



Introduction

For many communities, an important step in assessing housing needs is to identify the community's risk factors related to displacement. The following analysis presents several factors to consider related to the [2020 Housing Action Plan](#), as they relate to conditions that may result in greater potential for residents to be displaced from their homes in the future due to economic strife, development pressure, and equity conditions present in the City and surrounding jurisdictions. Displacement can have a life-changing negative effect on households that are directly impacted. It can also disrupt the social fabric and networks of trust and support that existing within a community. For these reasons, understanding potential displacement risks in a community is an important step in assessing housing needs.

Methodology

This analysis was prepared under the guidance of the Washington [State Department of Commerce methodology for Housing Action Plans](#) as part of the housing needs assessment. However, the method suggested by the State methodology is not available to jurisdictions in eastern Washington as many variables the state asked jurisdictions to consider are not measured on a regional level in this area. As a result, the City of Spokane identified a comparable methodology—namely the Social Vulnerability Index prepared by the federal Agency for Toxic Substances and Disease Registry (ATSDR).

ATSDR's Geospatial Research, Analysis & Services Program (GRASP) created Centers for Disease Control and Prevention Social Vulnerability Index (SVI) to help public health officials and emergency response planners identify and map the communities that will most likely need support before, during, and after a hazardous event. While on the surface it may seem that disease and hazardous events have little to do with social displacement due to long-term effects like development pressure, many of the factors included in the SVI are the same as those that affect longer-term displacement factors. Accordingly, while the intent of the SVI is different, the ultimate results are the same as those that would cause residential displacement.

SVI groups the factors that contribute to vulnerability into four categories: socioeconomic status; household composition and disability; minority status and language; and housing type and transportation. The various sub-variables in each group are shown in **Table 1** Below. These factors, individually and combined, all contribute to displacement potential for residents. SVI calculates individual values for each category as well as a combined "overall" value. These values are available separated by Census Block Group throughout the state.

TABLE 1: VARIABLES AND CATEGORIES INCLUDED IN SVI VALUES

| | | |
|------------------------------|---|---|
| Overall Vulnerability | Socioeconomic Status | Below Poverty |
| | | Unemployed |
| | | Income |
| | | No High School Diploma |
| | Household Composition and Disability | Aged 65 or Older |
| | | Aged 17 or Younger |
| | | Older than Age 5 with a Disability |
| | | Single-Parent Households |
| | Minority Status & Language | Minority |
| | | Speaks English "Less than Well" |
| | Housing Type & Transportation | Multi-Unit Structures |
| | | Mobile Homes |
| | | Crowding |
| No Vehicle | | |
| Group Quarters | | |

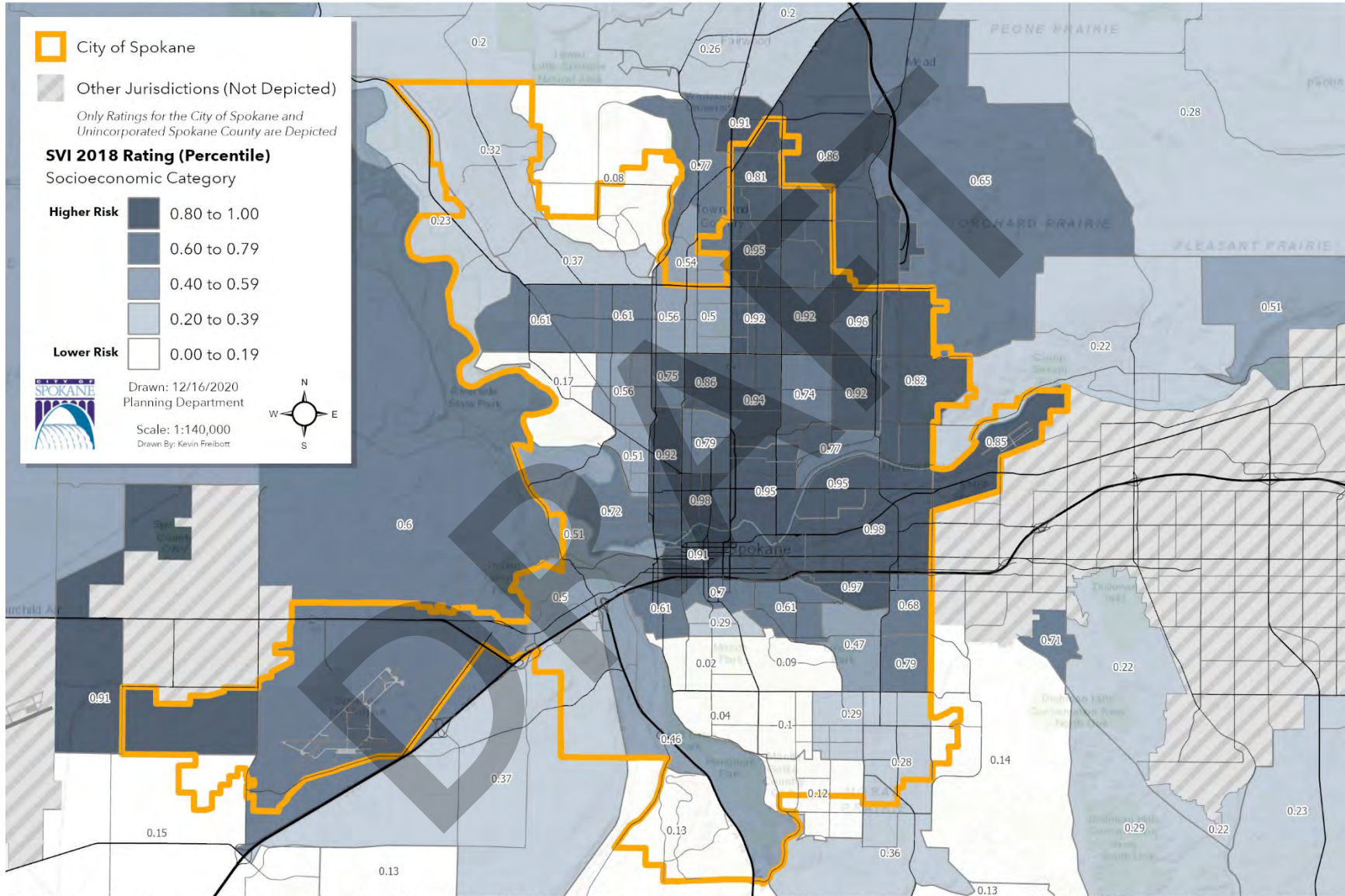
Source: CDC SVI 2018 Documentation, January 31, 2020

The original source for the values shown in the rightmost column in **Table 1** is the American Communities Survey, conducted by the U.S. Census Bureau, representing the 5-year estimates for 2018. Each Census Tract was ranked for these variables. Raw variables represent a percentage comparison between the census tract and the United States as a whole. Thus, these values are a comparison of a given tract’s vulnerability as it compares to the nation. A rating of 0 (0 percent) indicates a low vulnerability while a value of 1 (100 percent) indicates high vulnerability. **Figure 1** through **Figure 5** indicate this value with color. Darker colors in the futures represent higher vulnerability in any given tract.

The following Figures are provided below, showing those values by block group in the City of Spokane and surrounding area:

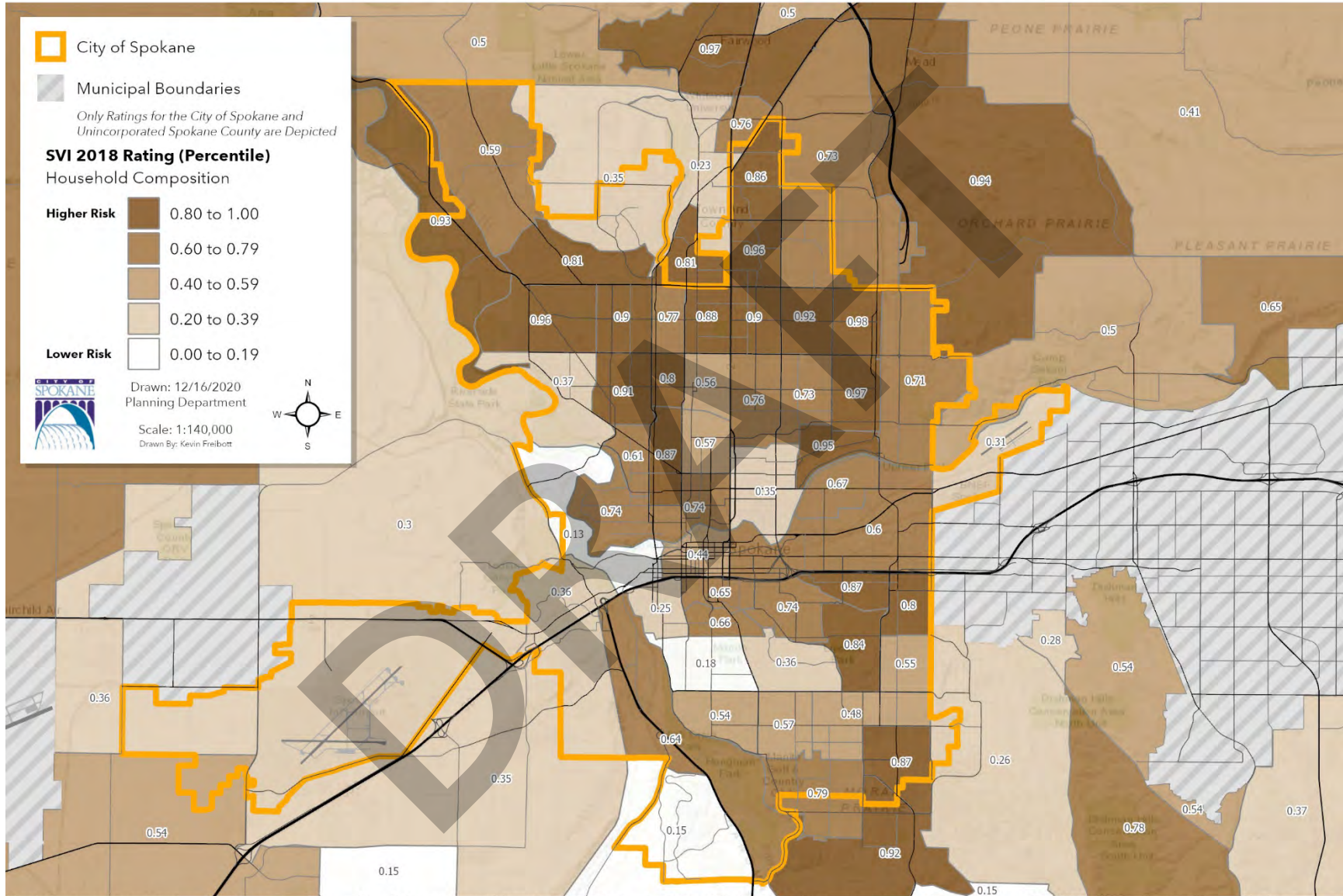
- **Figure 1:** Socioeconomic Status
- **Figure 2:** Household Composition and Disability
- **Figure 3:** Minority Status and Language
- **Figure 4:** Housing Type and Transportation
- **Figure 5:** Overall SVI Rating (All Factors Combined)

Figure 1: SVI Value, Displacement Risk due to Socioeconomic Status



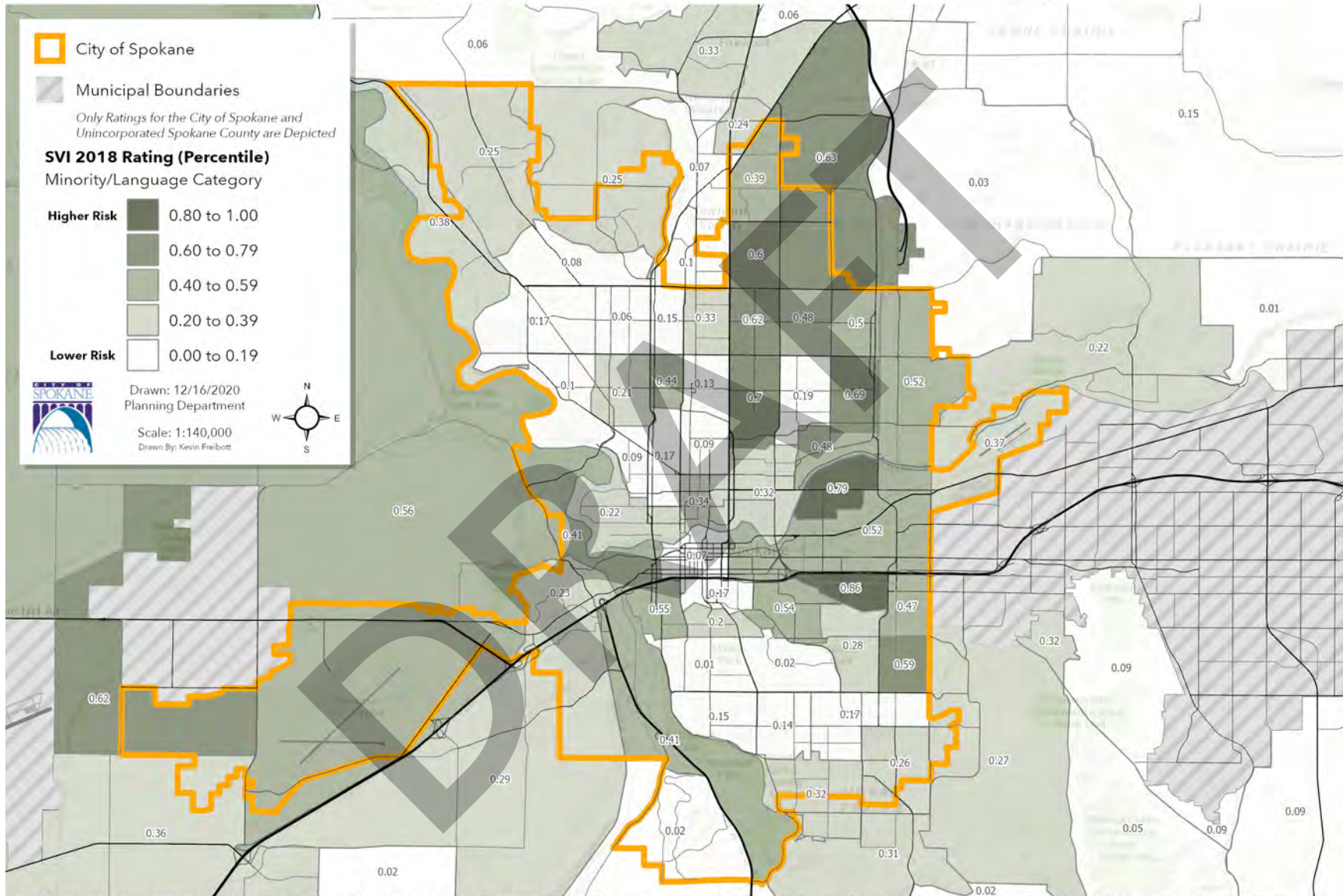
Map Layer Source: City of Spokane, Spokane County, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Data Source: U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, SVI2018 CDC analysis.

Figure 2: SVI Value, Displacement Risk due to Household Composition and Disability



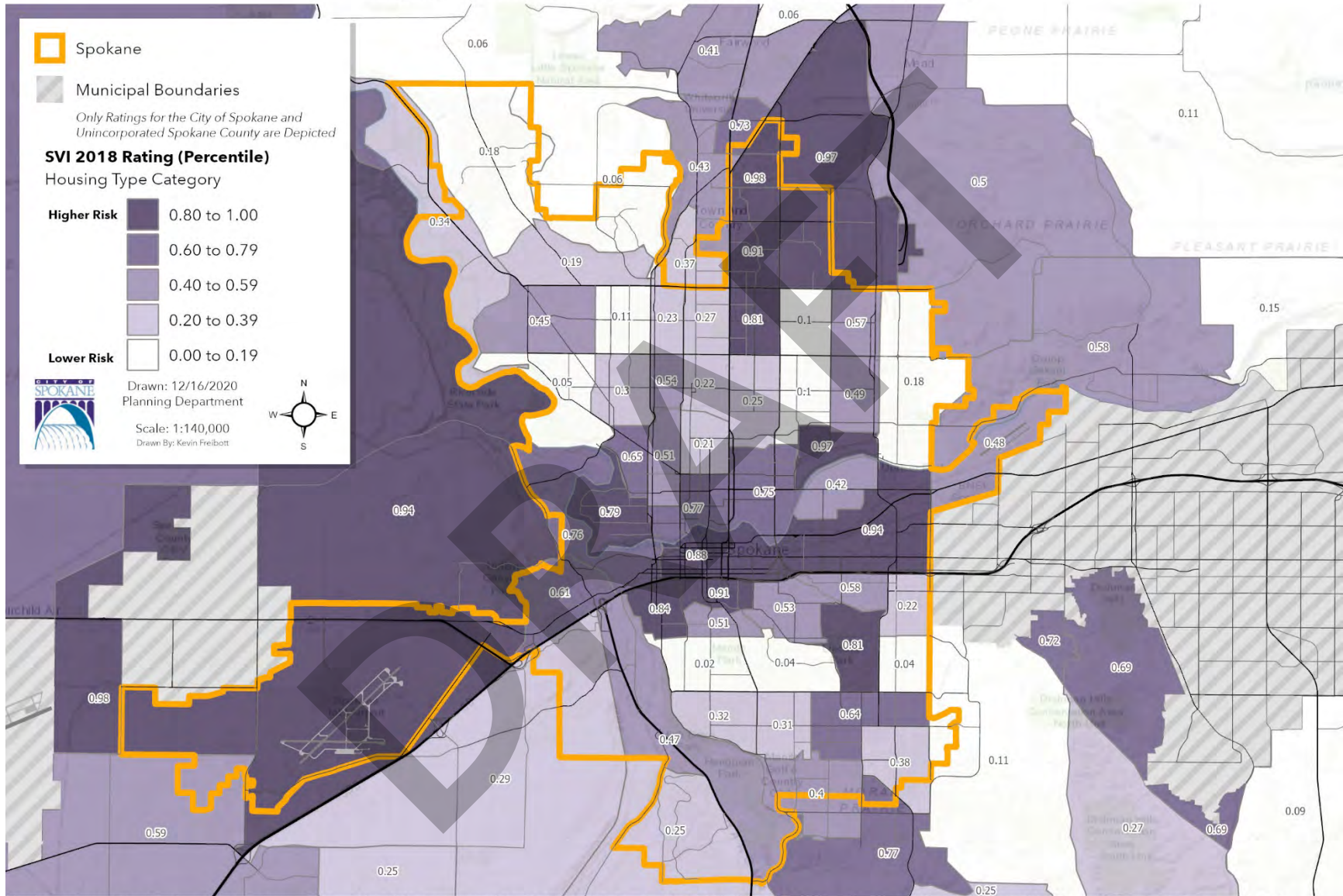
Map Layer Source: City of Spokane, Spokane County, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Data Source: U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, SVI2018 CDC analysis.

Figure 3: SVI Value, Displacement Risk due to Minority Status/English Ability



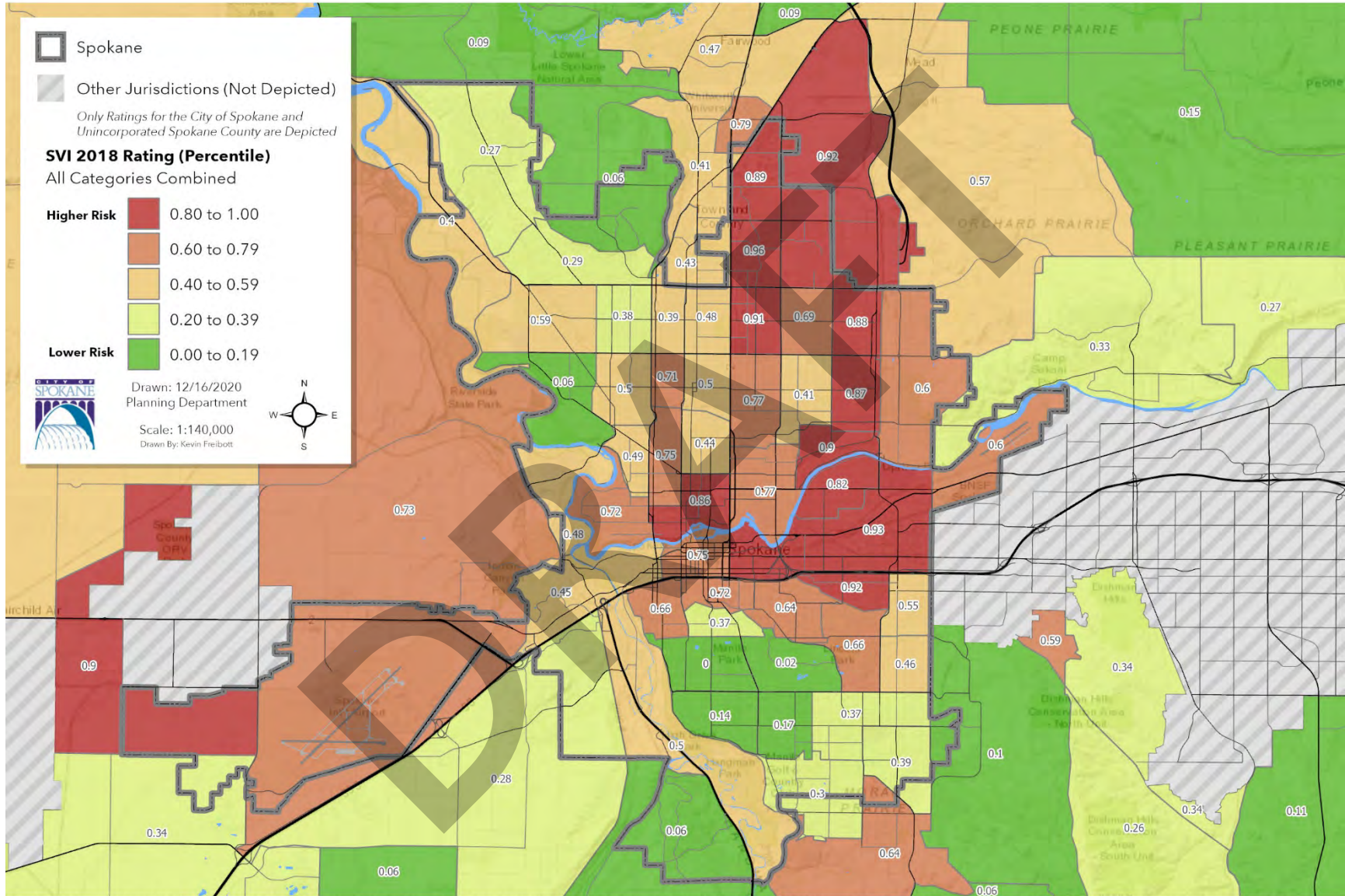
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Figure 4: SVI Value, Displacement Risk due to Housing Type



Map Layer Source: City of Spokane, Spokane County, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Data Source: U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, SVI2018 CDC analysis.

Figure 5: Overall SVI Value, Combined Value for All Categories by Tract



Degree and Magnitude of Risk

The analysis presented in **Figures 1-5** gives a good overall evaluation of relative displacement risk throughout the region. However, these figures do not take into account the actual number of dwellings located in any one location. Areas with high displacement risk may only have a few homes within them. Conversely, areas with moderate risk may have extremely high numbers of dwellings. For example, the area around the Spokane International Airport is shown in **Figure 5** as having a generally high displacement risk. However, there are comparatively very few dwellings there, as most of the area contains Airport property. By factoring in both the risk *and* the number of dwellings, both sourced from the same Census and American Communities Survey data, the analysis becomes more helpful when determining where assistance might be applied and to what degree.

Methodology

To provide additional detail in this analysis, it is helpful to consider not only the comparative displacement risk in certain areas of the City but also the potential magnitude of that risk. The clearest way to provide both location of risk *and* the magnitude of that risk is to compare the risk factor depicted in **Figure 5** above with the number of dwelling units that exist in any given area. This helps correlate areas in the City of Spokane of high displacement risk with areas of high population and helps identify where more people are at risk of displacement. Additionally, it is helpful to further refine the data available by Census tract (the large areas indicated in the map) into smaller units of area to give a more refined level of detail.

Tessellation, the division of larger irregular areas into small regular shapes like hexagons, provides for a series of smaller shapes with no overlap. For this analysis, a tessellation of the study area was created with a map of interlaced hexagons 1/8 of a square mile in area. The resulting displacement risk of each hexagon was calculated by adding up the area of each risk level within that hexagon. In other words, a hexagon in which half the area has a risk of 1.0 and the other half has a risk of 0.5 would result in an overall risk in that hexagon of 0.75 ($50\% \times 1.0 + 50\% \times 0.5 = 0.75$).

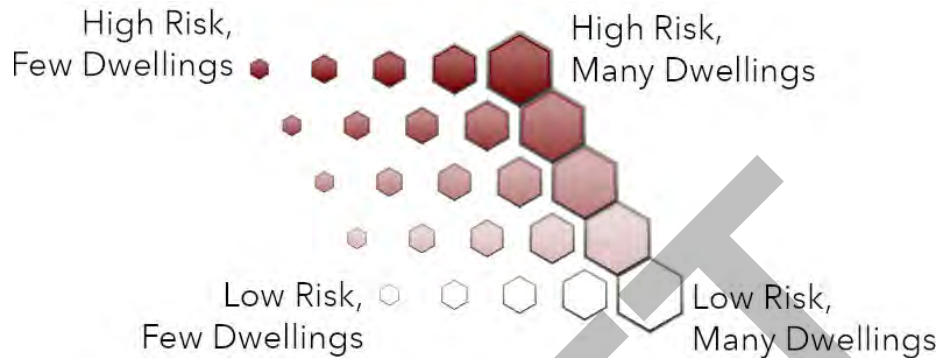
The resultant risk in each 1/8-square mile hexagon can then be compared against the number of dwelling units in that Census tract. Because the data does not include the location of each dwelling unit within the tract, the number of dwellings cannot be accurately refined into smaller units like the displacement risk. As a result, each hexagon was assigned the number of dwelling units matching the tract within which its center is located.

Results

The methodology described in the previous section provides for a simple comparison between hexagons of the resulting displacement risk versus the relative density of dwelling units in that part of the City. In other words, we can look at both the level of risk *and* the relative number of dwellings that may be at risk. To further clarify this situation, any hexagons in which there are zero dwellings have been removed entirely from the map.

The results of the methodology described above is depicted in **Figure 6**. Two factors are indicated by each hexagon. The relative number of dwellings within each hexagon is indicated by size—the larger the hexagon, the more dwellings that might be affected. Conversely, the

resulting displacement risk is shown by the intensity of color in the hexagon—white hexagons have low risk, dark red hexagons have high risk. As such, a large hexagon with dark red color indicates an area in which there is both a high risk of displacement and that displacement may affect many dwellings. Conversely, a small white hexagon indicates areas with little risk and few houses. The following graphic provides a general guide to the depictions in **Figure 6**.

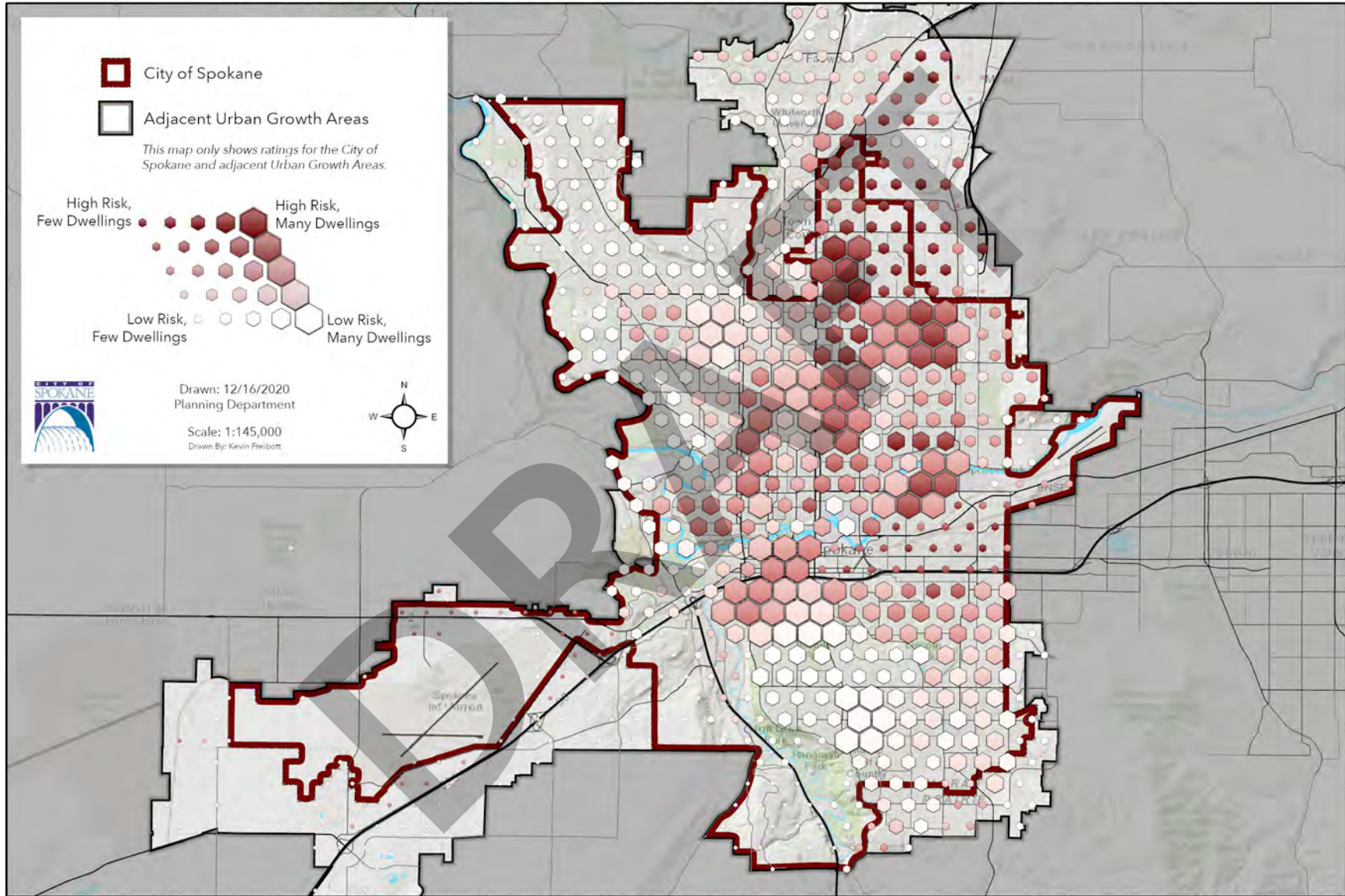


As shown in **Figure 6** below, there are several distinct areas of concern for higher risks of displacement affecting the most people.

- Distinct nodes of concern exist within the City of Spokane, namely north of the river between the Division and Hamilton/Nevada arterials.
- An additional node of concern, an area of potentially high risk with significant numbers of dwellings, exists in the Chief Garry Park neighborhood, south of the river.
- Additional areas of concern in the City of Spokane include the lower south hill areas and portions of the West Central Neighborhood along the Maple arterial and south of Boone.

Parts of the East Central neighborhood, specifically those north of the freeway, display universally high displacement risk, according to the analysis. However, the relatively fewer homes in that area when compared to the region indicates a lower magnitude of possible effect. That isn't to say decisionmakers shouldn't be concerned about that area, but the solutions presented to that location should consider the amount of housing as well as the potential benefit of any solution offered to that area.

Figure 6: Displacement Risk Compared to Housing Density (Showing Urban Growth Area Only)



Map Layer Source: City of Spokane, Spokane County, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Data Source: U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, SVI2018 CDC analysis.

Strategies for Mitigating and Responding to Displacement

By considering the results shown in Figure 6, decisionmakers can better understand which measures to reduce the risk or mitigate the effects of displacement should be applied, where in the City they should apply, and to what degree. The Department of Commerce has provided some possible solutions to displacement in their Guidance for Developing a Housing Action Plan. Those possible solutions are described briefly in **Table 2** below:

TABLE 2: POSSIBLE STRATEGIES TO MITIGATE/REDUCE DISPLACEMENT

| Type of Displacement | Strategy |
|---|---|
| Physical Displacement Strategies | PD-1: Strategic Acquisition and Financing of Existing Multifamily Housing |
| | PD-2: Support Third-party Purchases of Existing Affordable Housing |
| | PD-3: Notice of Intent to Sell / Sale Ordinance |
| | PD-4: Foreclosure Intervention Counseling |
| | PD-5: Mobile Home Park Preservation and Relocation Assistance |
| | PD-6: Mobile Home Park Conversion to Cooperative |
| | PD-7: Tenant Relocation Assistance |
| | PD-8: Just Cause Eviction Protections |
| | PD-9: "Right to Return" Policies for Promoting Home Ownership |
| | PD-10: Regulating Short-term Rentals |
| Economic Displacement Strategies | ED-1: Community Land Trusts |
| | ED-2: Need-based Rehabilitation Assistance |
| | ED-3: Down Payment Assistance |
| | ED-4: Property Tax Assistance Programs |
| Cultural Displacement Strategies | CD-1: Grants/Loans to Directly Support Small Businesses |
| | CD-2: Financing Ground Floor Commercial |
| | CD-3: Preservation Development Authorities (PDA) and Ports |
| | CD-4: Commercial Community Land Trust |
| | CD-5: Community Benefits/Development Agreements |
| | CD-6: Micro-Retail and Flexible Cultural Space Design |
| | CD-7: Business Incubators, Co-Working Spaces, and Artisan/Makers Spaces |

Source: [Guidance for Developing a Housing Action Plan—Public Review Draft](#)

Notes: Some of these strategies may be in place in part or entirely within the City of Spokane. This list is provided verbatim from the Department of Commerce documentation and does not represent a recommendation or prioritization of possible solutions. It is included here for completeness and to provide general information to the public.

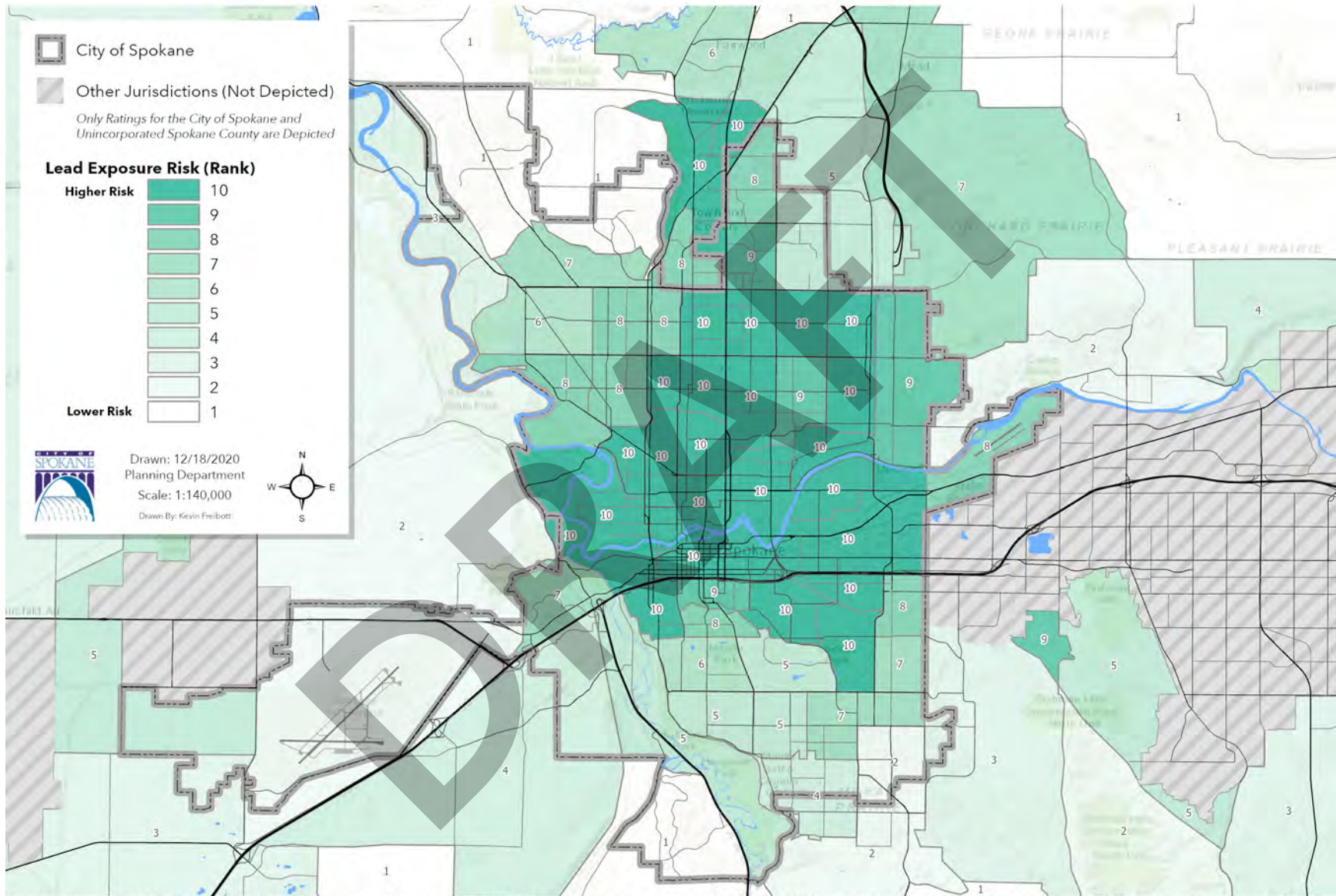
Additional Consideration: Lead Paint Exposure

While not strictly a consideration for displacement, consideration of the possible risk of exposure to lead paint can give further insight into portions of the study area that may contain aging housing. Lead paint in older homes can elevate indoor lead levels, which in combination with poor housing conditions can elevate the risk of lead exposure. Children who live in households at or below the federal poverty level and those who live in housing built before 1978 are at the greatest risk of lead exposure.¹ Also, communities of color are at a higher risk of lead exposure because they may not have access to safe, affordable housing or face discrimination when trying to find a safe, healthy place to live.¹ This is called housing inequity, and it puts some children, such as non-Hispanic Black persons, at a greater risk of exposure to lead.¹ Lead exposure can cause learning disabilities, behavioral problems, stunted physical growth and delayed mental development. These health conditions can themselves point to possible displacement of individuals and households that may be sensitive to lead exposure (i.e. those with young children). Also, the lead exposure risk of a given area can give a general indication of the age of homes and the need for those homes to be renovated or updated, processes that also result in displacement.

To map the possible lead exposure in the study area, and to provide additional consideration for displacement risk, the map in **Figure 7** is provided below. The data presented in **Figure 7** are sourced from the American Communities Survey and US Census Bureau, as compiled by the Washington Tracking Network of the Washington State Department of Health. Rather than a numerical exposure level in given locations of the study area, the map provides a ranking of 1 to 10, comparing each location in the study areas to all others and giving a rule-of-thumb indication of the level of expected possible exposure. The number rankings in this map have no relation to the SVI rankings presented in the previous maps.

¹ Childhood Lead Poisoning Prevention. "Populations at Higher Risk." Center for Disease Control. Url: <https://www.cdc.gov/nceh/lead/prevention/populations.htm>.

Figure 7: Lead Exposure Risk by Census Tract, Ranked



Map Layer Source: City of Spokane, Spokane County, Bureau of Land Management, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS Data Source: Washington Tracking Network, Washington State Department of Health. Web. "Housing Built Before 1980 that May Have Lead-based Paint based on Housing Estimates for 2010". Data obtained from the American Community Survey (ACS) five-year estimates. Published on WTN: October 2019.