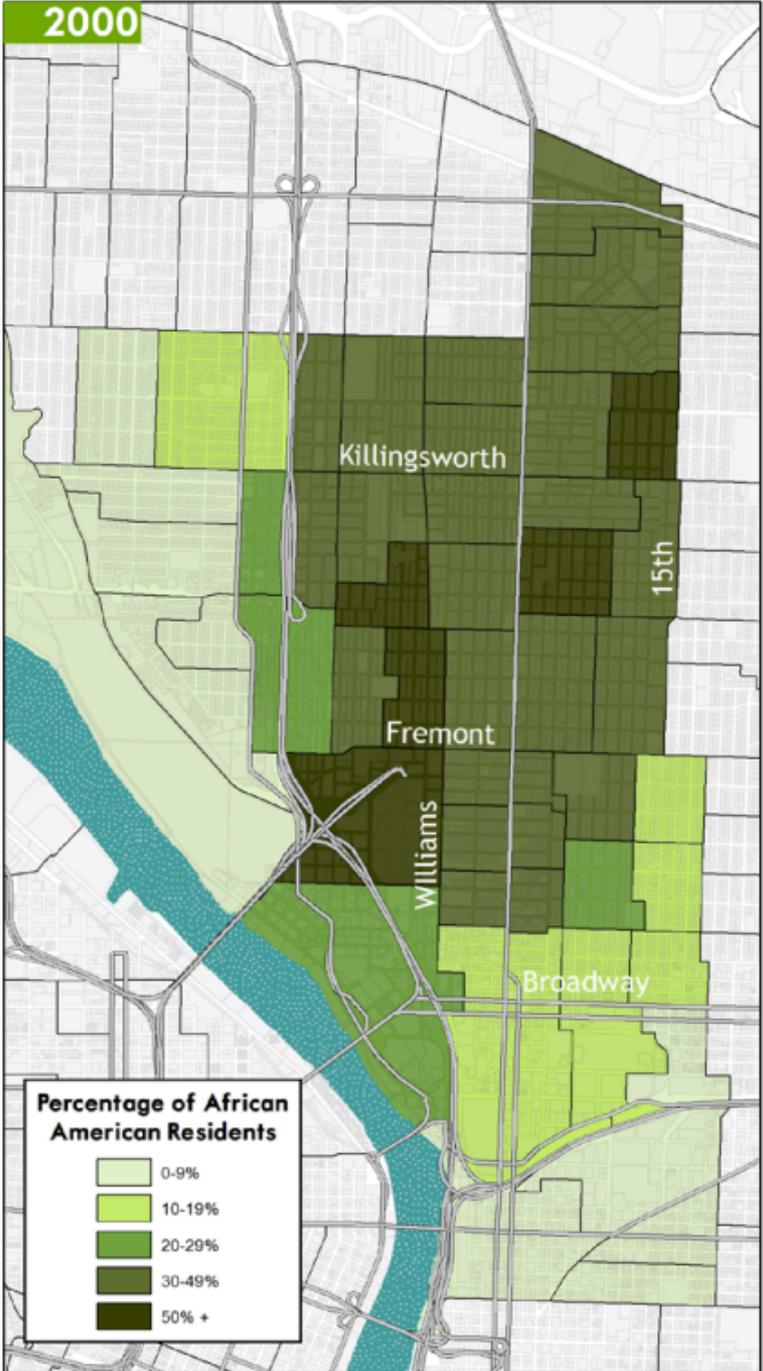
The 1970s and 1980s saw continual disinvestment in Albina. The maps show the neighborhoods becoming increasingly African American. But this is only half the story, White flight continued through out the 70s and 80s, but the Black population also dropped in most neighborhoods in Albina.

In the census tracts shown in these maps, the total population had dropped almost in half from 1950 to 1990.

1990



2000

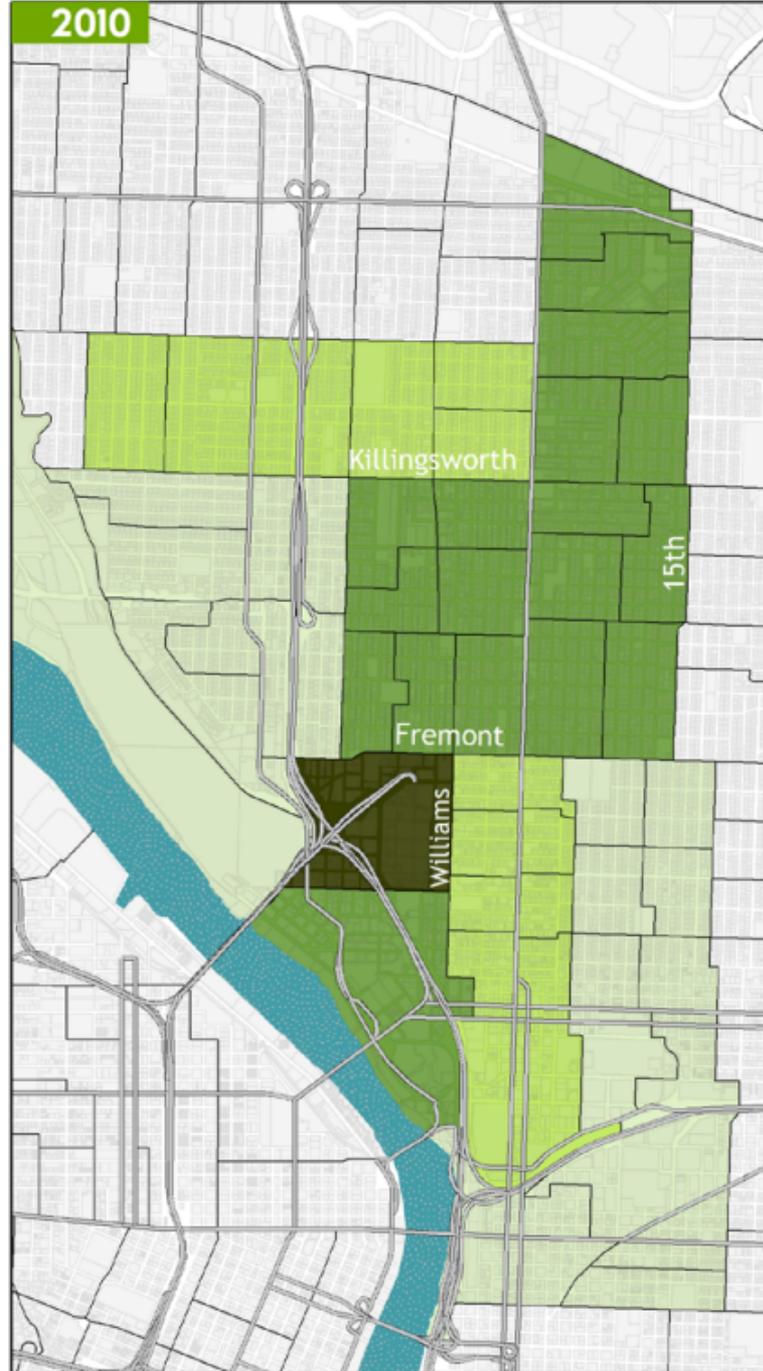


The 1990s and 2000s saw massive change in Albinia. Gentrification led to the increase in home prices up to 10 fold. Population levels increased in almost all neighborhoods for the first time since the 1950s, but the Black population has declined dramatically. The only area which kept a majority of Black residents was in the 2010 census was tract 22.01, the northeast corner of the Eliot neighborhood. It is also one of the least populated census tracts in this group, with a total population 350.

"The flood of white homebuyers would not have occurred without the 1990s economic boom that raised home prices in all other quarters of the central city. A booming economy, bargain basement property, and pent-up demand coincided to transform pockets of Albinia in three or four years from very affordable to out of reach. At the beginning of the decade, the worry was abandonment, at the end it was the preservation of affordable housing."  
*-Bleeding Albinia (2000)*

Sources:  
 US Decennial Census (1940-2010)  
*History of Portland's African American Community (1805-Present)*; Portland Bureau of Planning, 1993  
*Bleeding Albinia: A History of Community Disinvestment, 1940-2000*; Karen J. Gibson; Transforming Anthropology, 2008

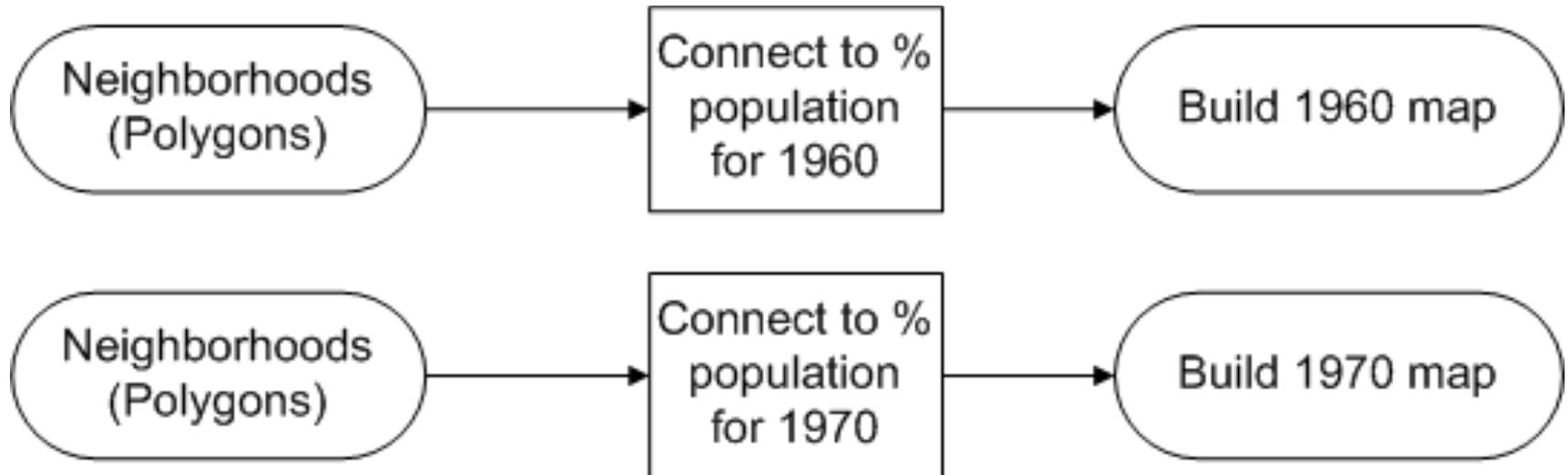
2010



Source: U.S. Census Bureau; 2000 and 2010 Census

# Example #1

**Research Question:** How have African Americans been displaced in NE Portland?



... continue for each year of interest

# Pub Patios In and Around NE Portland

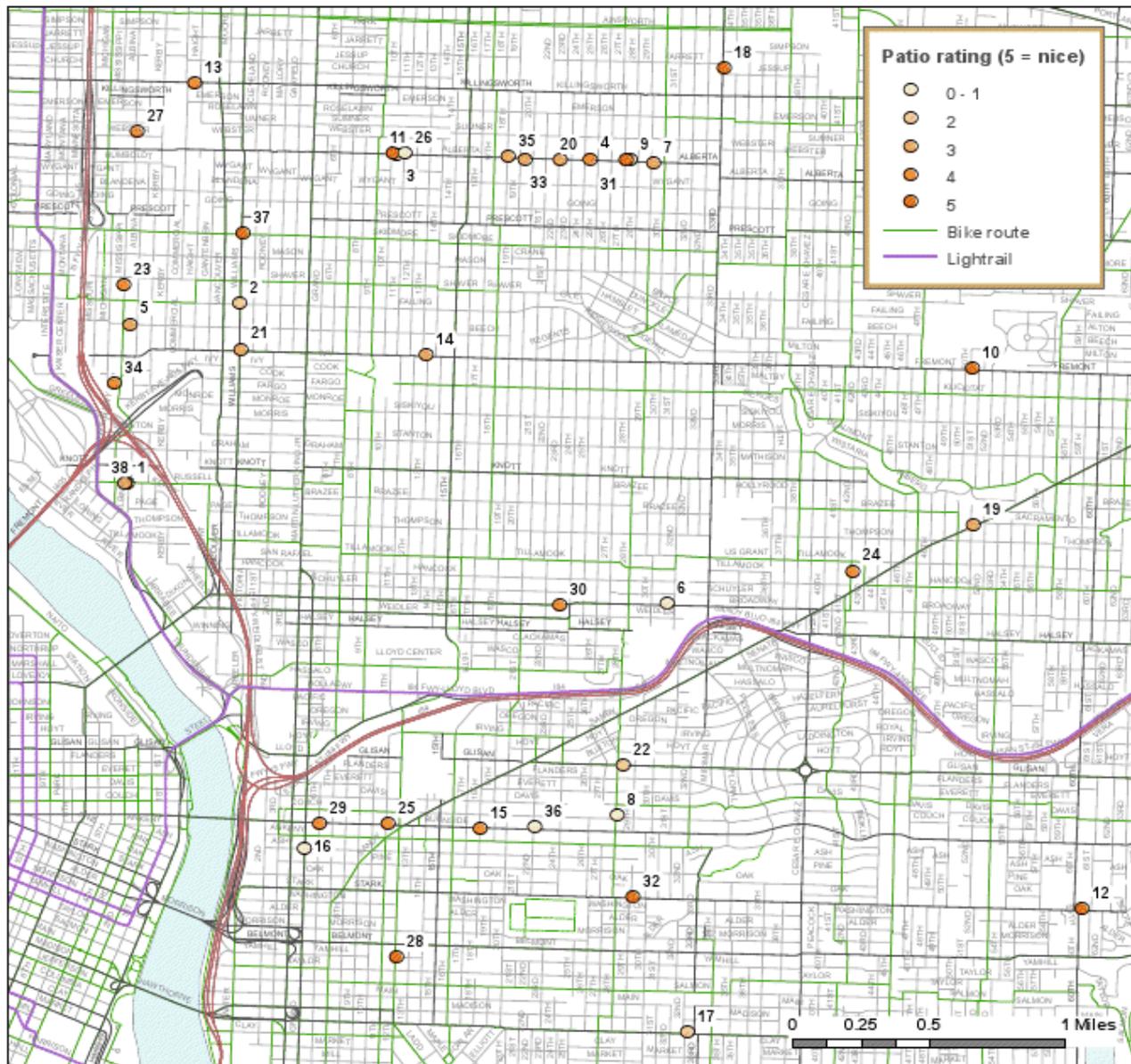
- |                                              |                                               |
|----------------------------------------------|-----------------------------------------------|
| 1 - 820<br>820 N Russell St.                 | 20 - Mash Tun<br>2204 NE Alberta # 101        |
| 2 - 5th Quadrant<br>3901 N Williams Ave.     | 21 - Mani's<br>3508 N Williams Ave.           |
| 3 - Alberta Street<br>1036 NE Alberta St.    | 22 - Migration Brewing<br>2828 NE Glisan St.  |
| 4 - Alleyway<br>2415 NE Alberta St.          | 23 - Moloko Plus<br>3967 N Mississippi        |
| 5 - Amnesia Brewing<br>832 N Beech St.       | 24 - Moon and Sixpence<br>2014 NE 42nd Ave.   |
| 6 - Basil Bar<br>3135 NE Broadway            | 25 - Noble Rot<br>1111 East Burnside St.      |
| 7 - Bernie's Bistro<br>2904 NE Alberta St.   | 26 - Radio Room<br>1101 NE Alberta St.        |
| 8 - Beulahland<br>118 NE 29th Ave.           | 27 - Red Fox<br>5128 N Albina Ave.            |
| 9 - Binks<br>2715 NE Alberta St.             | 28 - Roadside Attraction<br>1000 SE 12th Ave. |
| 10 - Bottles<br>5015 NE Fremont              | 29 - Rontoms<br>600 E Burnside St.            |
| 11 - Bye and Bye<br>1011 NE Alberta St.      | 30 - Rose and Thistle<br>2314 NE Broadway     |
| 12 - Caldera<br>6031 SE Stark                | 31 - Siam Society<br>2703 NE Alberta St.      |
| 13 - Chapel Pub<br>430 N Killingsworth       | 32 - Starley's<br>2913 SE Stark St.           |
| 14 - County Cork<br>1329 NE Fremont St       | 33 - The Hilt<br>1934 NE Alberta St.          |
| 15 - East Burn<br>1800 N Burnside St.        | 34 - The Liberty Glass<br>938 N Cook Ave.     |
| 16 - East End<br>203 SE Grand Ave.           | 35 - The Nest<br>1801 NE Alberta St.          |
| 17 - Gold Dust Meridian<br>3267 SE Hawthorne | 36 - The Standard<br>14 NE 22nd Ave.          |
| 18 - Kennedy School<br>5736 NE 33rd Ave.     | 37 - Vendetta<br>4306 N Williams Ave.         |
| 19 - Laurelwood<br>5115 NE Sandy             | 38 - White Eagle<br>836 N Russell St.         |

Patio rating (5 = nice)

- 0 - 1
- 2
- 3
- 4
- 5

— Bike route  
— Lightrail

0 0.25 0.5 1 Miles

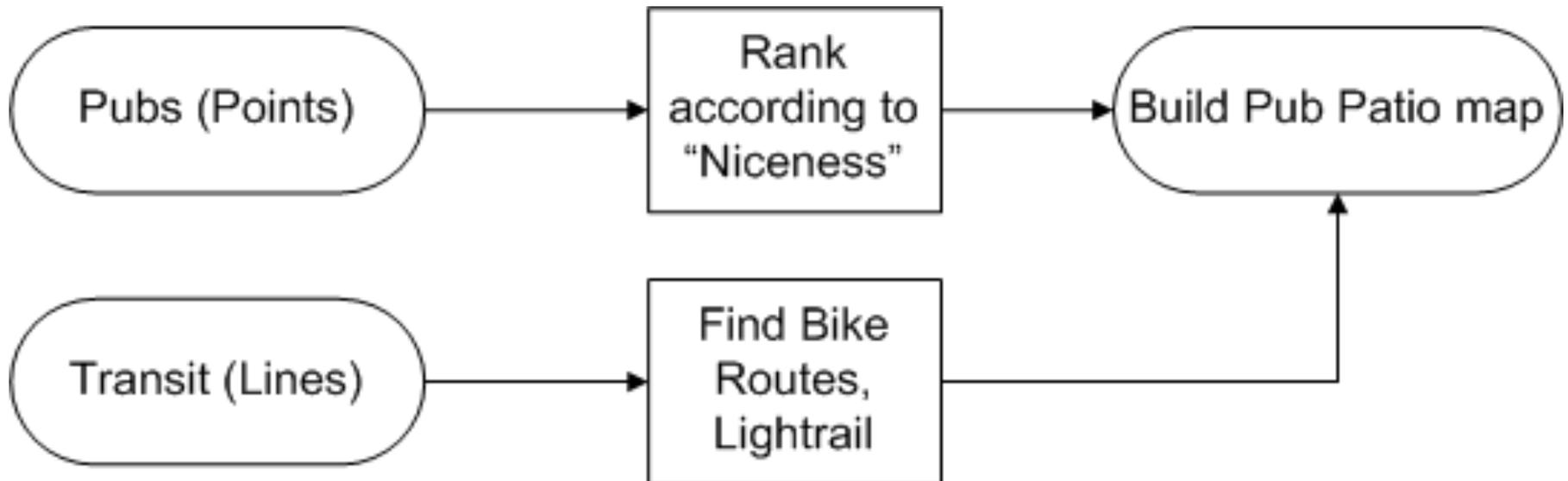


Map created by JON B. RAINE

# Example #2

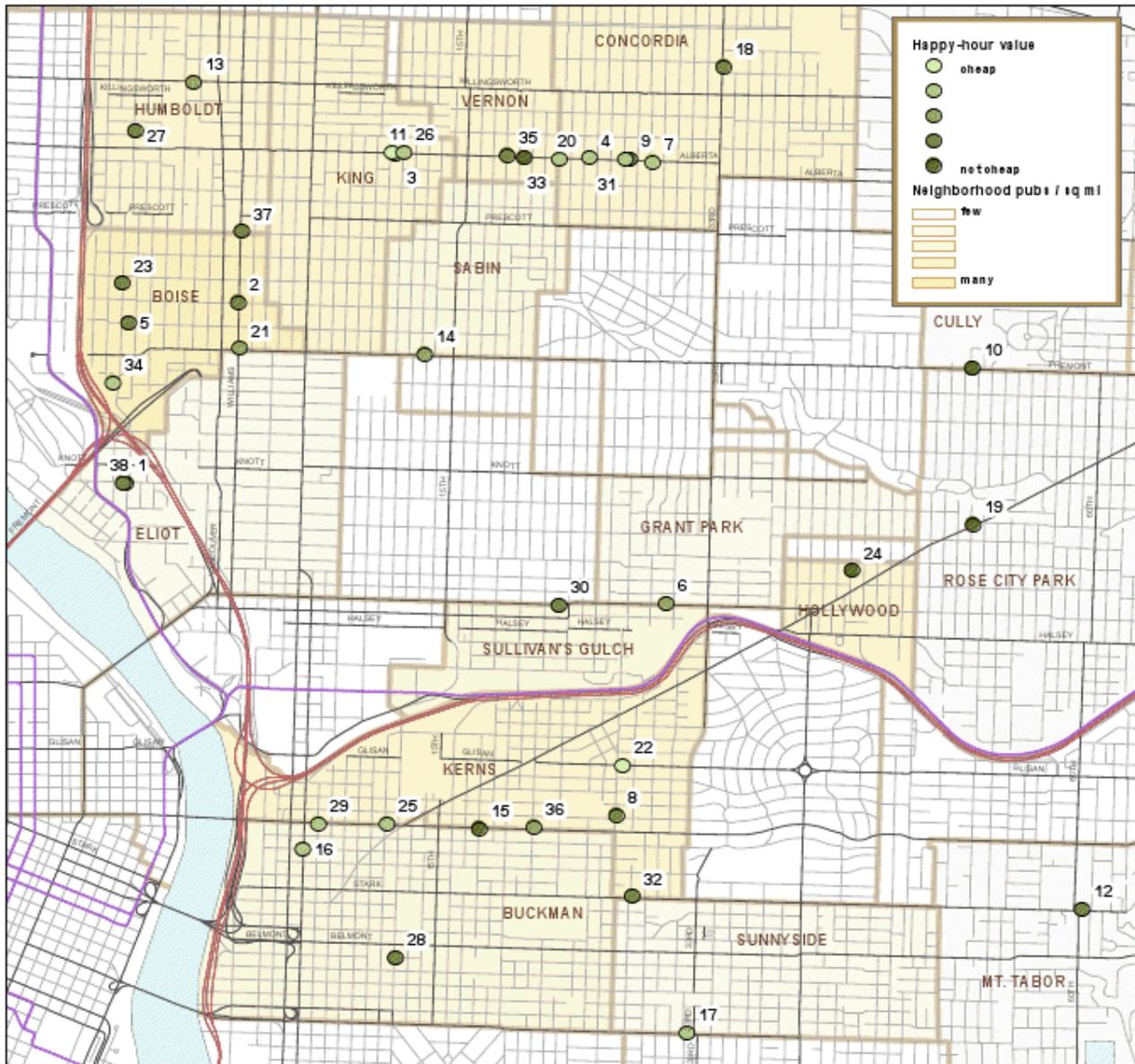
**Research Question:** Where are the best pubs on the Eastside of Portland?

## Map #1: Pub Patio Map



# Pub Patios In and Around NE Portland

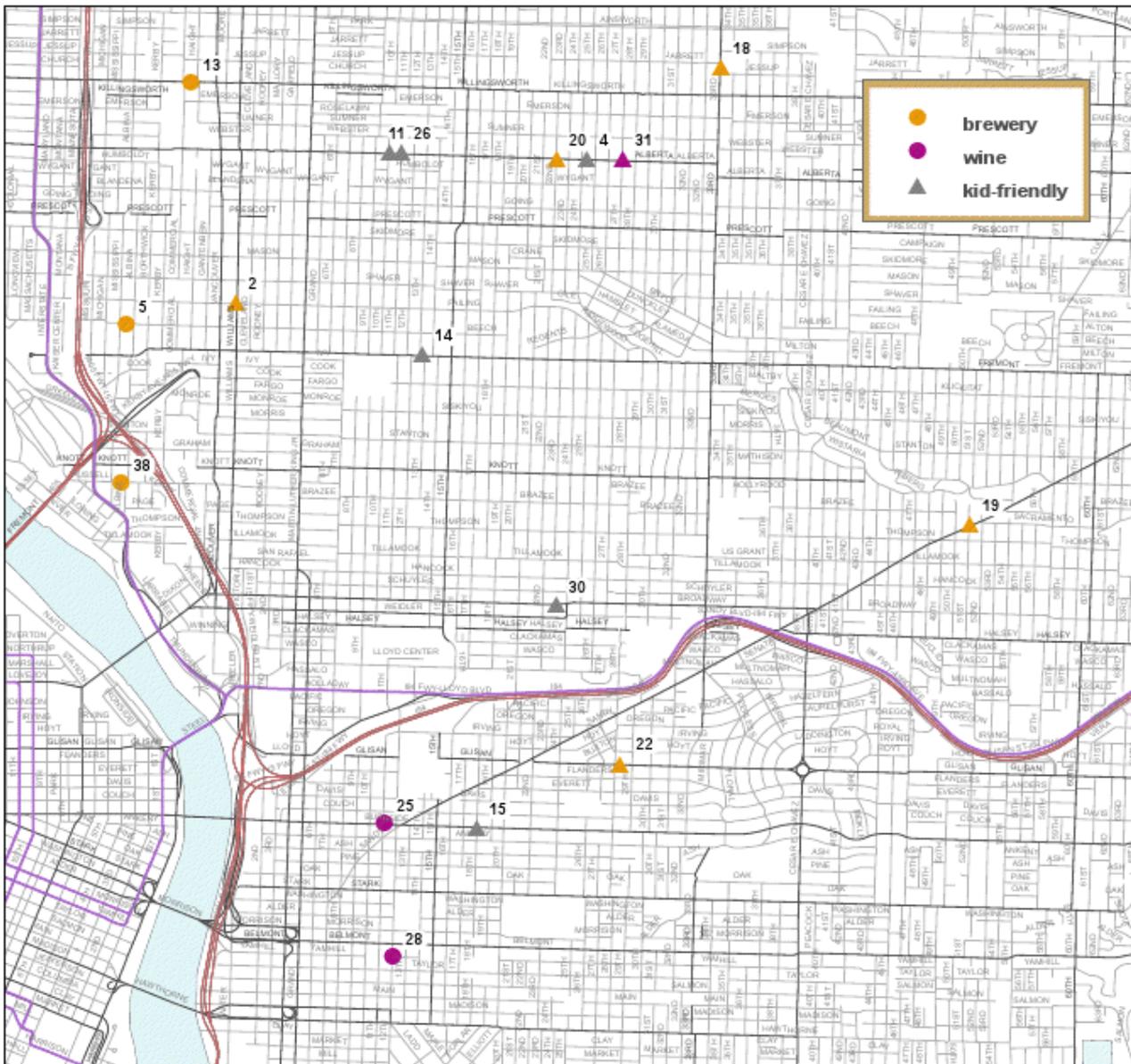
## Neighborhood Happy-hour



- |                                              |                                               |
|----------------------------------------------|-----------------------------------------------|
| 1 - 820<br>Mon- Sat 4-6:30pm                 | 20 - Mash Tun<br>Mon-Fri 3-6pm                |
| 2 - 5th Quadrant<br>Mon- Sat 4-6pm           | 21 - Maui's<br>Mon- Fri 3-7pm                 |
| 3 - Alberta Street<br>Mon- Fri 5-7:45pm      | 22 - Migration Brewing<br>n/a                 |
| 4 - Alleyway<br>All days 3-6pm               | 23 - Moloko Plus<br>All days 3-8pm            |
| 5 - Amnesia Brewing<br>Mon- Fri 4-6pm        | 24 - Moon and Sixpence<br>no happy hour       |
| 6 - Basil Bar<br>All days 4:30-6:30pm        | 25 - Noble Rot<br>Mon- Fri 5-6pm              |
| 7 - Bernie's Bistro<br>Tue- Sat 4-6pm        | 26 - Radio Room<br>All days 3-6pm             |
| 8 - Beulahland<br>Mon- Fri 4-6pm             | 27 - Red Fox<br>Mon- Sat 3-7pm                |
| 9 - Binks<br>Mon- Fri 4:30-6:30              | 28 - Roadside Attraction<br>All days 3-6pm    |
| 10 - Bottles<br>n/a                          | 29 - Rontoms<br>Mon- Fri 4:30-6:30pm          |
| 11 - Bye and Bye<br>All days 4-7pm           | 30 - Rose and Thistle<br>Sun- Thurs 3-7pm     |
| 12 - Caldera<br>All days 5-6pm, 9-close      | 31 - Siam Society<br>Thurs- Sun 4:30-6:30pm   |
| 13 - Chapel Pub<br>Sun- Thurs 4-6pm, 9-close | 32 - Stucky's<br>All days 5-7pm               |
| 14 - County Cook<br>Mon- Fri 4-6pm           | 33 - The Hilt<br>n/a                          |
| 15 - East Buzz<br>n/a                        | 34 - The Liberty Glass<br>All days (time n/a) |
| 16 - East End<br>All days 4-7pm              | 35 - The Nest<br>All days 3-7pm               |
| 17 - Gold Dust Meridian<br>All days 2-5pm    | 36 - The Standard<br>All days 3-6pm           |
| 18 - Kennedy School<br>All days 4-6pm        | 37 - Vendetta<br>All days 3-6pm               |
| 19 - Laurelwood<br>n/a                       | 38 - White Eagle<br>All days 4-6pm            |

# Pub Patios In and Around NE Portland

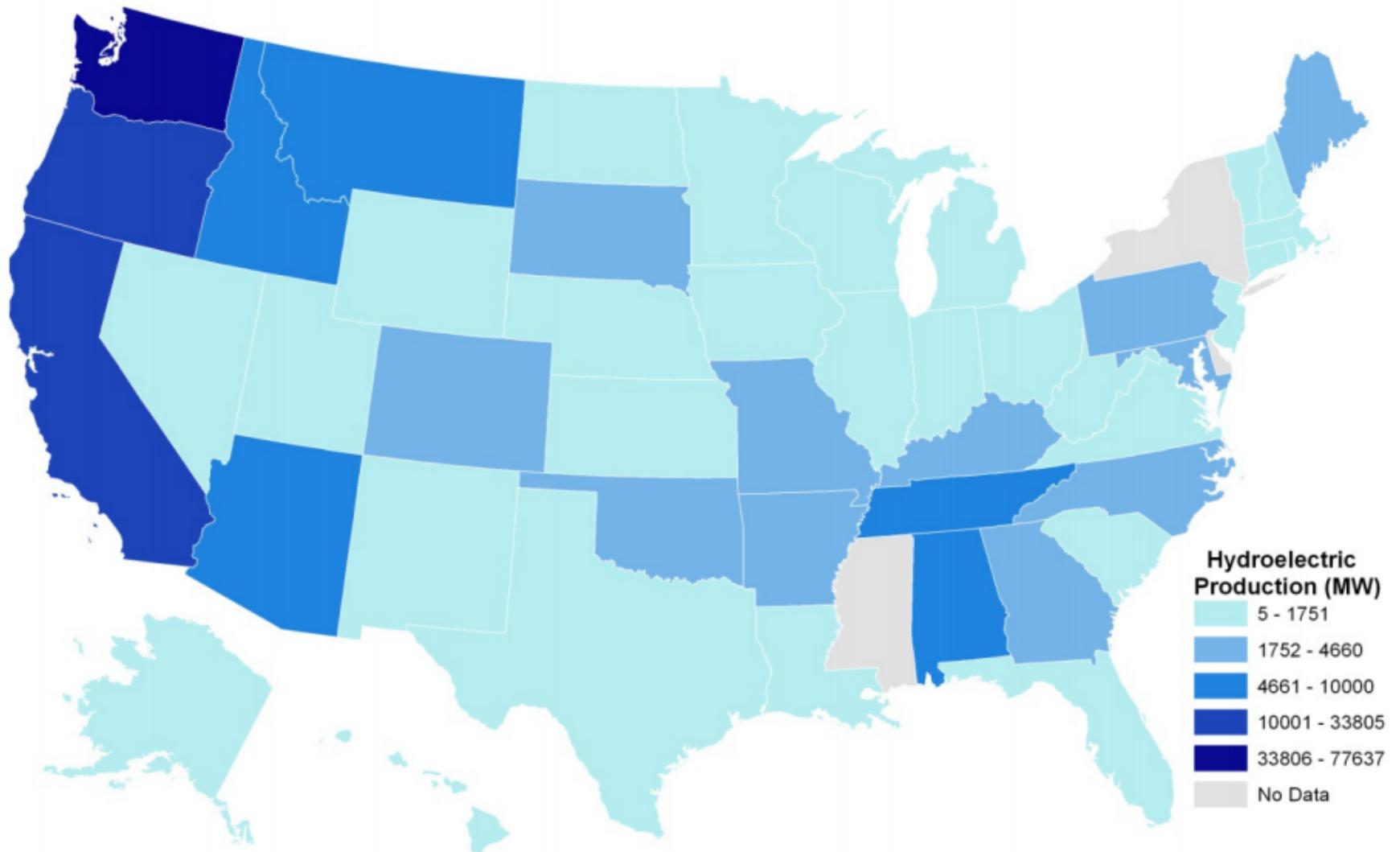
## *Pub features*



- |                                          |                                               |
|------------------------------------------|-----------------------------------------------|
| 2 - 5th Quadrant<br>3901 N Williams Ave. | 20 - Mash Tun<br>2204 NE Alberta # 101        |
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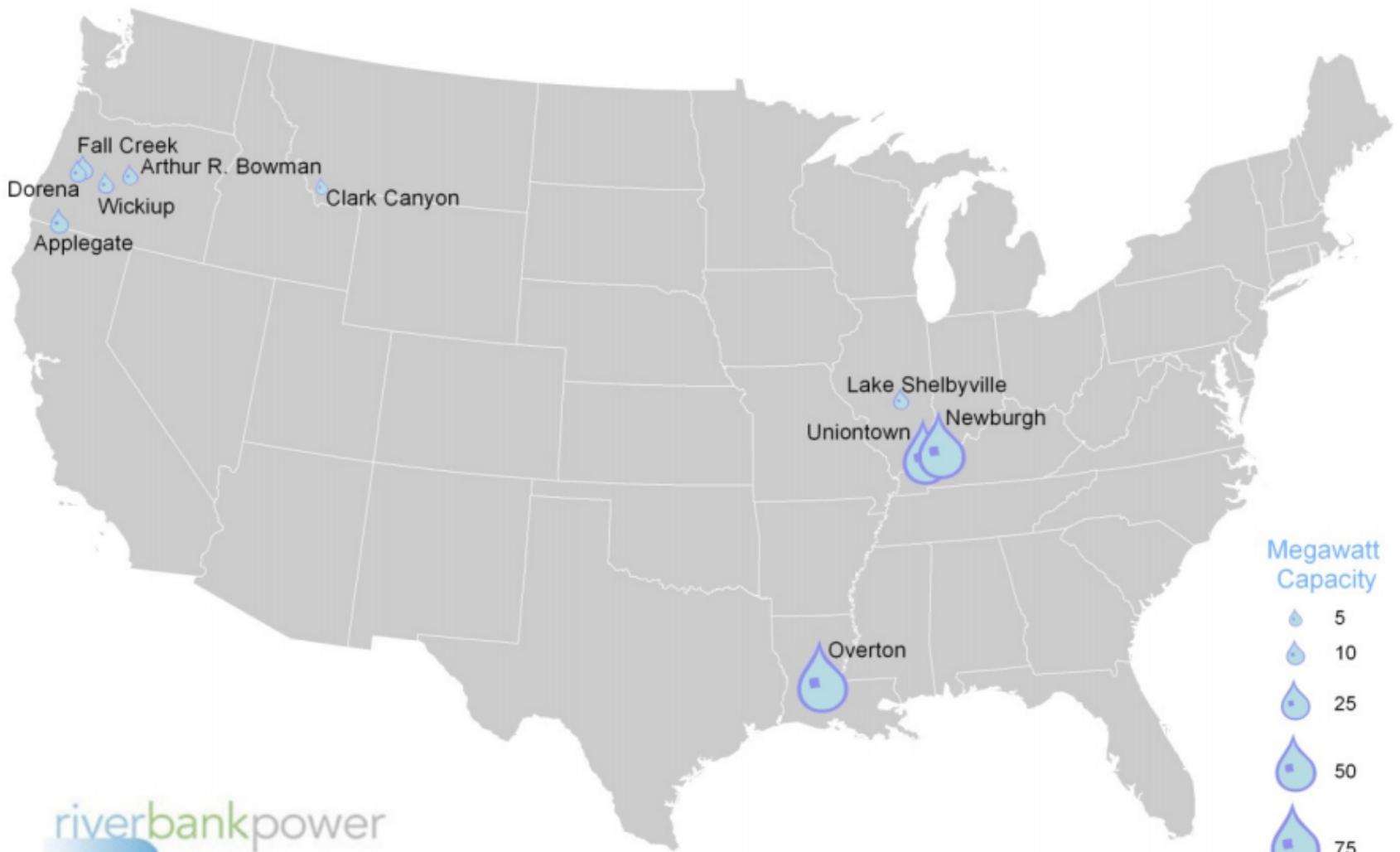


# Hydroelectric Production



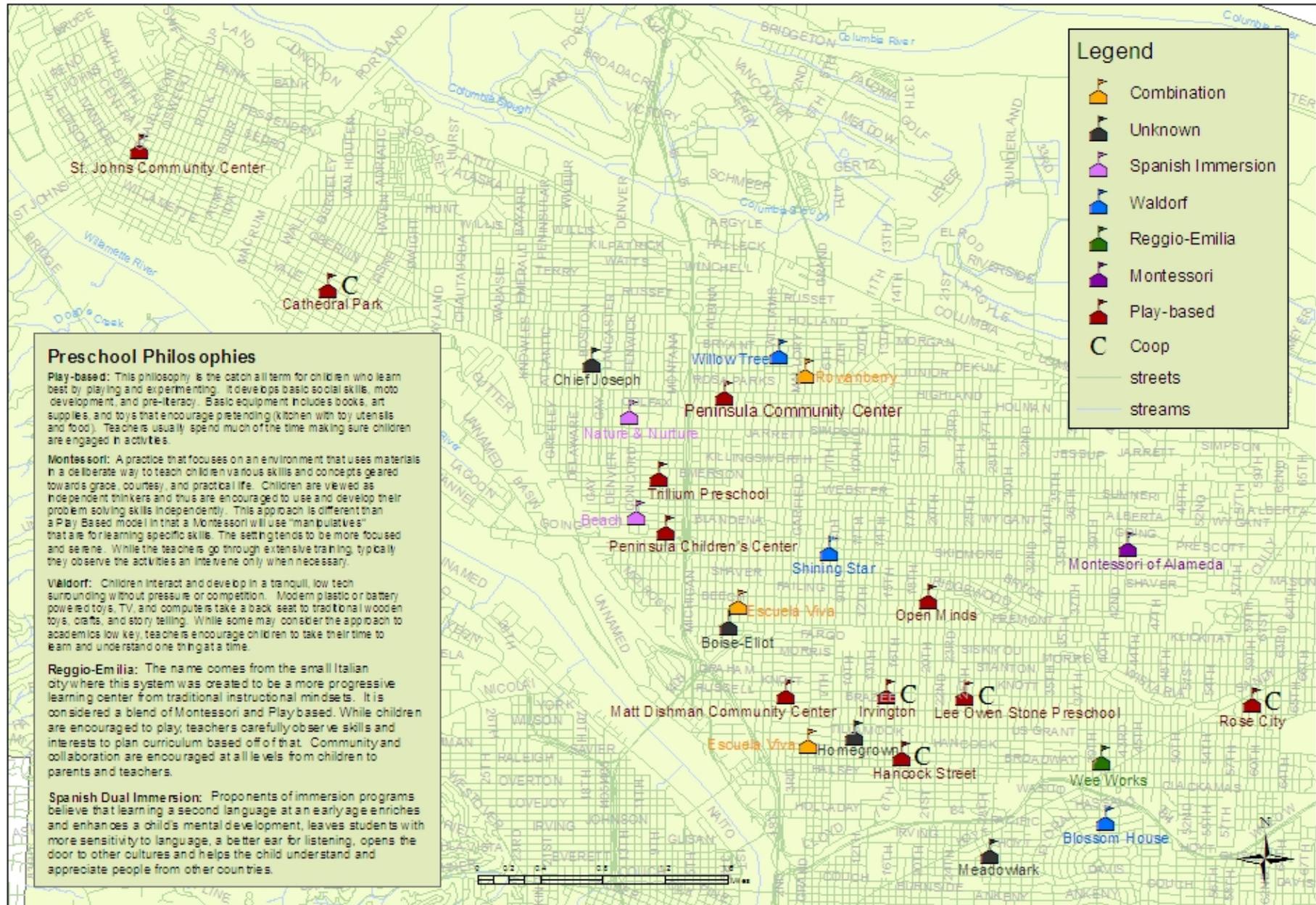
Sources: U.S. Energy Information Administration, ESRI

# Run Of River Projects



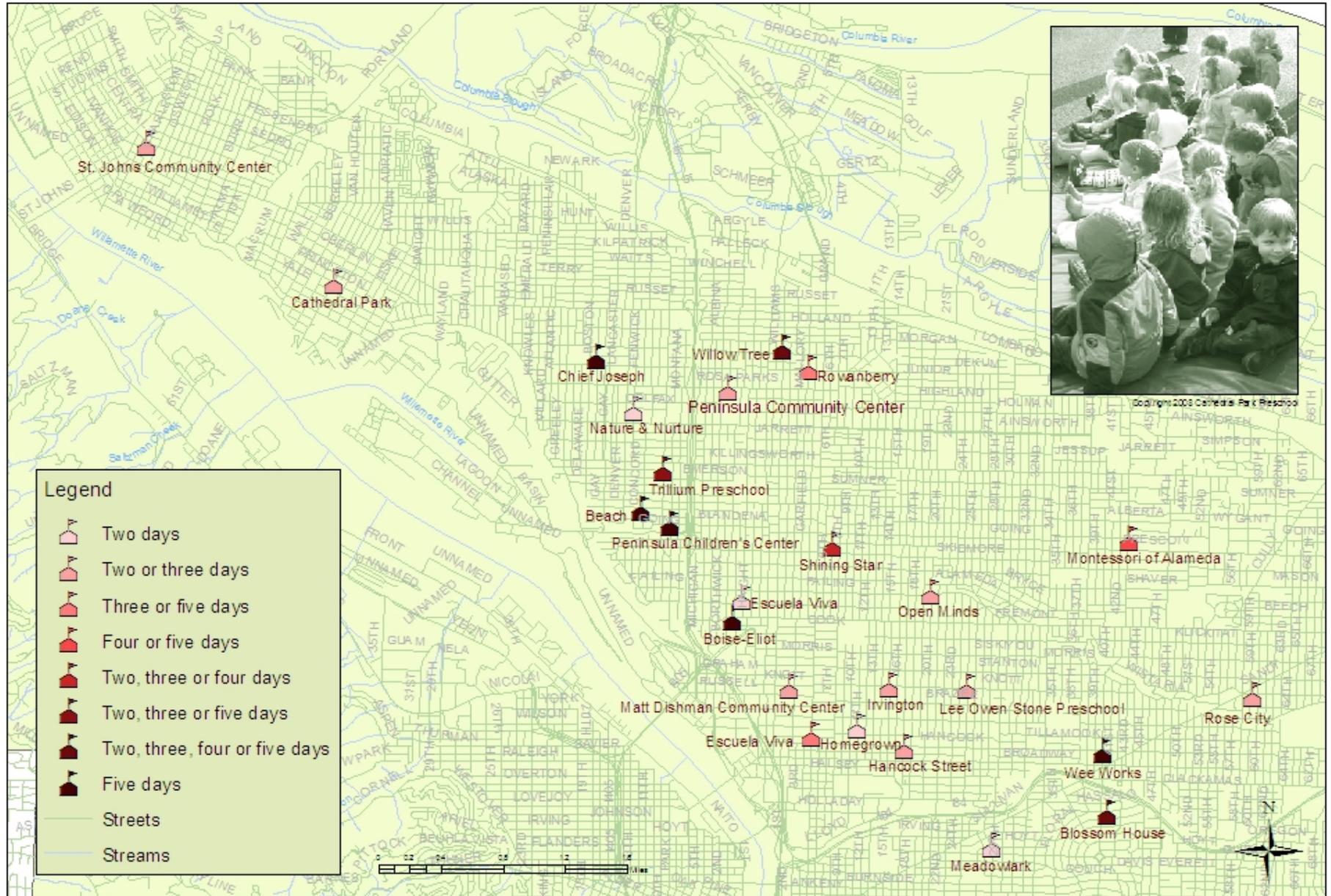
# North & Northeast Portland Preschools

## Preschool Philosophies



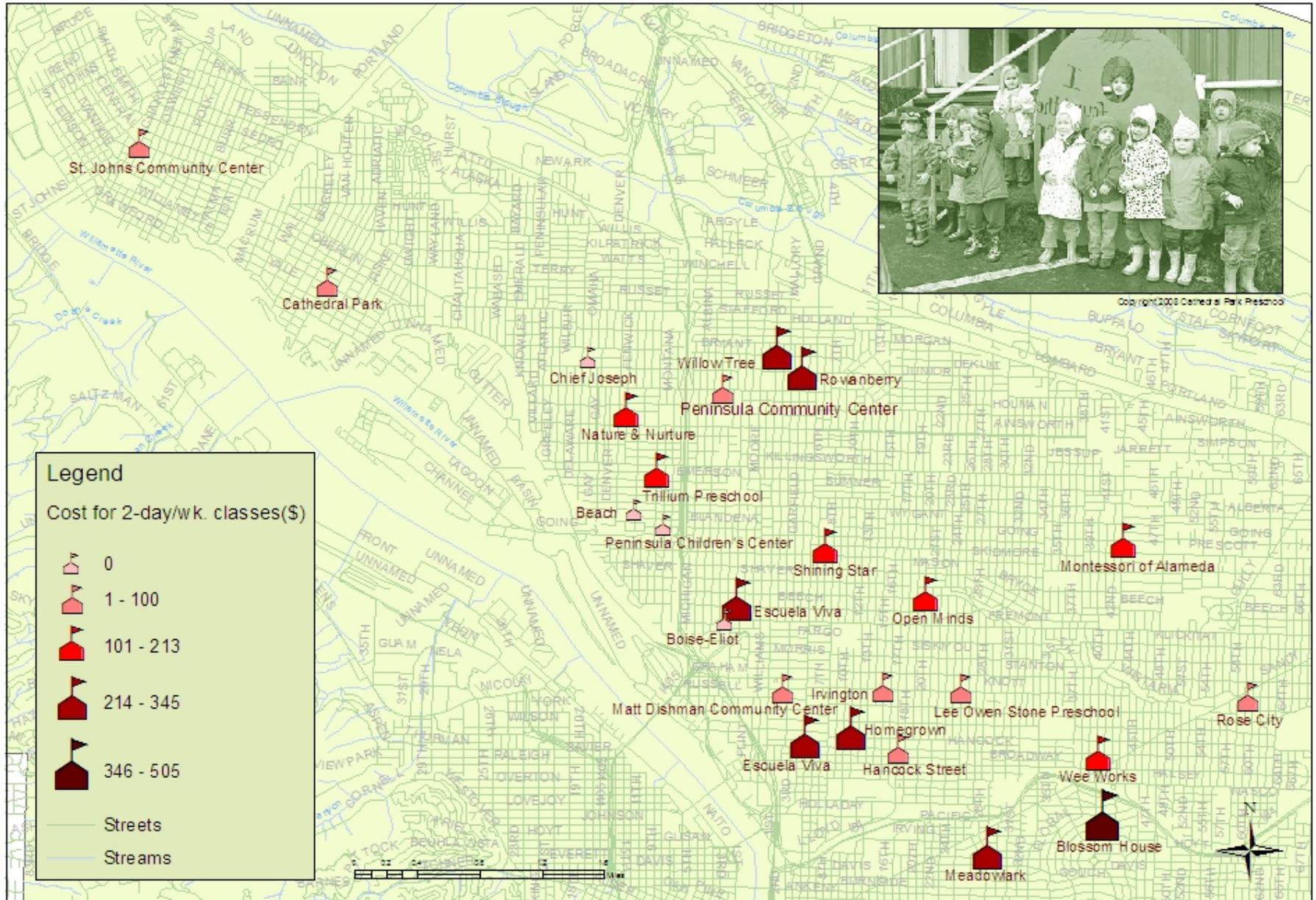
# North & Northeast Portland Preschools

## Number of Days Per Week Preschool is Offered



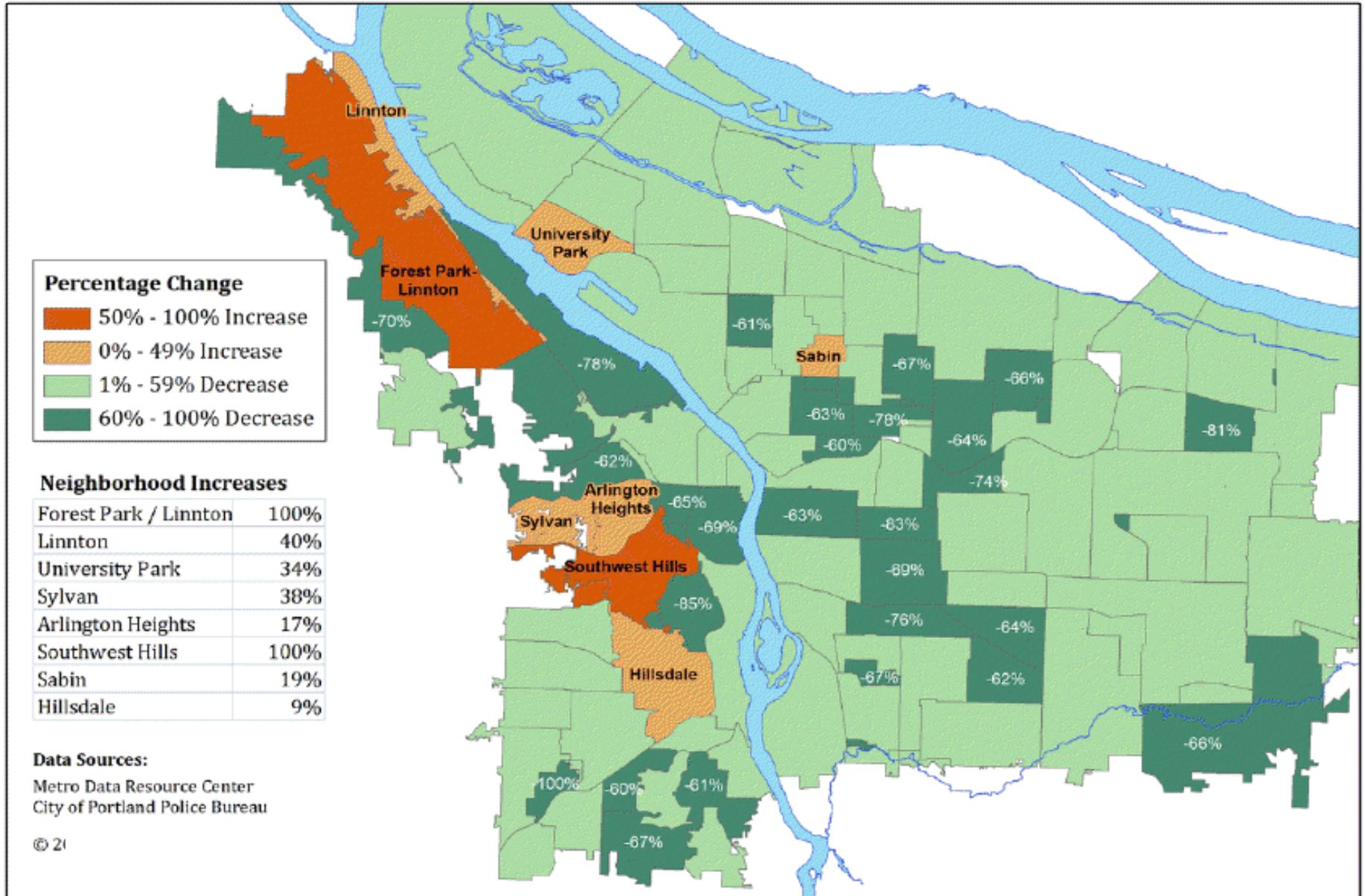
# North & Northeast Portland Preschools

## Preschools Ranked by Expense

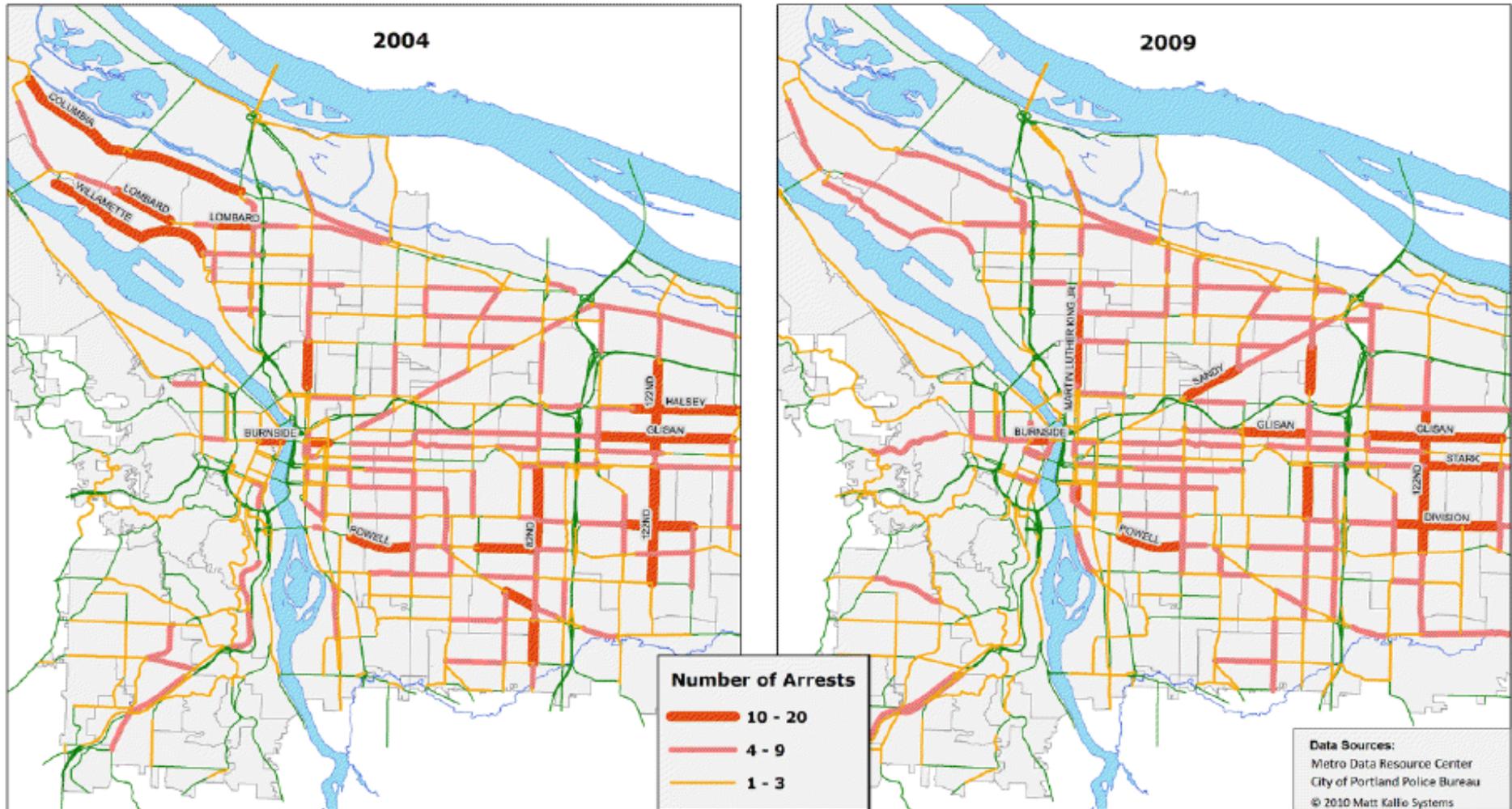


# Burglaries in Portland Neighborhoods

Percentage increase or decrease between 2004 and 2009



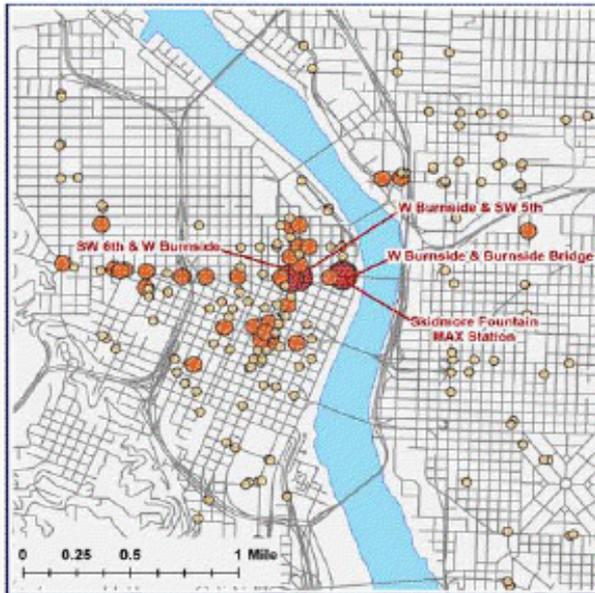
## Portland Arrests for Driving Under the Influence of Intoxicants, 2004 and 2009



# Portland's Perilous Transit Stops

Bus and train stops with assaults or robberies within 100 feet during 2009

## Downtown Detail



### Legend for both maps

#### Number of Incidents

- 17 - 30 ●
- 5 - 16 ●
- 1 - 4 ●

Data Sources:  
CivicApps.org  
Metro Data Resource Center  
TriMet Developer Resources  
City of Portland Police Bureau

