



Because no one
should be hungry.

**Marion-Polk Food Share
Agency Locations and
Poverty:
*An Initial Analysis***

*GEO 592 – GIS 2
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Research Questions

Are current Marion-Polk Food Share agency locations adequately located for those in the most need in Marion and Polk Counties?

If not, what are potential areas in need of a food distribution location?



Methods

1. Geocode Marion-Polk Food Share agency locations.
2. Associate year 2000 census poverty statistics with year 2000 census block groups.
3. Create a choropleth map of percentage of total population in poverty by census block group.
4. Add federal, state, and corporate land boundaries, and water features.
5. Remove federal, state, and corporate lands, and large water features from block group layer to display only those areas with a population.
6. Query to find percentage of poverty associated with each agency location.
7. Query to find high poverty percentage areas without agency locations.
8. Analyze results



Marion-Polk Food Share

The volunteers, board of directors and staff of Marion-Polk Food Share, in partnership with a positive, nurturing and empowering community that is aware of the hunger needs of its people, both residents and visitors, will provide adequate sustainable resources and programs to meet those needs and work together to identify and **eliminate the root causes of hunger.**



Marion-Polk Food Share



Marion-Polk Food Share Facts

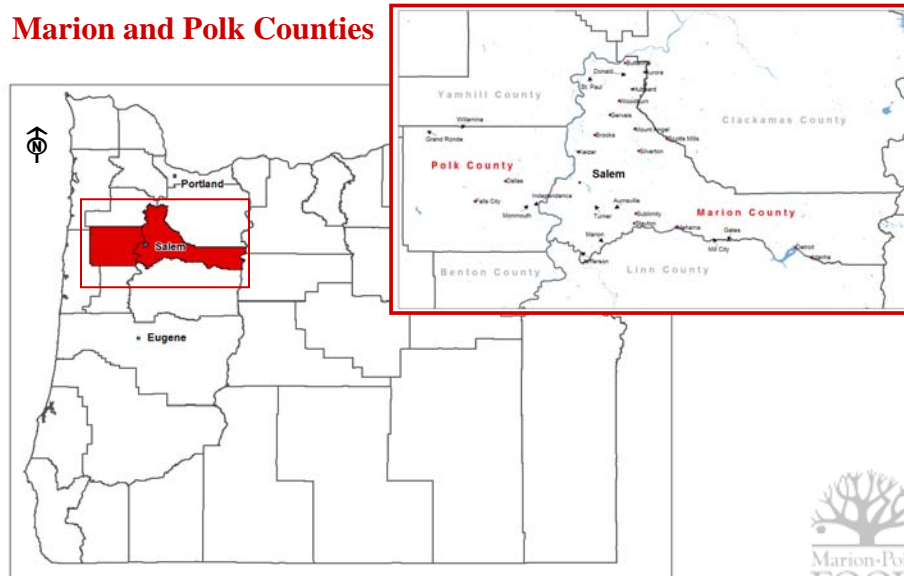
- Over **5,200 families** receive a food box each month
- **19,000 meals** are served each month
- **466,000 pounds of food** is distributed each month
- For every **\$10** donated MPFS can collect and distribute **60 pounds of food**



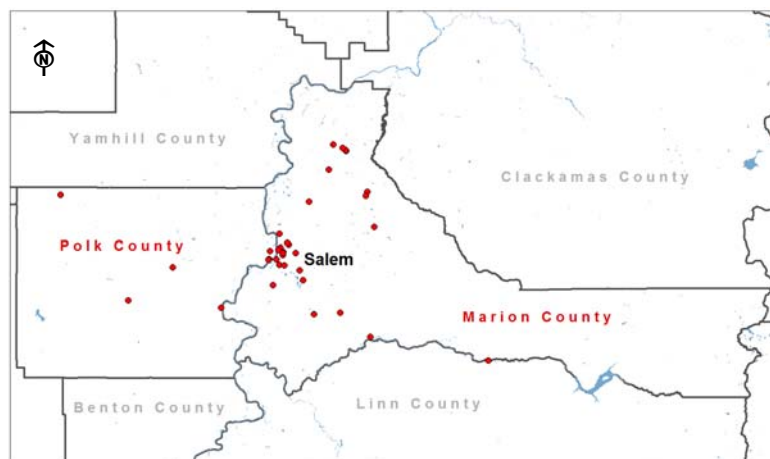
<http://www.foodbanksalem.org/hungerfacts.htm>



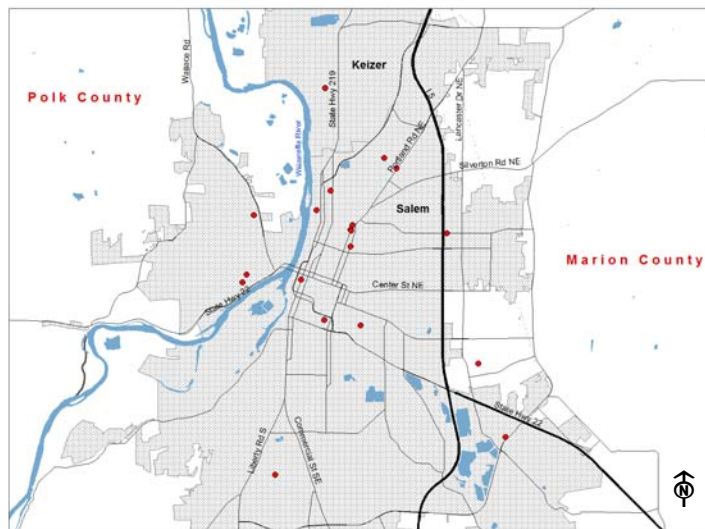
Marion and Polk Counties



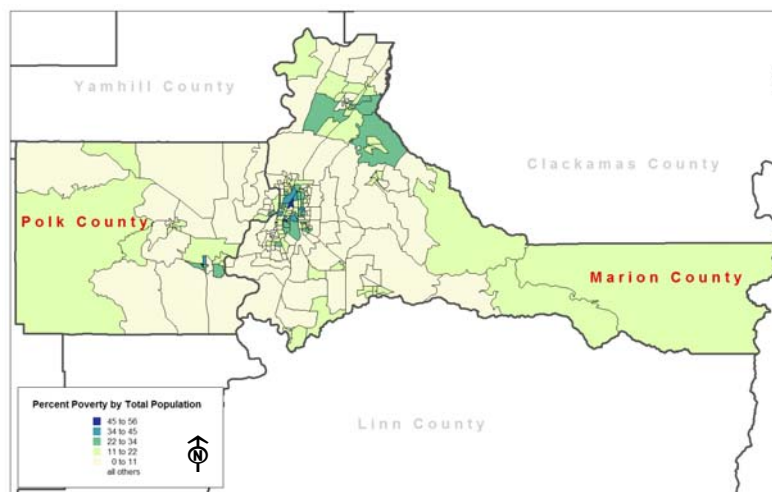
MPFS Agency Locations – Marion and Polk Counties



MPFS Agency Locations – Salem and Keizer



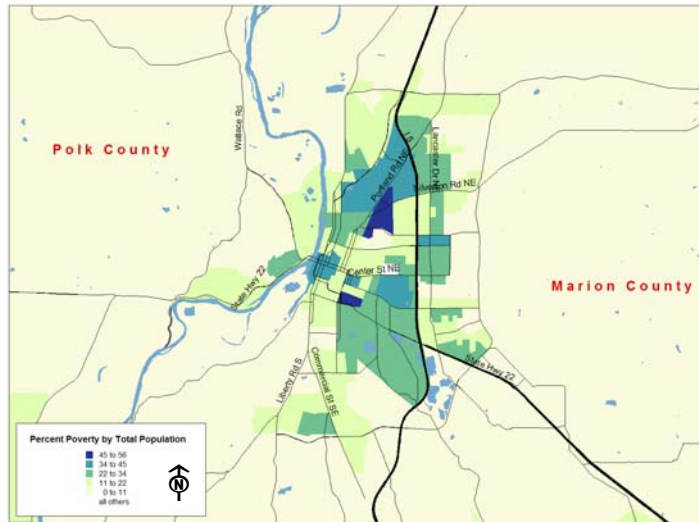
Percent Poverty in Marion and Polk Counties, Oregon – Year 2000



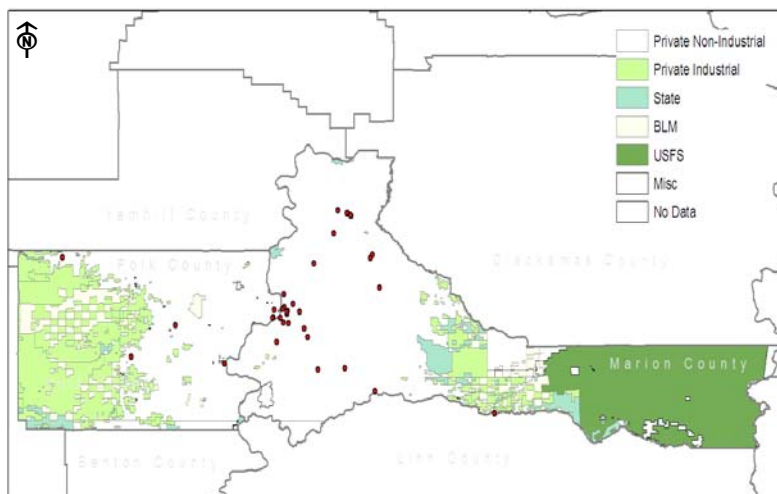
**Data from US Census Bureau 2000 Census*



Percent Poverty in Salem and Keizer, Oregon – Year 2000



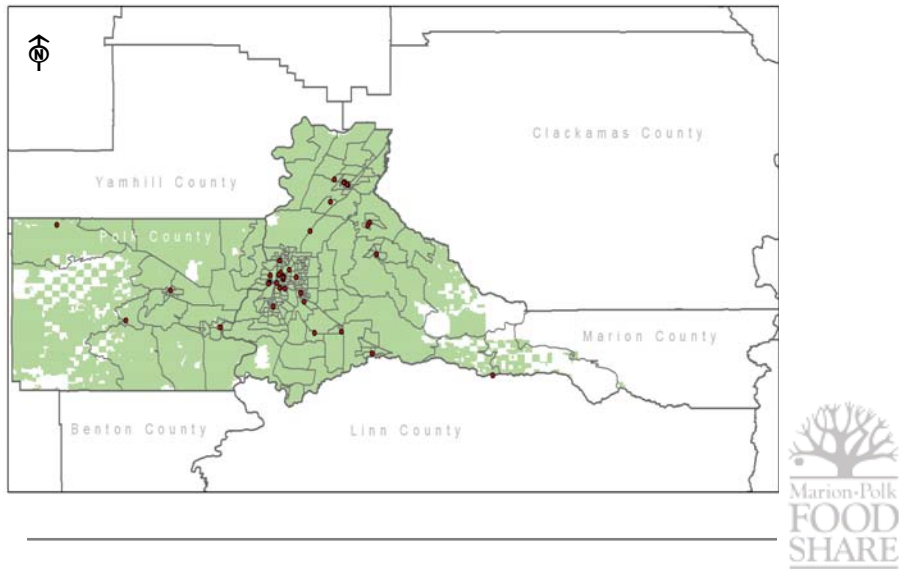
Forest Ownership and Management



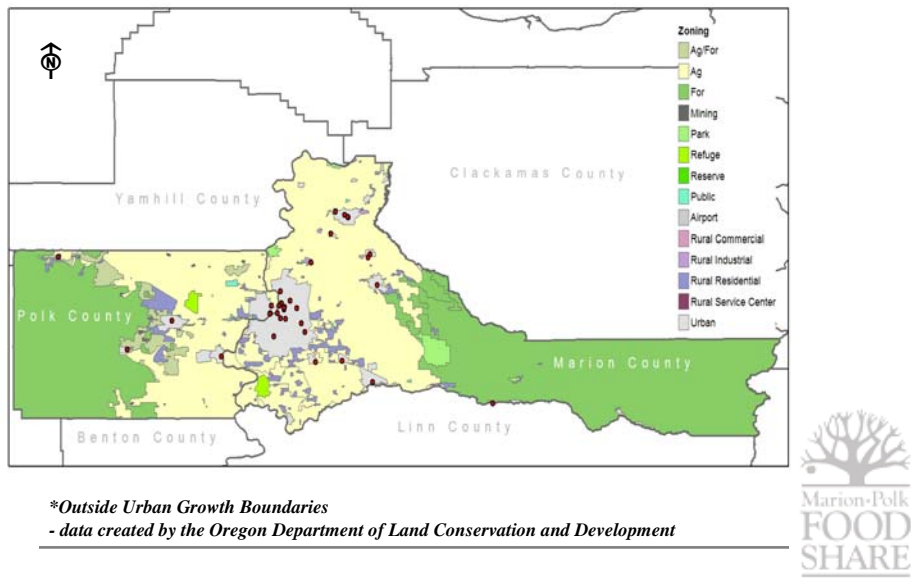
**Data created by the Oregon Department of Forestry*



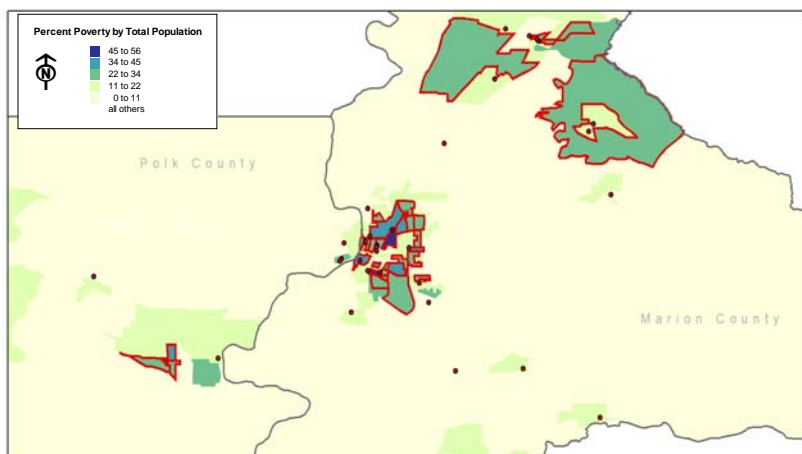
Attempted Raster Analysis



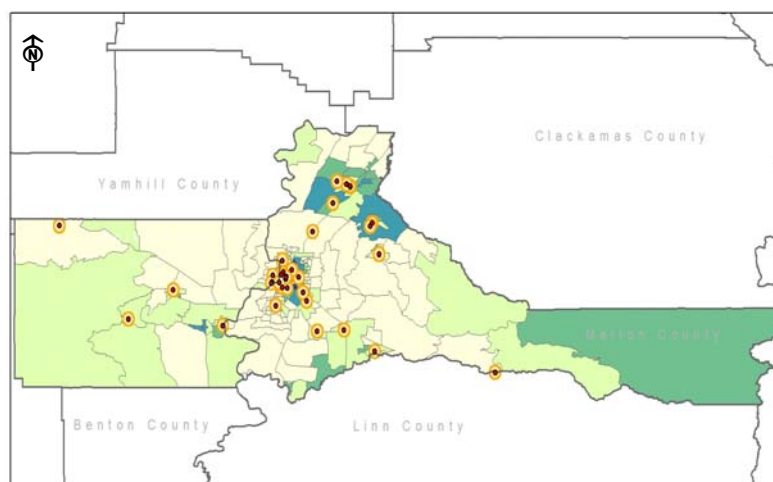
Statewide Zoning



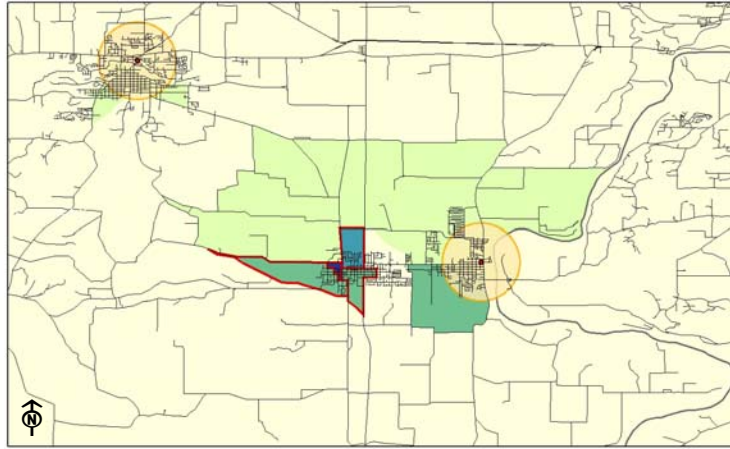
Block Groups Displaying Poverty 25% or Greater



One Mile Buffers of Agency Locations



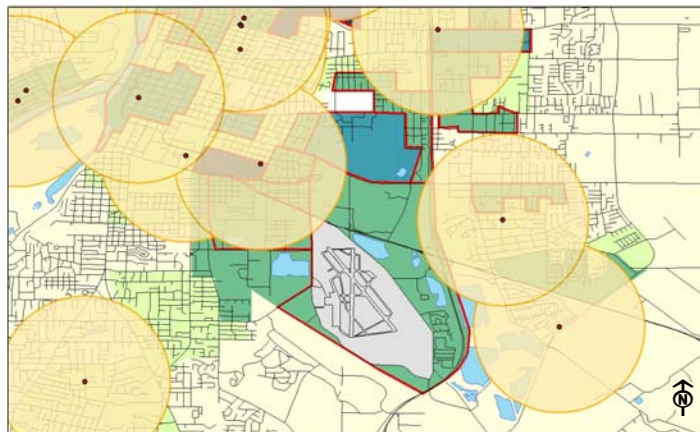
Monmouth and Independence, Oregon – Polk County



The single obvious area of need in Polk County is in Monmouth. The concentrated population, as shown by the roads layer, and the high poverty areas both suggest an area that is not being adequately served. The Independence food pantry location is well situated for that town, but not for neighboring Monmouth.



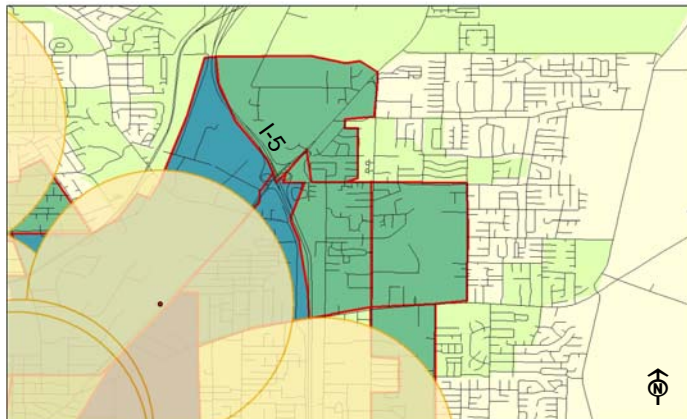
Southeast Salem, Oregon – Marion County



The road layer demonstrates the areas of higher density population in this map of southeast Salem. Showing the airport and water layers also gives some suggestion of the area. A state prison is located in the dark blue area in the north central portion of a map.



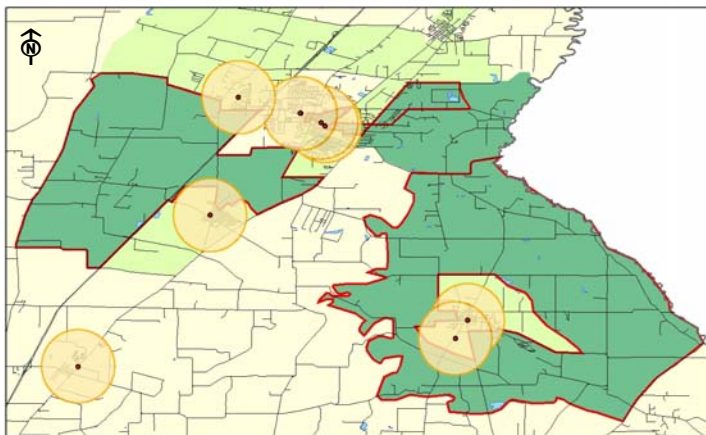
Northeast Salem, Oregon – Marion County



The dark green block groups represent between 27% and 33% poverty. This area in Northeast Salem appears to be underserved due to its proximity to a food distribution site and is somewhat of an island due to the path of I-5.



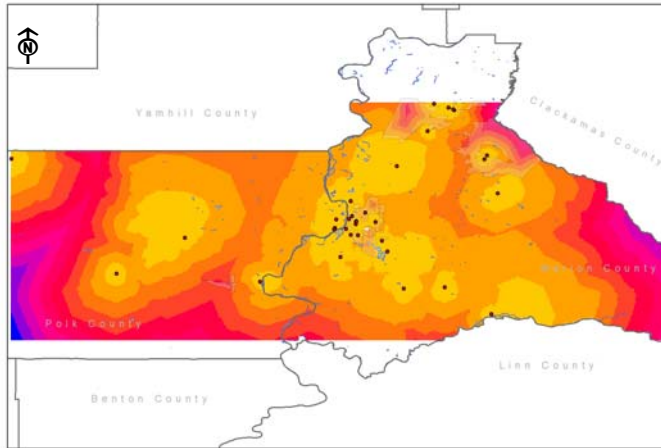
Southeast Salem, Oregon – Marion County



Street analysis shows that high density areas generally fall within a 1 mile buffer of agency locations in the Woodburn area.



Cost Distance Analysis



The Cost Distance raster analysis weighted each cell based on its proximity to a food bank agency and its percent of poverty. Areas nearest food distribution locations and with the lowest poverty levels are shown in yellow with both distance and poverty levels influencing the darker colors. Note the overlay areas showing the highest poverty block groups.



The Next Steps . . .

- Collect zoning data for urban areas including Salem, Woodburn, and Monmouth
- Geocode church locations in high poverty areas
(25 of the 36 agency locations are currently at church locations)
- Collect transportation data for high poverty areas including bus stop points
- Meet with Marion-Polk Food Share staff to evaluate findings and establish work to be done



Data Credits

US Census Bureau

- Block Group Boundaries
- 2000 census poverty statistics

Oregon Geospatial Data Clearinghouse

- Forest Ownership
- Zoning

TeleAtlas Data

- Roads
- River/Lakes
- Airports

Questions?

