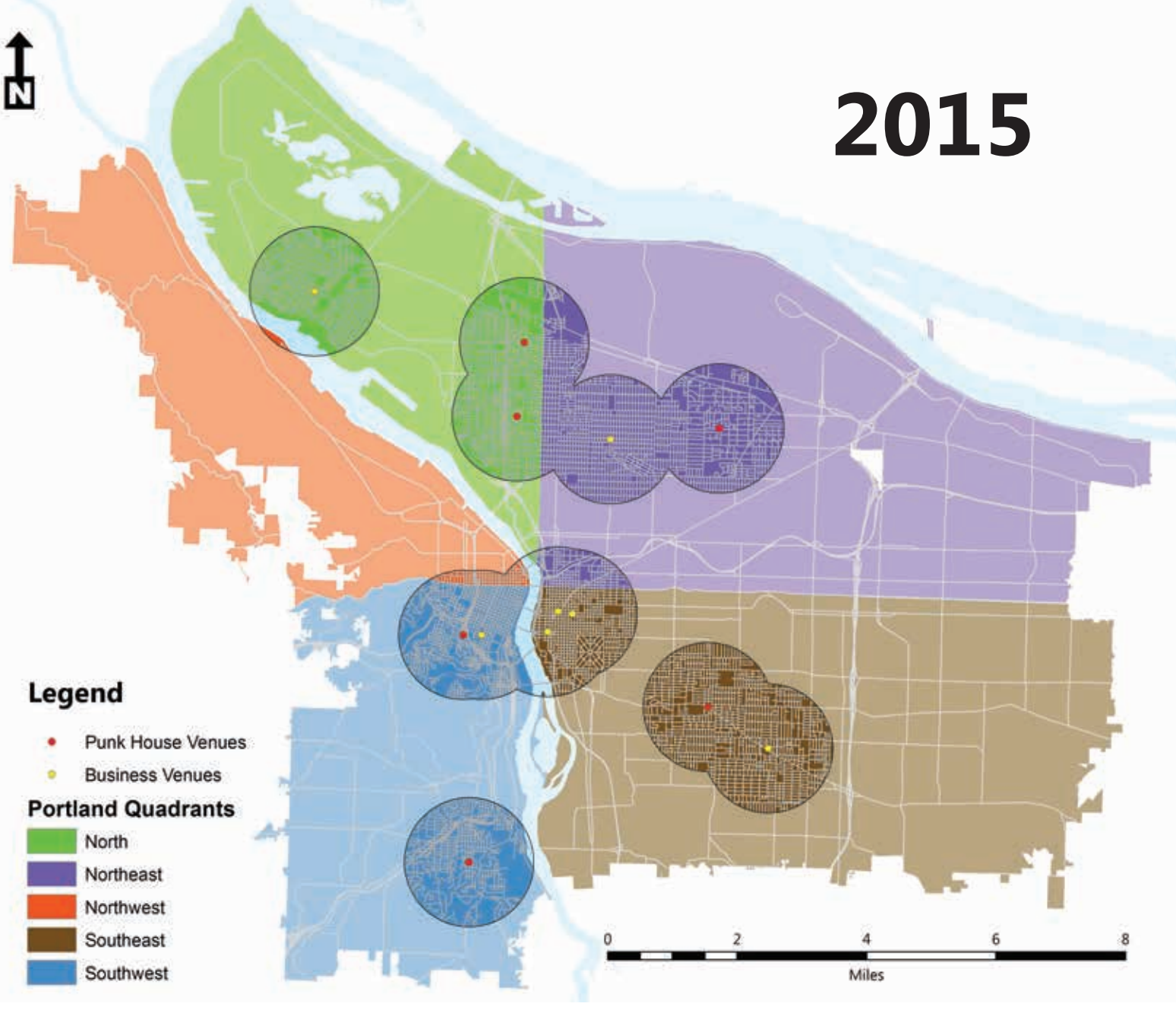
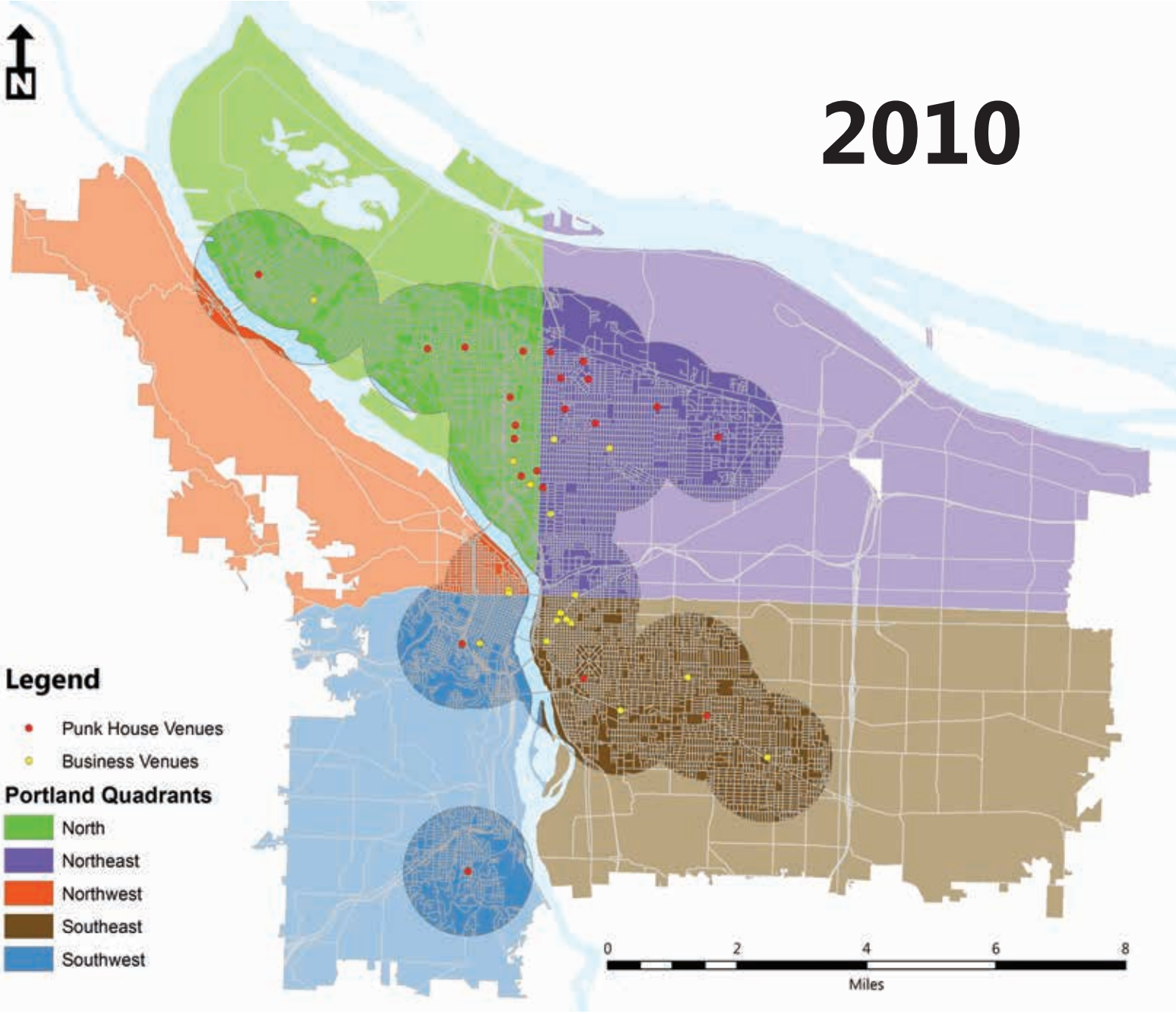
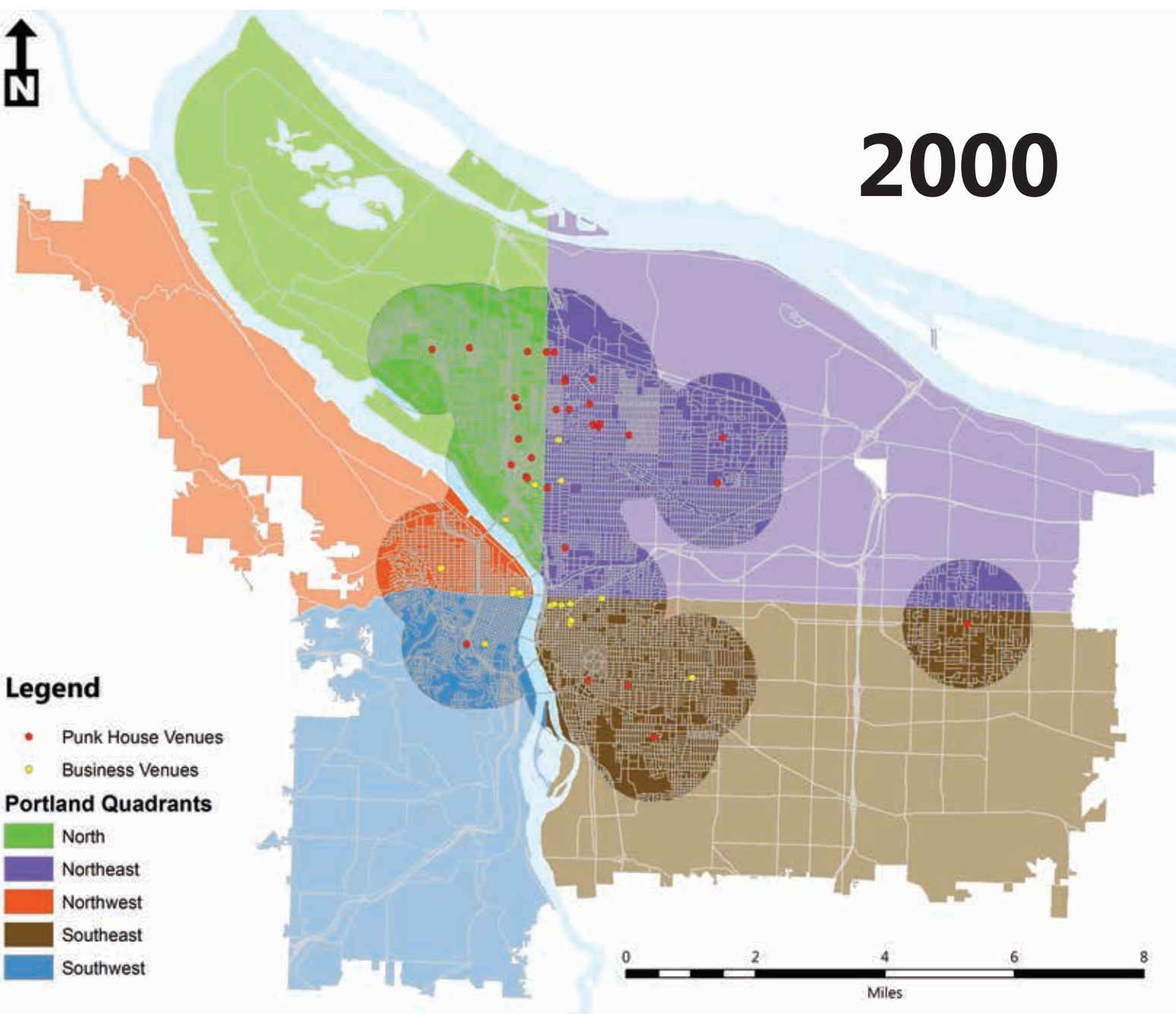


Venue Accessibility Analysis:



Change in Area Over Time	2000	2010	2015
Taxlot Area per Quadrant (Sq. Mi.)			
Quadrant	Area (Sq. Mi.)		
North	19.52	19.22	26.32
Northeast	29.47	29.42	40.80
Northwest	15.52	15.53	19.02
Southeast	27.99	27.84	36.44
Southwest	16.24	16.20	21.55
Total	108.74	108.21	144.13
Level 4 Taxlot Area per Quadrant (Sq. Mi.)			
Quadrant	Area (Sq. Mi.)		
North	3.46	2.53	1.92
Northeast	9.33	8.51	5.67
Northwest	0.25	0.67	0.30
Southeast	14.51	7.03	6.96
Southwest	2.48	5.94	2.48
Total	30.04	24.67	17.33
Percentage of Level 4 Taxlots			
Quadrant	Area (Percent)		
North	17.74%	13.14%	7.30%
Northeast	31.66%	28.92%	13.91%
Northwest	1.64%	4.32%	1.57%
Southeast	51.84%	25.24%	19.09%
Southwest	15.29%	36.65%	11.50%

Portland's All Ages Music Scene: A Changing Habitat

The Effects of Portland's Growth on All Ages Music Venues and Punk Houses

Project Statement:

While Portland has long been known as an vital center for independent music, equal accessibility to music venues is an issue that has plagued the city since the 1990's. The majority of the city's music venues are bars or large concert halls, meaning that they exclude anyone under the age of 21, as well as low income folks who cannot afford the ticket price of larger venues. Smaller venues that cater to an all ages crowd tend to struggle because they cannot serve alcohol, thanks in part to archaic regulations by the Oregon Liquor Licensing Commission (Kroner 2011)

Portland's young, poor, and radical musicians and artists have managed to carve themselves out a small but vibrant underground music scene by holding all ages concerts in private homes and small businesses around the city (Tropier, 2015). Often referred to as "punk houses", the shared single family homes cum music venues are controversial amongst city residents, and are often seen as nuisances by neighbors (Griffin 2011), however they are also a part of Portland's cultural identity, and an incubator for young artists. As the city grows and development and gentrification occur, will these places be priced out of the city? Does a habitat still exist for Portland's all ages music scene?

Using a dataset crowdsourced from Portland bands, music fans, and radio show hosts, we are using GIS to explore the change in the spatial distribution of Portland's punk houses and small all ages music venues from 2000-2015. We will run a habitat analysis to determine what percentage of the city was available as a punk house habitat for the years 2000, 2010, and 2015, based on criteria derived from our empirical data. We will also compare venue accessibility in our three study years.

Methods:

Habitat Analysis

- Produced Excel sheet based on crowd sourced data
- Imported to ArcMap
- Geocoded points
- Intersected vector points with taxlot layer
- Chose criteria for habitat: ranked by importance
 - 0 – no matches; does not meet any criteria
 - 1 – SFR; taxlots identified as single family residences
 - 2 – Rent; falls below max monthly rent cost
 - 3 – Sq. Footage; falls within min max range of property sq. footage
 - 4 – % Family; percentage of families that live within census tract
- Criteria ranges set based off intersect points taxlot data
- Evaluated data using ranked criteria
 - With 0 as meets no criteria – 4 as meets all criteria
- Located taxlots that meet all 4 criteria and identified them as "most suitable habitat"
- Calculated percent change of "most suitable habitat" area
- Mapped outcome to show change over time

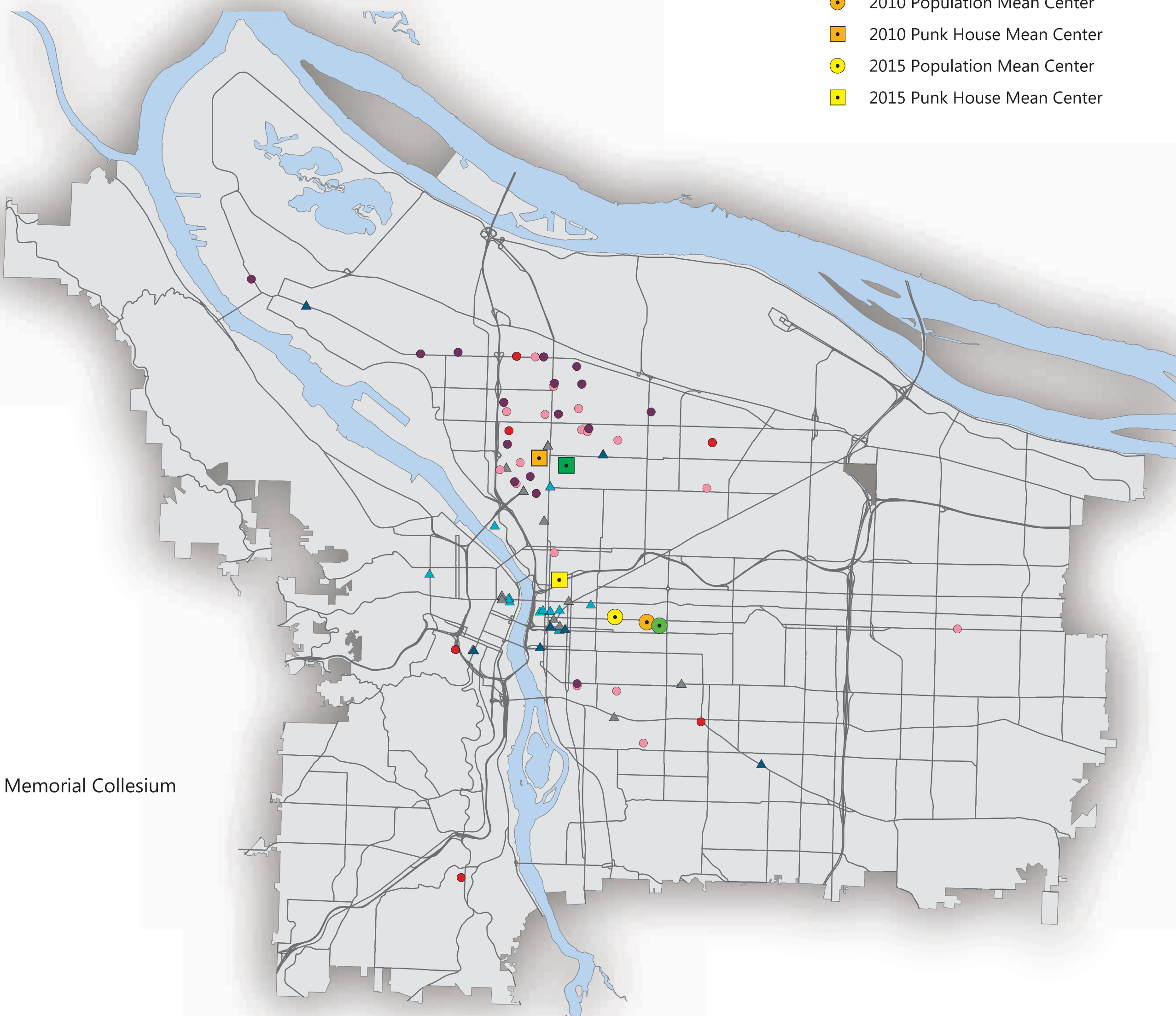
Accessibility Analysis

- Applied 1 mile buffer to all points
 - Representing accessibility
- Dissolved buffer to one multipart polygon
- Calculated multipart polygon area in sq. mi.
- Mapped outcome to show change in spatial distribution over time

Conclusion:

Based on our habitat and accessibility analysis, we were able to draw the conclusion that Portland has experienced a drop in the amount of punk houses and all ages business venues over time. This appears to be due to a loss in the amount of single family homes (possibly due to an increase in multiuse condo and apartment buildings), an increase in rent prices, and more families with young children moving into the city. We also observed a change in the spatial distribution of the punk houses and all ages business venues over our years of study. By calculating the mean center of our punk house points for each year, we were able to observe how their distribution fluctuated, with a trend moving from the North/Northeast part of the city in 2000 and 2010 toward the South in 2015. Our study was limited by the lack of availability of data between our study years, as well as the lack of previous models or studies of this subject to base our analysis off of. However, it was clear from our findings that Portland's growth has had a negative impact on the number of all ages venues in the city, leading to less accessibility to affordable places for people of all ages to watch live music.

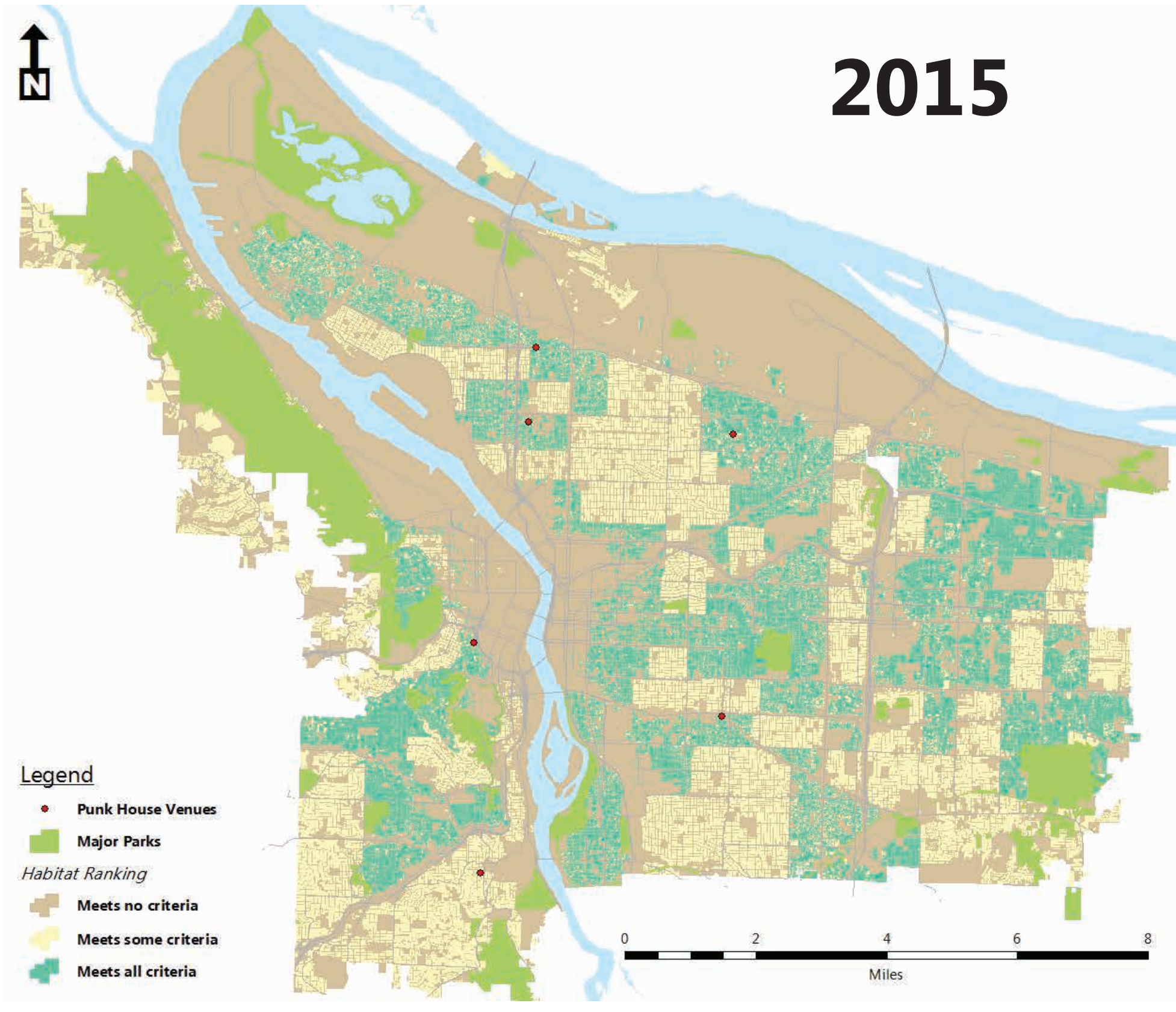
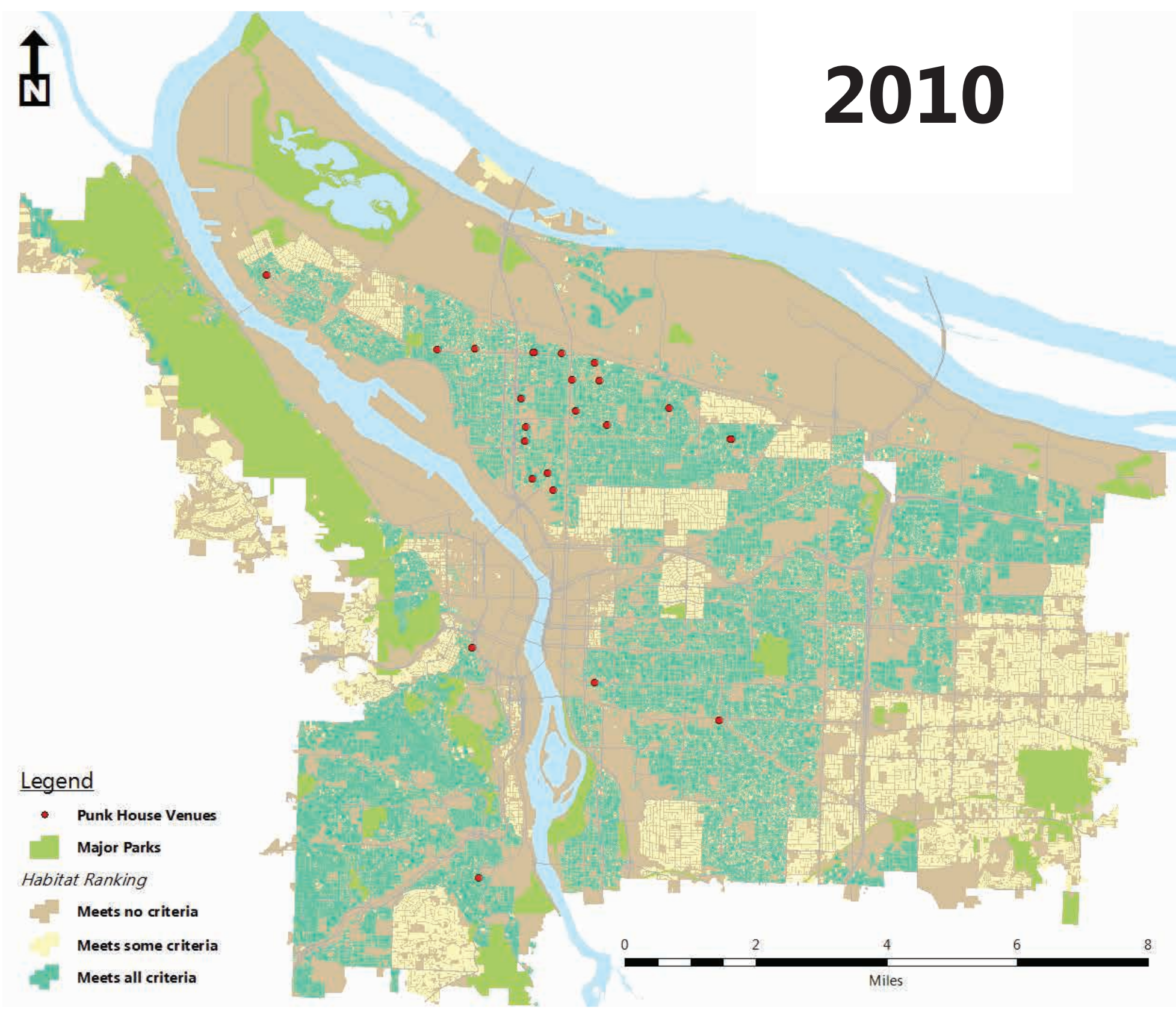
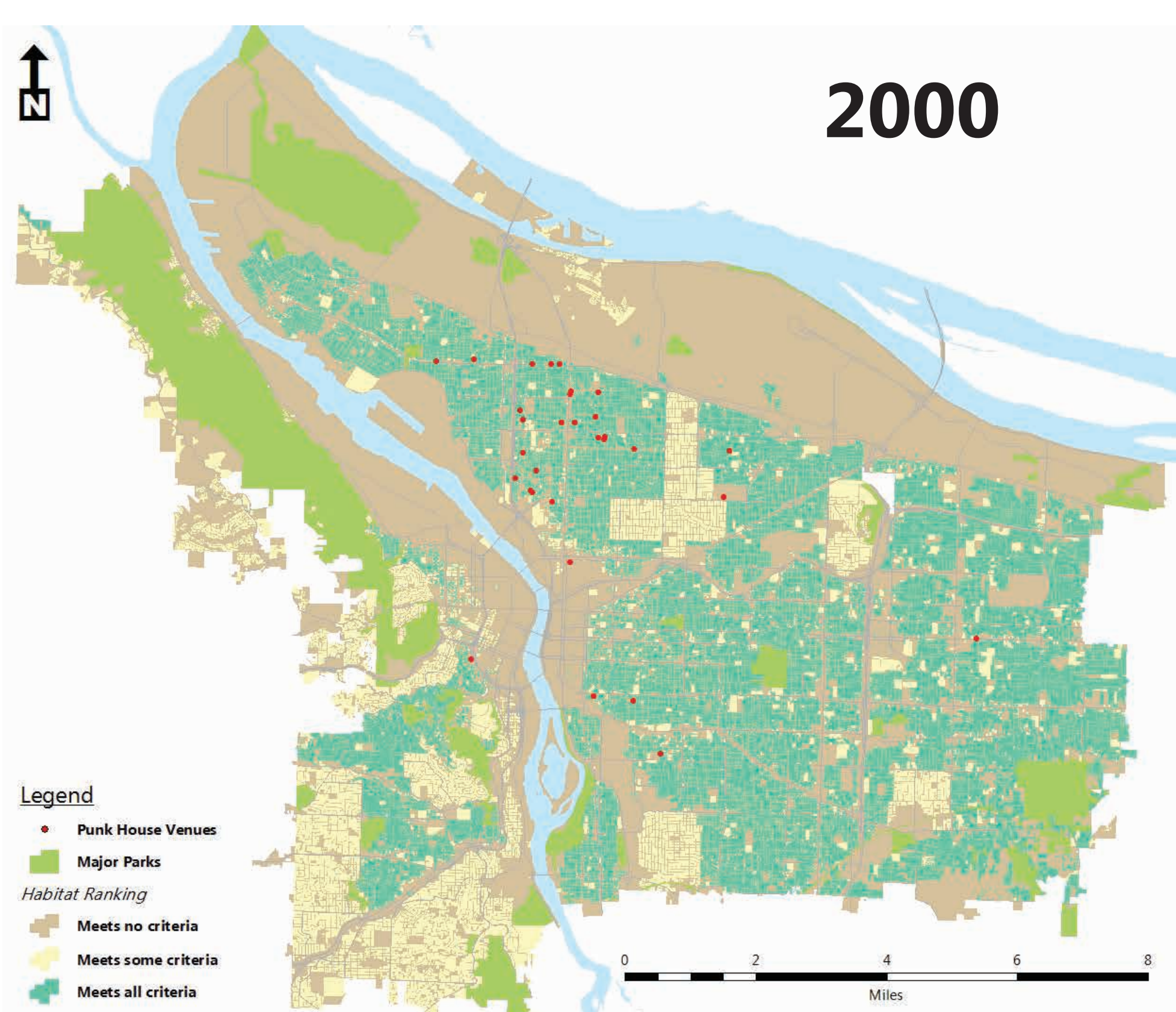
Portland All Ages Music Venues and Punk Houses 2000-2015



Sources:

Map Layers:
Portland RUS Streets, Rivers, City Boundary, Parks
US Census Bureau: Demographic Data
American Community Survey: Demographic Data
Research Sources:
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Fuller, D. 2012. *Vanishing All-Ages Venues*. Portland State Vanguard. Web article.
Griffin, A. 2011. *Home Based Music Clubs Popping Up in Portland Residential Neighborhoods*. The Oregonian. Web article.
Kroner, M. 2014. *How to Survive as an All Ages Venue*. Think Out Loud: Oregon Public Broadcasting. Web article.
Tropier, M. 2015. *No Way to Kill It: The Portland All Ages Music Scene that Portland Doesn't Want You to Know About*. Portland Mercury. Web Article.
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Punk House Suitable Habitat Analysis:



Venue Point Statistics	2000	2010	2015
Number of Venues per Year			
Punk Houses	31	24	6
Businesses	19	19	7
Actual Ranges			
Landuse	SFR	SFR	SFR
Rent	491 - 919 (750)	654-1128	780-1372
Building square footage (sq. ft.)	611-2880	910-4754	110-4754
% Single Family in census tract	0.3-27.8	2.7-28.8	2.53-34.78
Ranges used for Calculation			
Landuse	SFR	SFR	SFR
Rent	≤750	≤1200	≤1400
Building square footage (sq. ft.)	≥600/≤3000	≥900/≤5000	≥1000/≤5000
% Single Family in census tract	≤30%	≤30%	≤35%
Area within 1 Mile of Venue			
Accumulative area in buffers (sq. mi.)	37.25	41.69	29.19



Research, Cartography, and Analysis by:
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