Transportation Planning in Clark County

Presentation to the Clark County Commission on Aging

Oct. 16, 2018

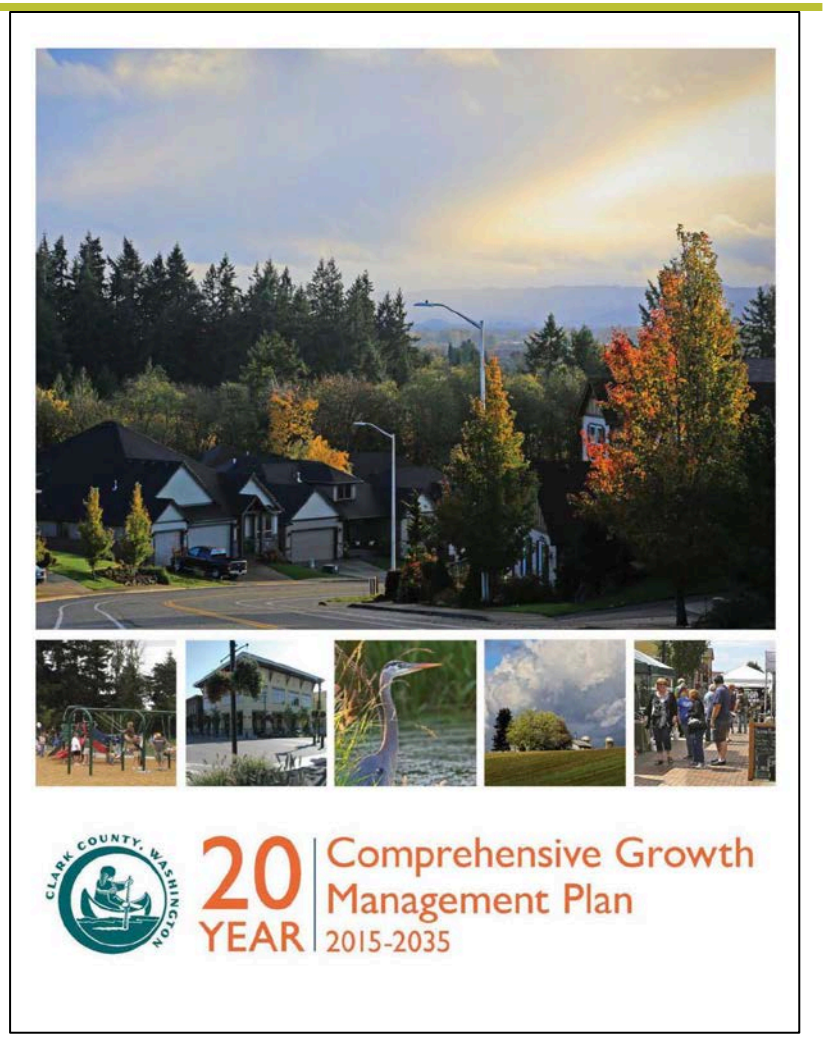
Matt Hermen, Planner III, Clark County Community Planning

Agenda

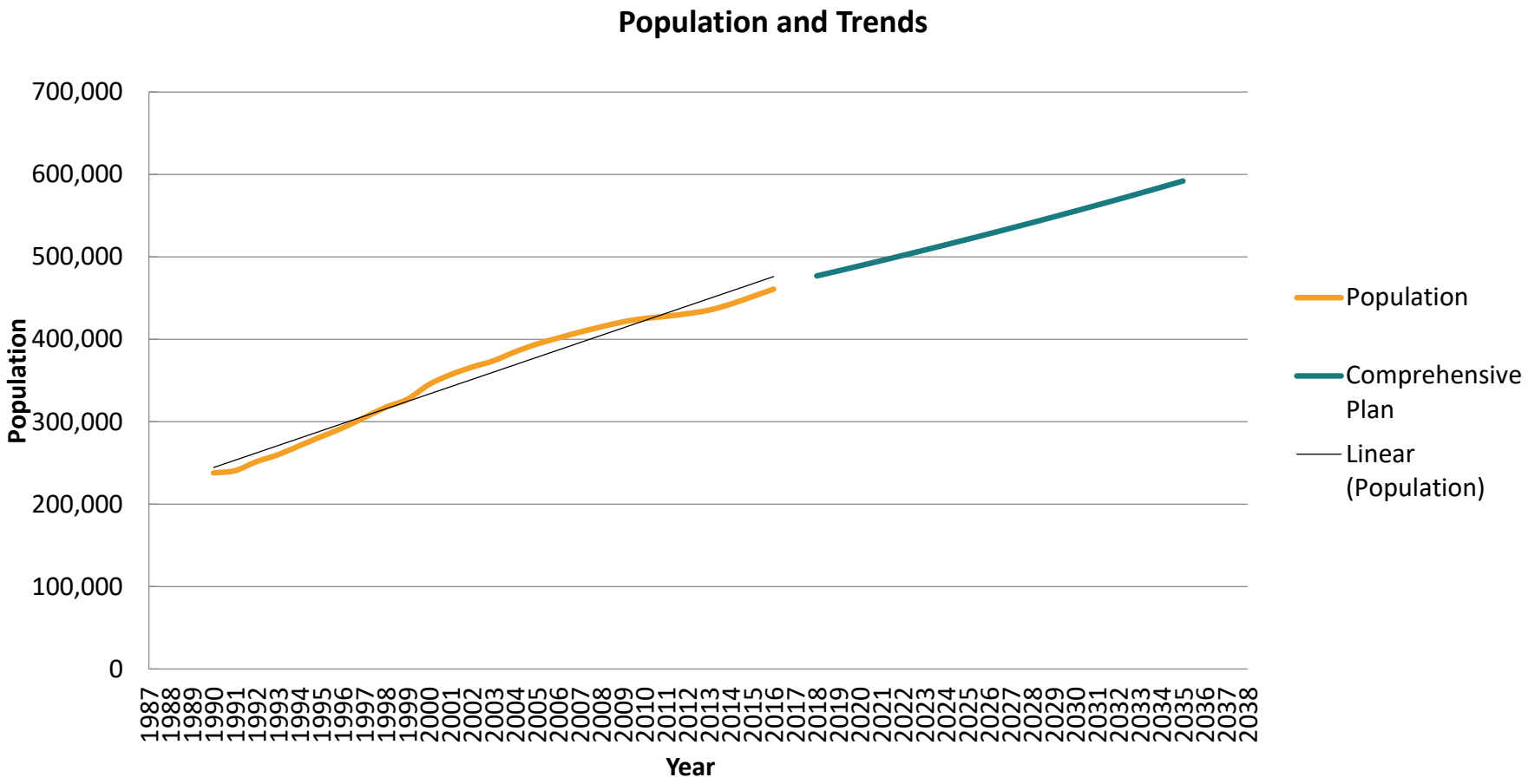
- Demographics
- Urban Form
- Cars
- Buses
- Walking
- Challenges
- Strategies

Clark County Comprehensive Plan

- 2035 Population: 577,431
- 2015-2035 Population Increase: 128,586
- Persons per Household: 2.66
- 2035 Employment Forecast: 232,500
- 2015-2035 Job Increase: 101,153



Population


Population and Trends
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Population
1987
1988
1989
1990
1991
1992
1993
1994
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1997
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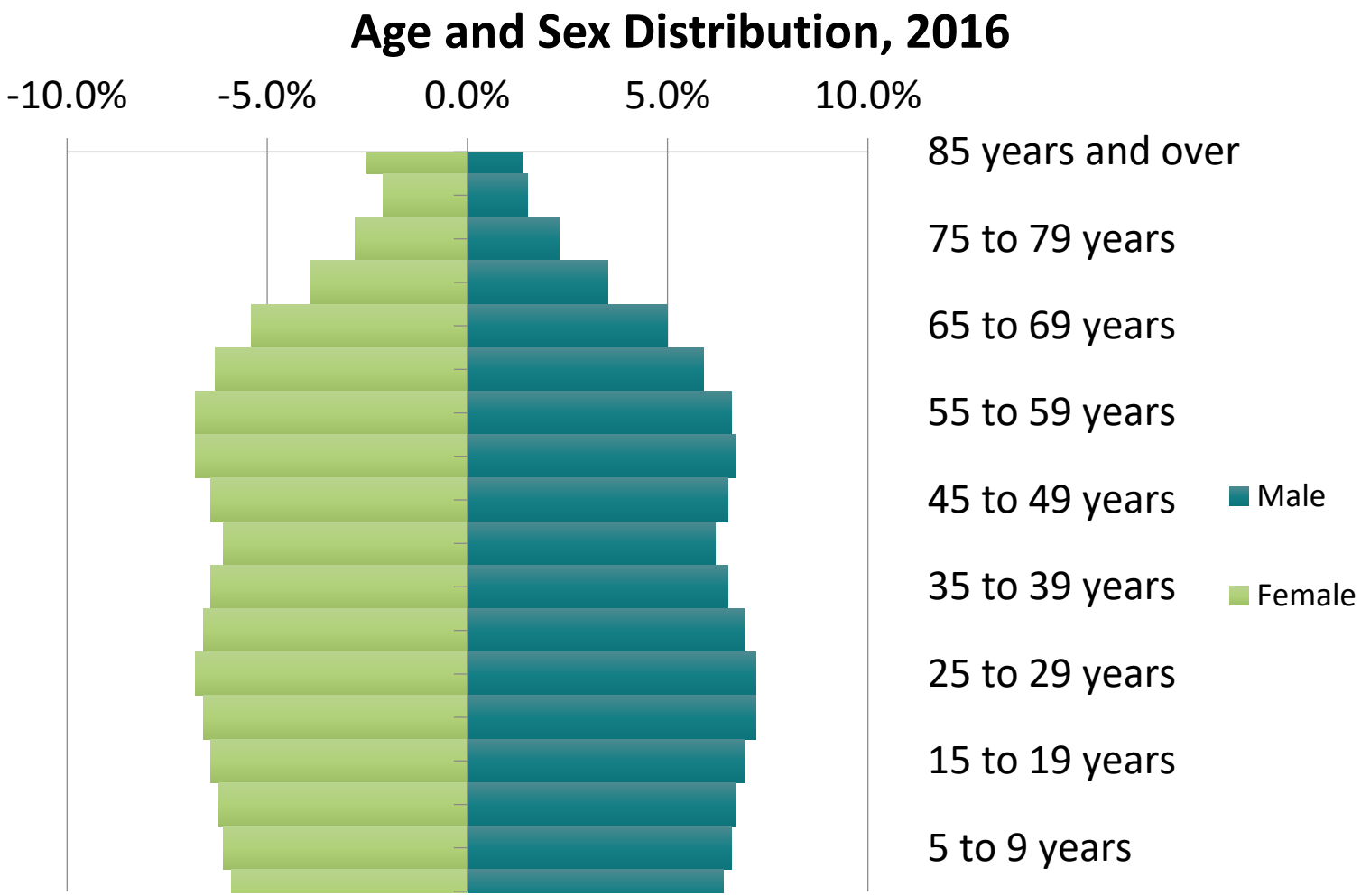
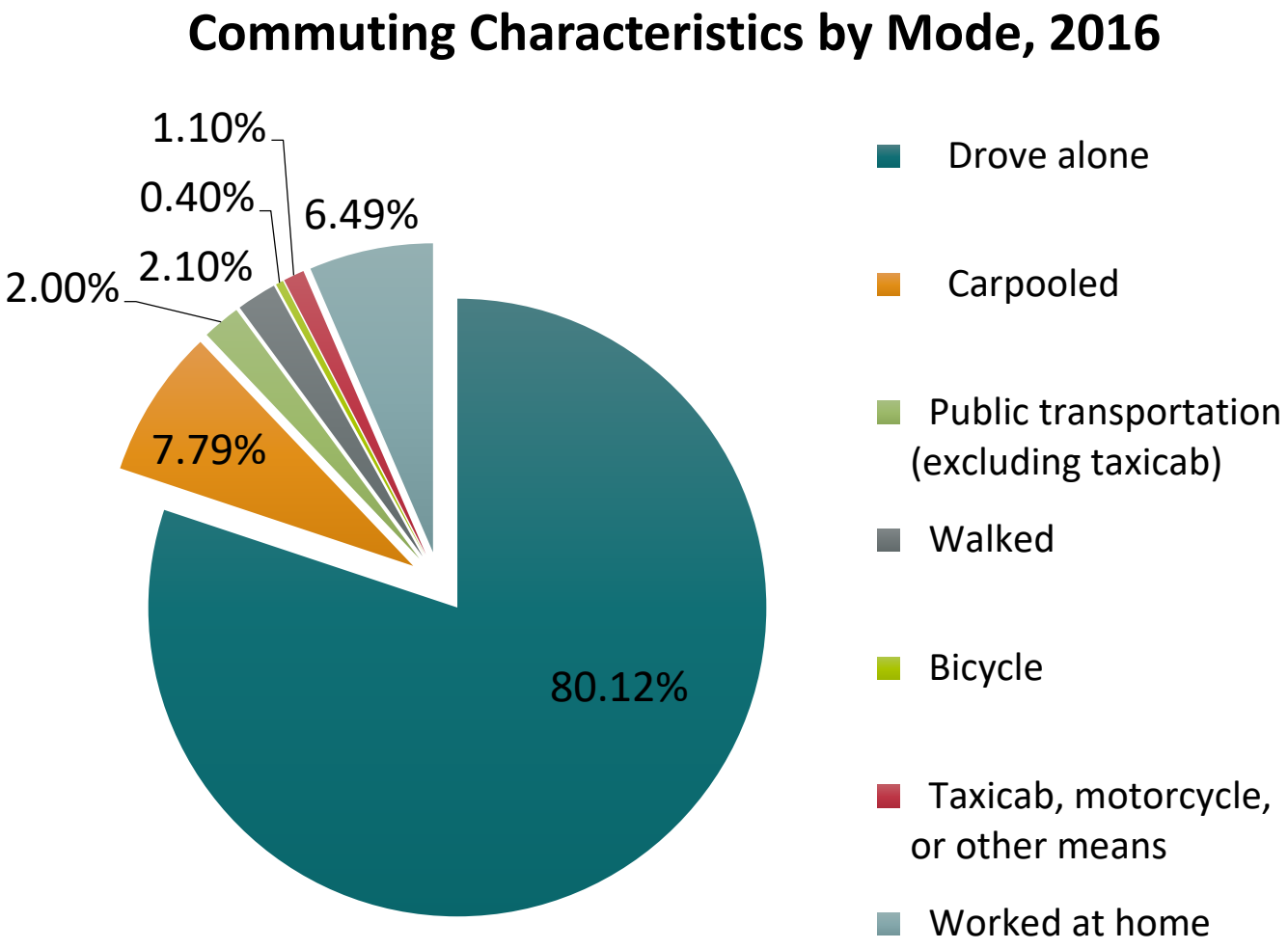
2032
2033
2034
2035
2036
2037
2038
Year
Population
Comprehensive Plan
Linear (Population)

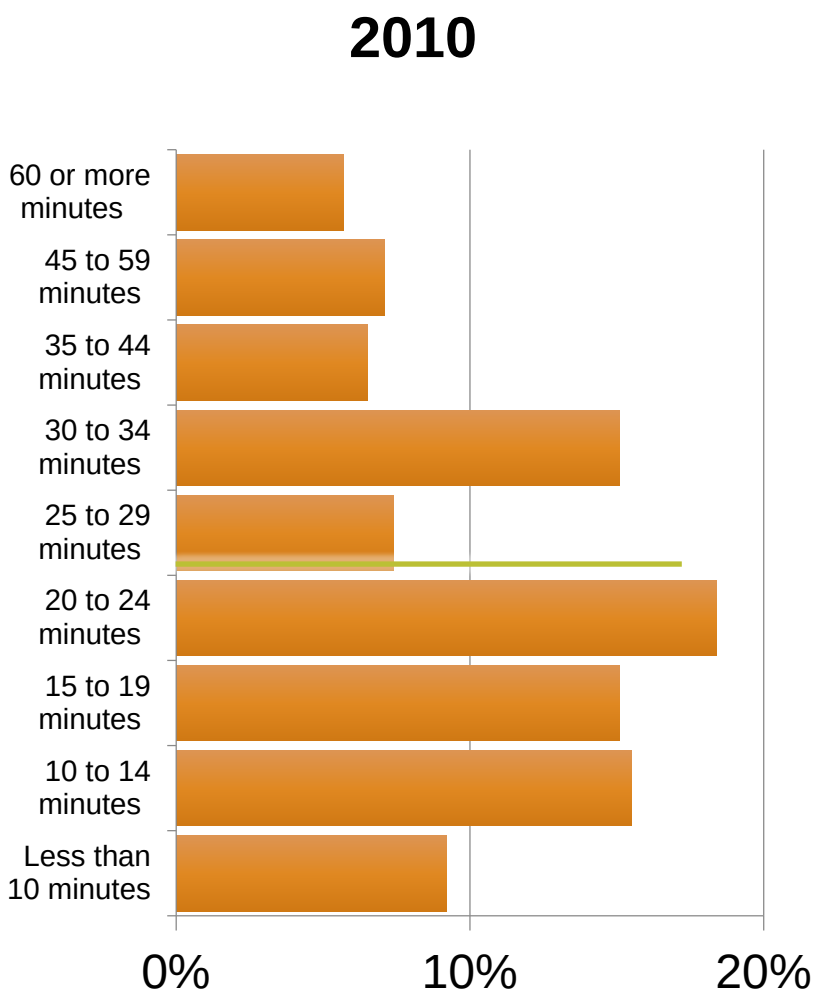
Age and Sex Distribution

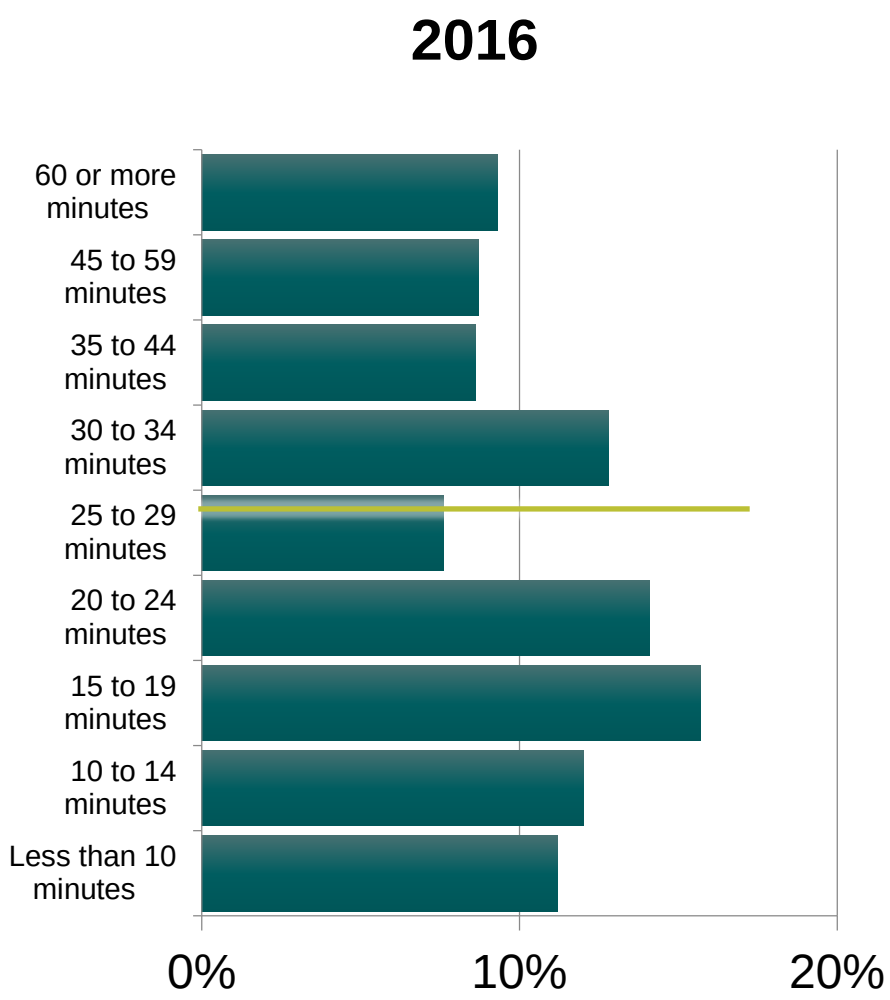


Mode of Transportation to Work

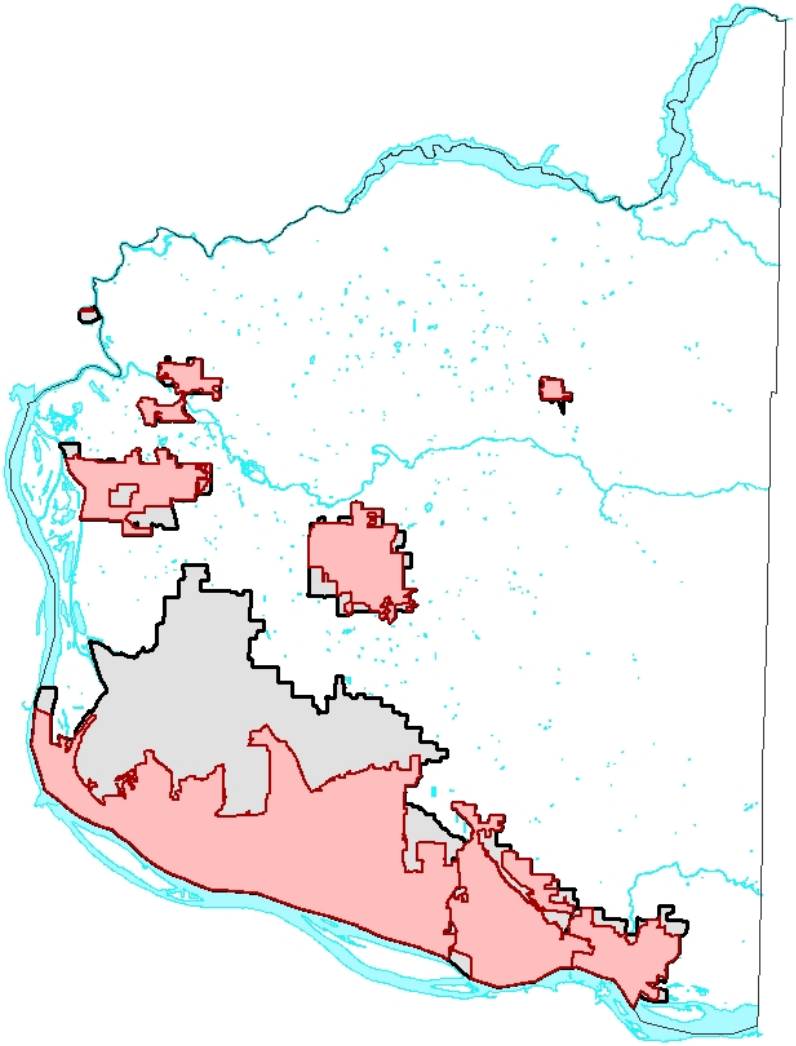


Travel Time to Work

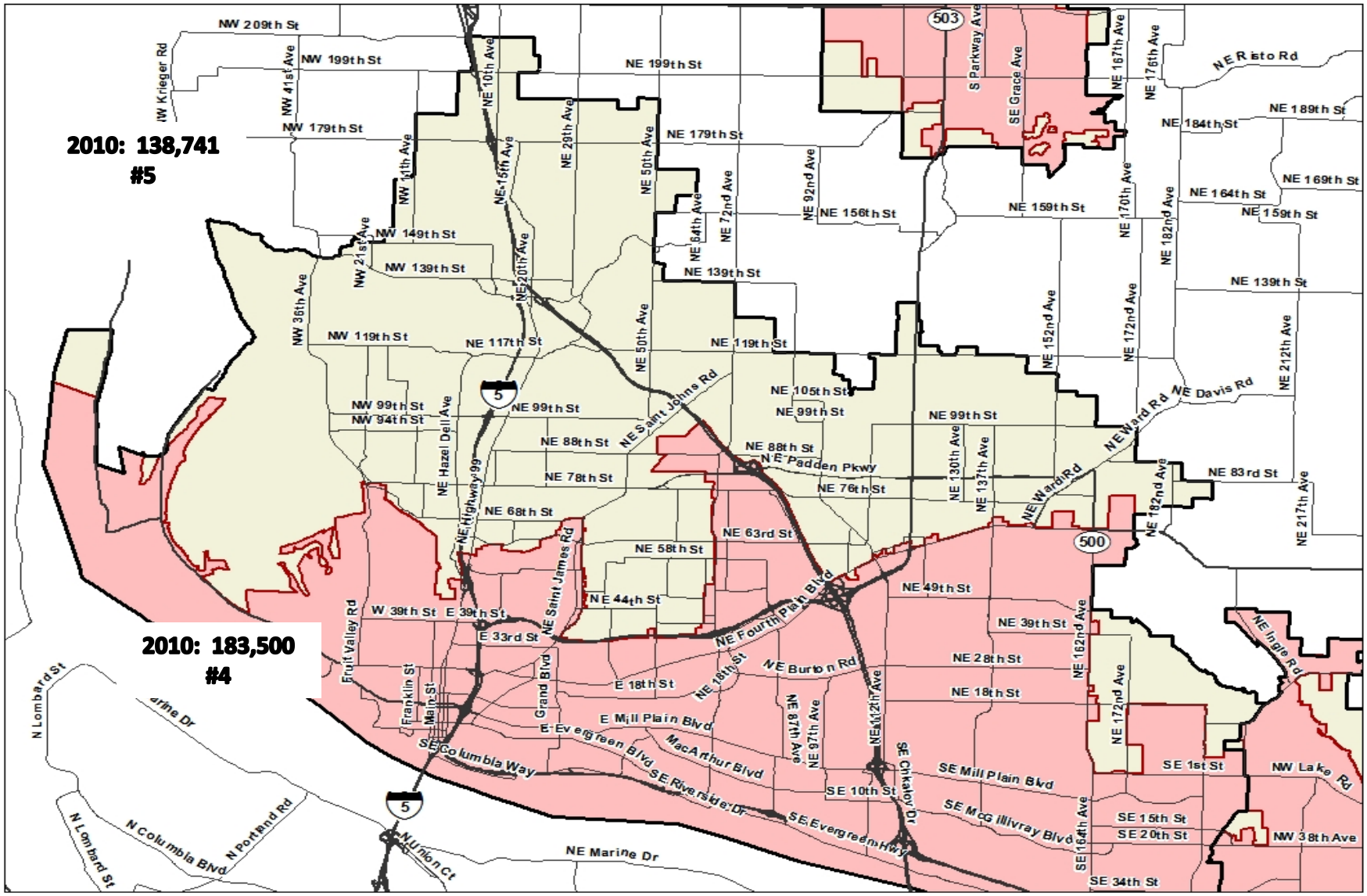




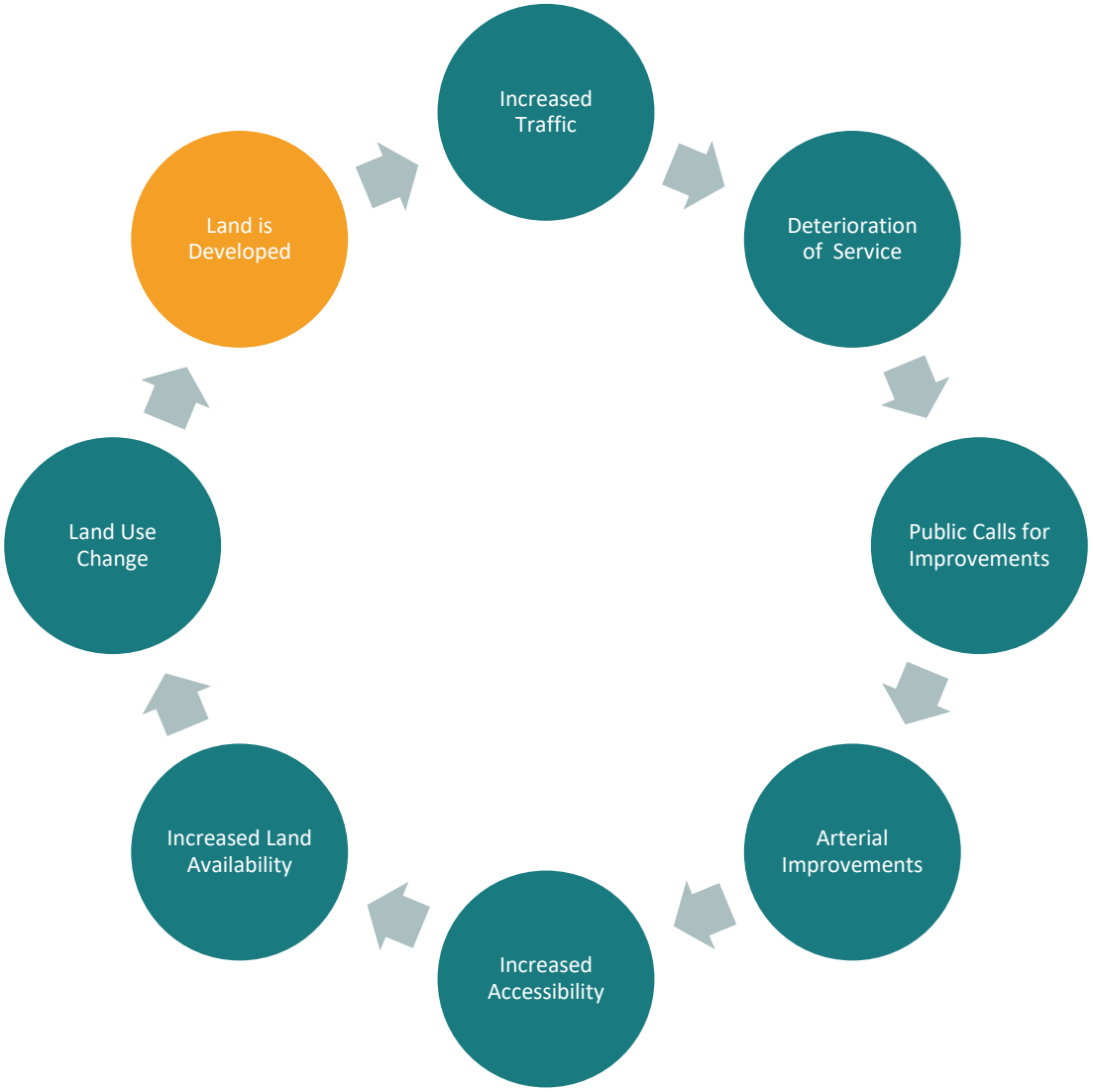
How does Clark County Grow?



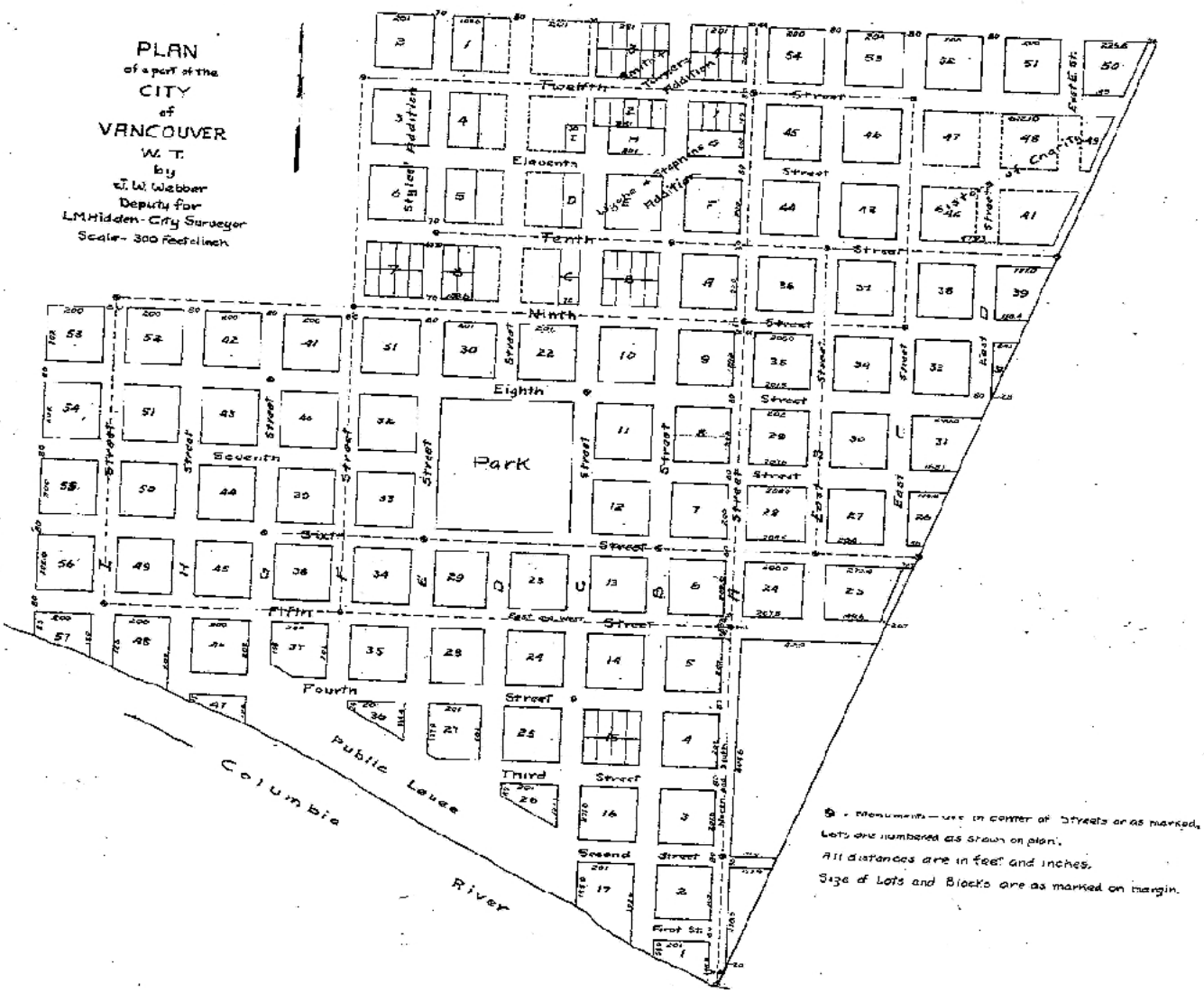
Vancouver Urban Growth Area



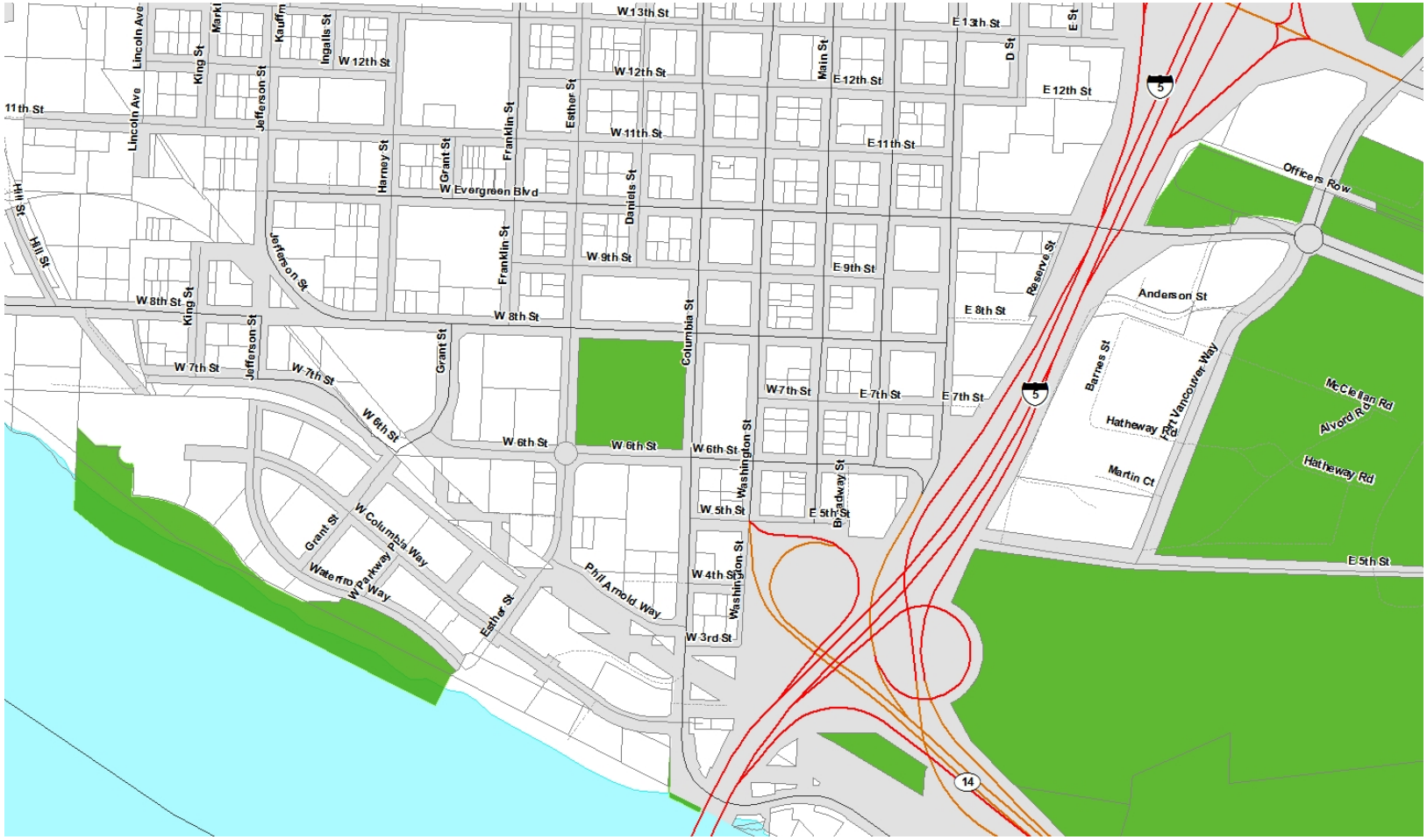
Land Use and Transportation



Historic Urban Development - 1852

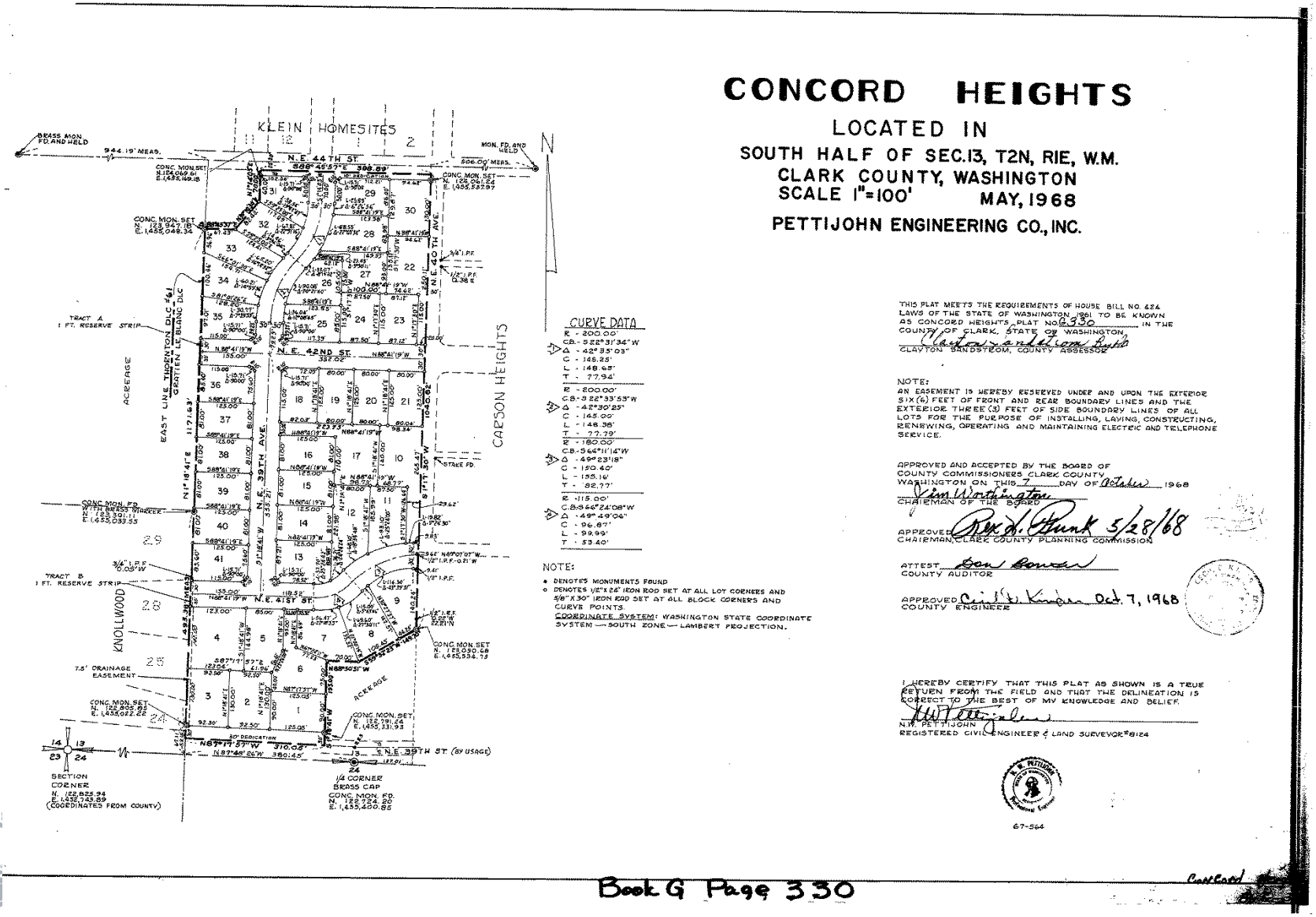


Historic Urban Development



Historic Urban Development

Suburban Residential Development - 1968



Suburban Residential Development - 1968

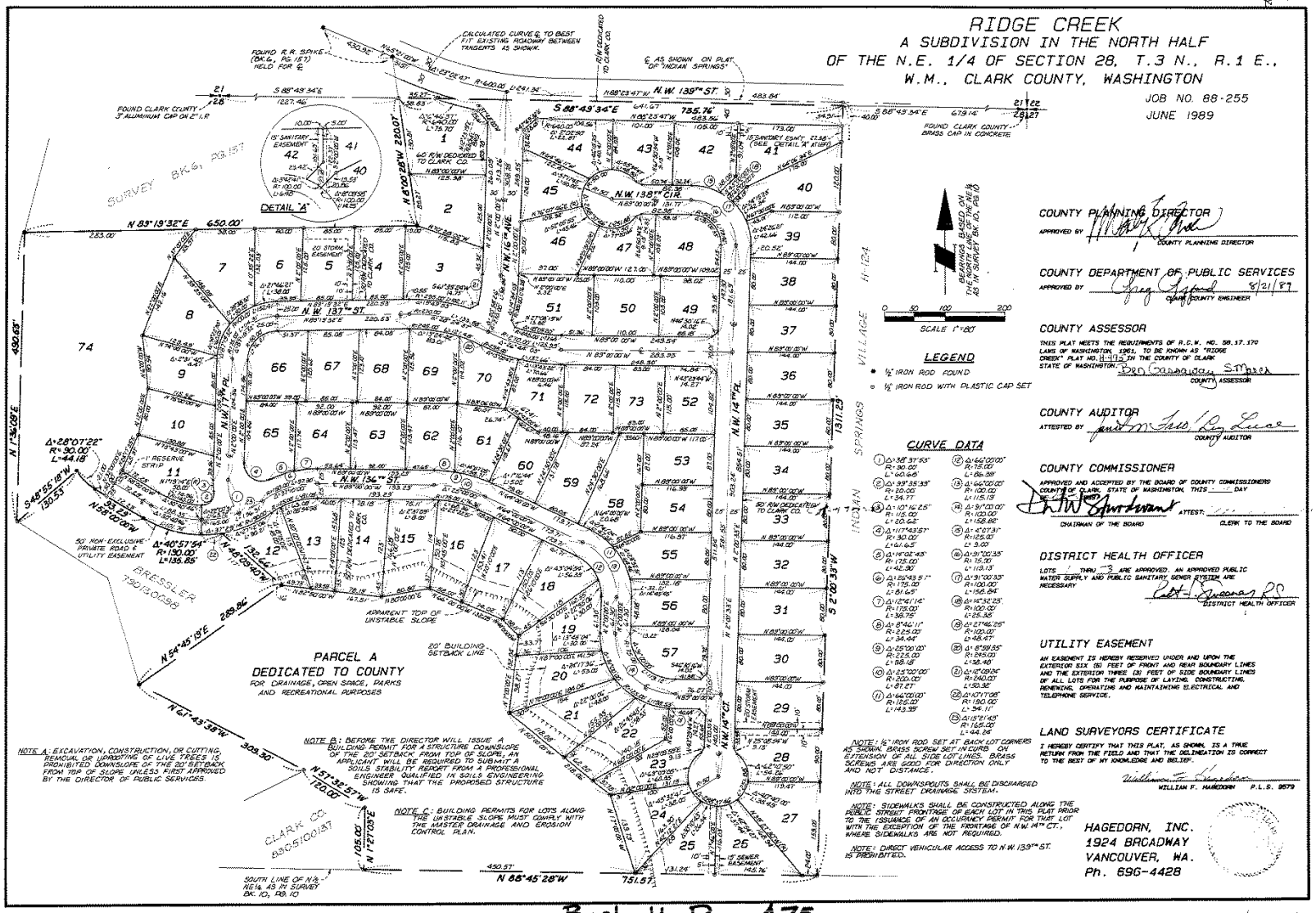
Suburban Residential Development - 1974

Suburban Residential Development - 2016

Why are growth patterns different?

- Consumer Preference
- Federally Subsidized Mortgage Loans
- Large-scale production building
- Interstate Highway System

Suburban Development - 1989



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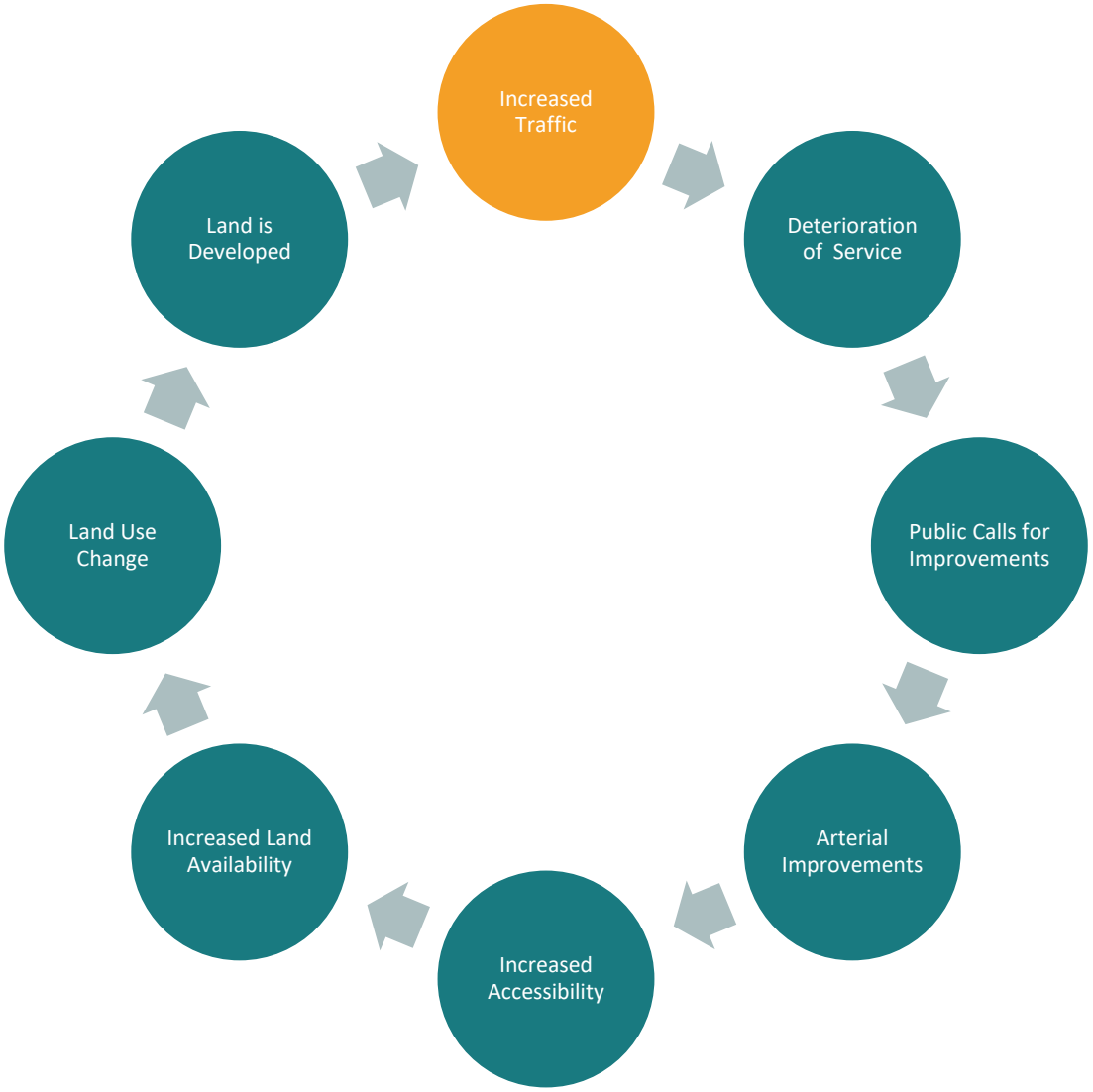
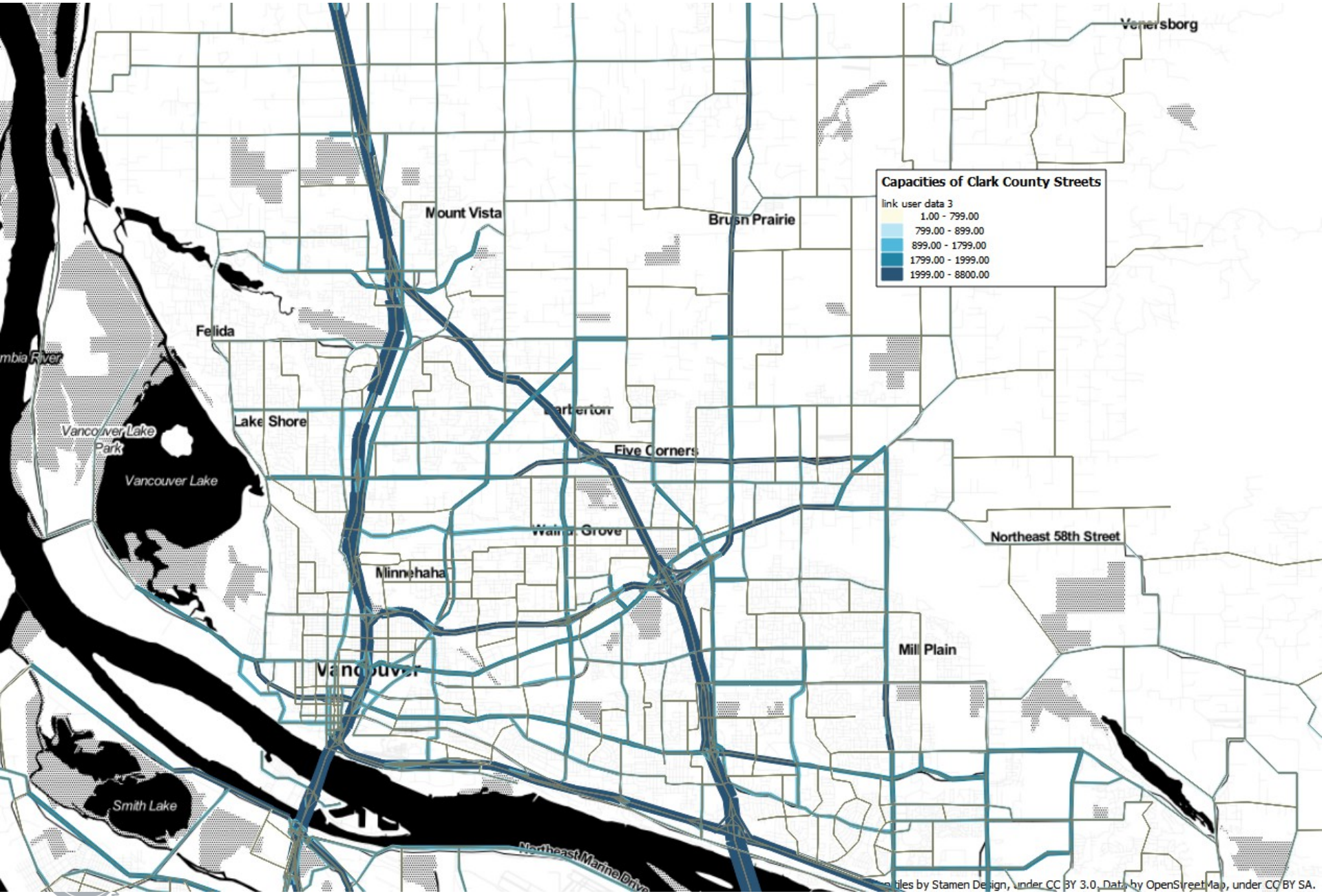
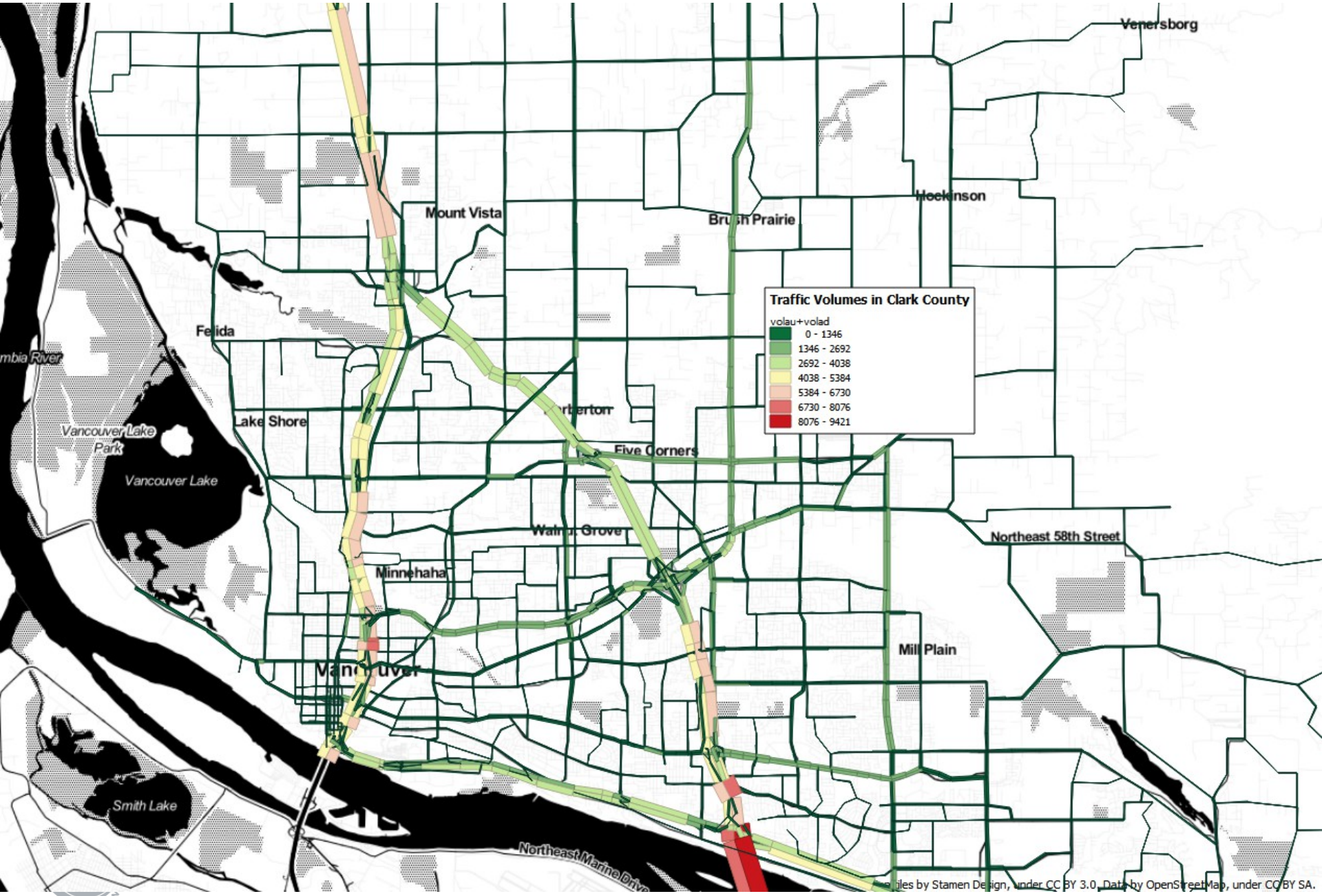
Suburban Development - 1994

Suburban Development - 2016

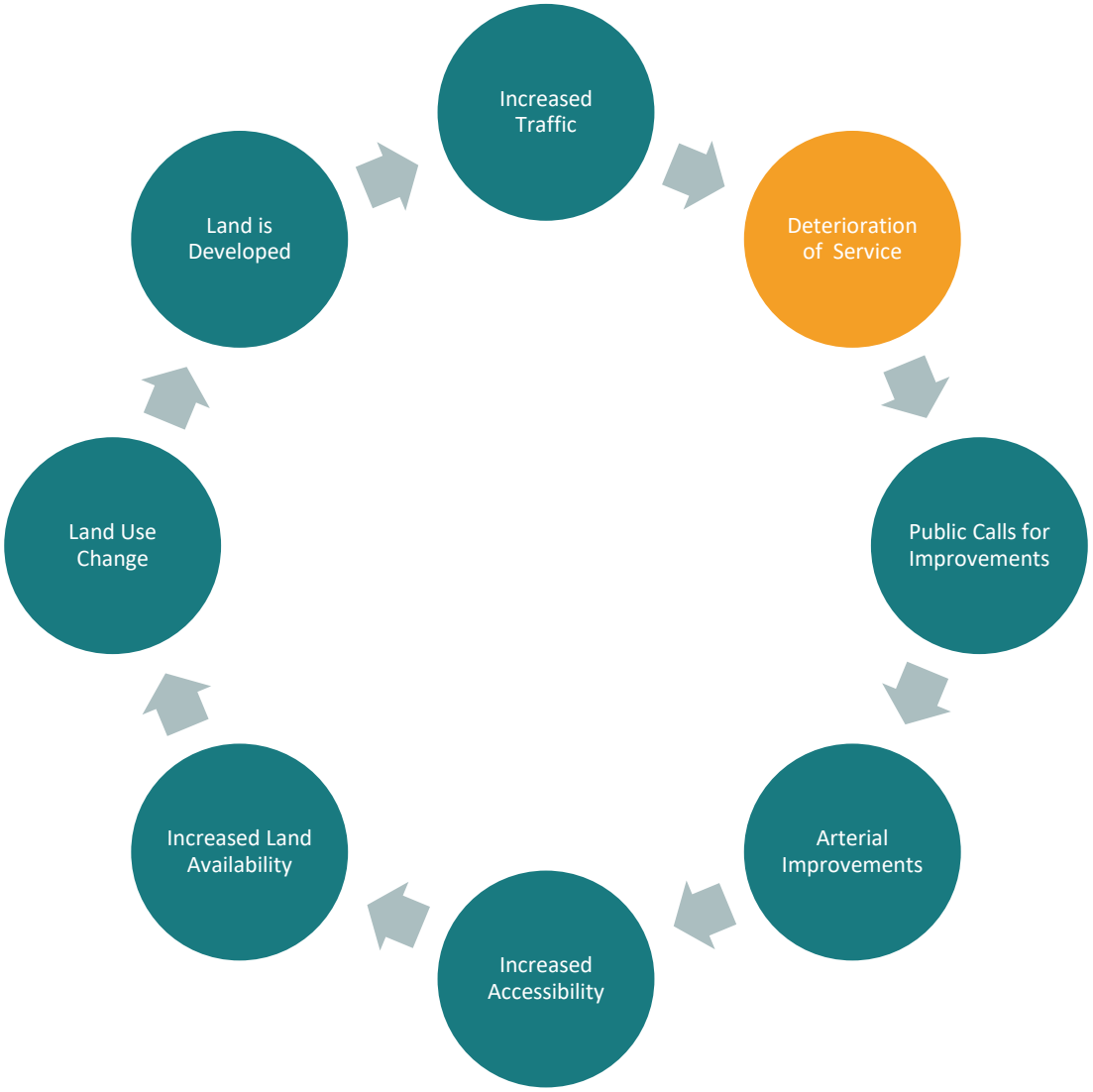
Land Use and Transportation

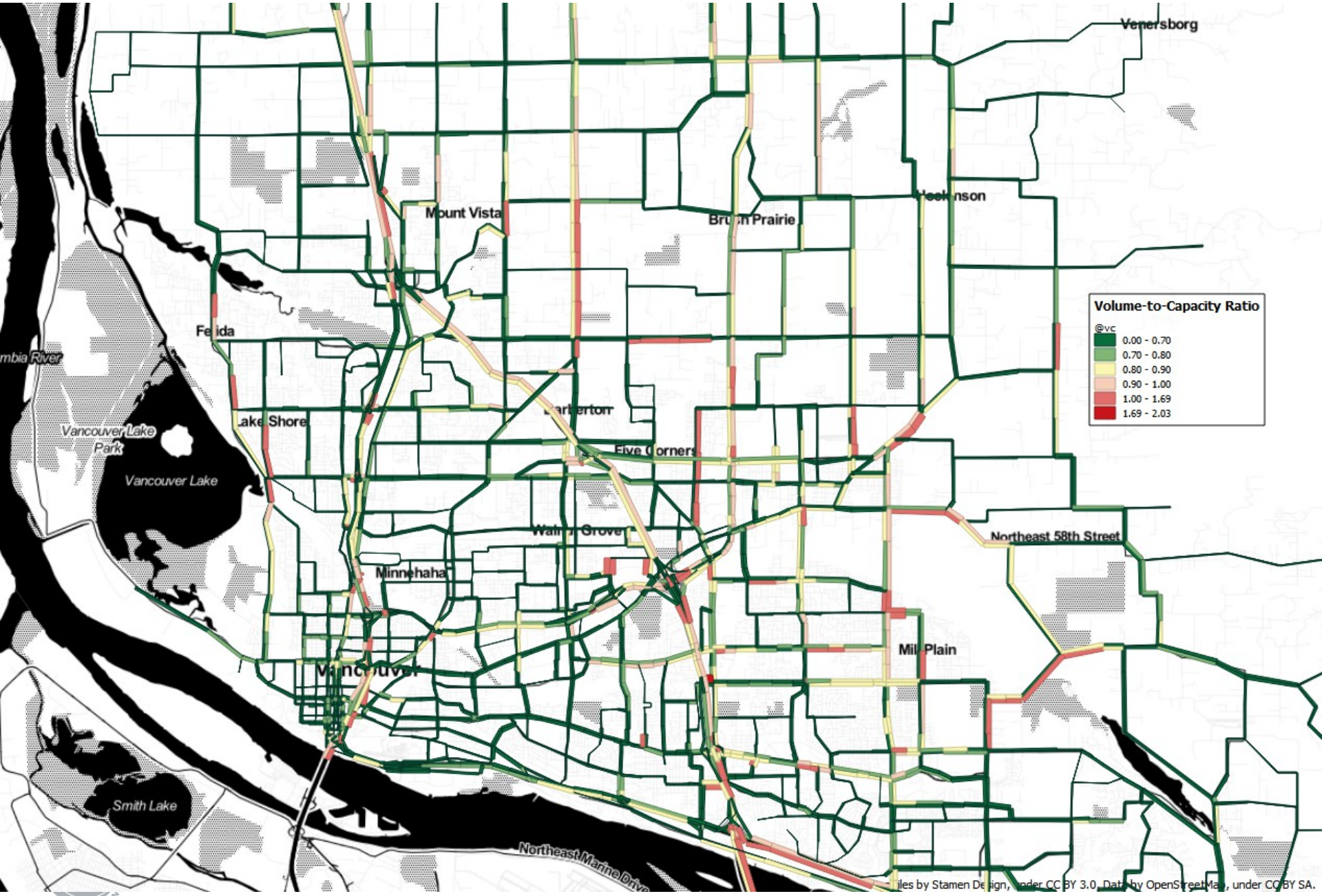



Capacities of Clark County Streets
link user data 3
1.00 - 799.00
799.00 - 899.00
899.00 - 1799.00
1799.00 - 1999.00
1999.00 - 8800.00
Mount Vista
Felida
Lake Shore
Vancouver Lake Park
Vancouver Lake
Five Corners
Northeast 58th Street
Minnehaha
Mill Plain
Smith Lake
Northeast Marine Drive
tiles by Stamen Design, under CC BY 3.0. Data by OpenStreetMap, under CC BY SA.

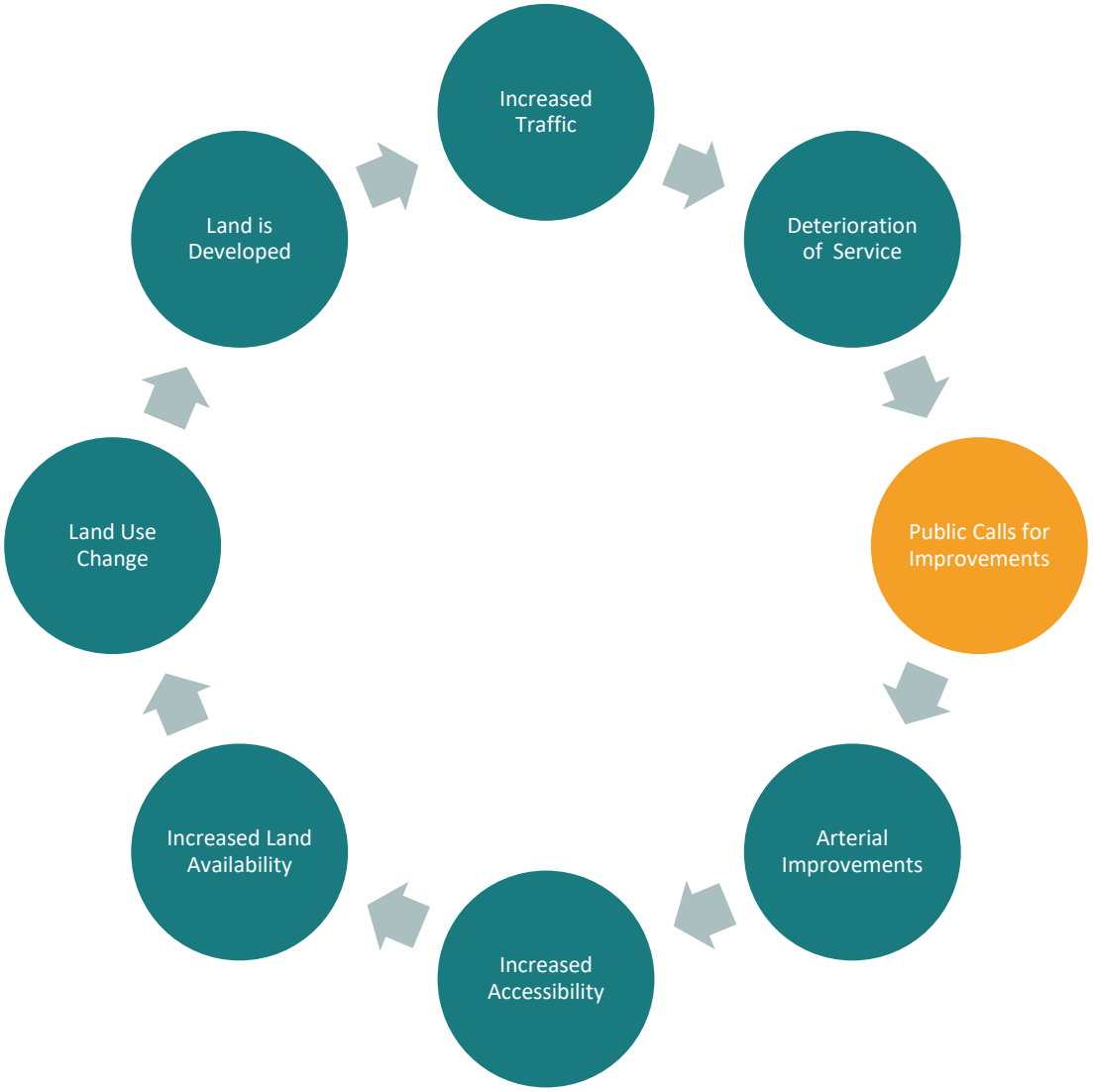

Traffic Volumes in Clark County
volau+volad
0 - 1346
1346 - 2692
2692 - 4038
4038 - 5384
5384 - 6730
6730 - 8076
8076 - 9421
Venersborg
Hockinson
Mount Vista
Felida
Lake Shore
Vancouver Lake Park
Vancouver Lake
Five Corners
Northeast 58th Street
Minnehaha
Mill Plain
Smith Lake
Northeast Marine Drive
Tiles by Stamen Design, under CC BY 3.0. Data by OpenStreetMap, under CC BY SA.

Land Use and Vehicular Transportation



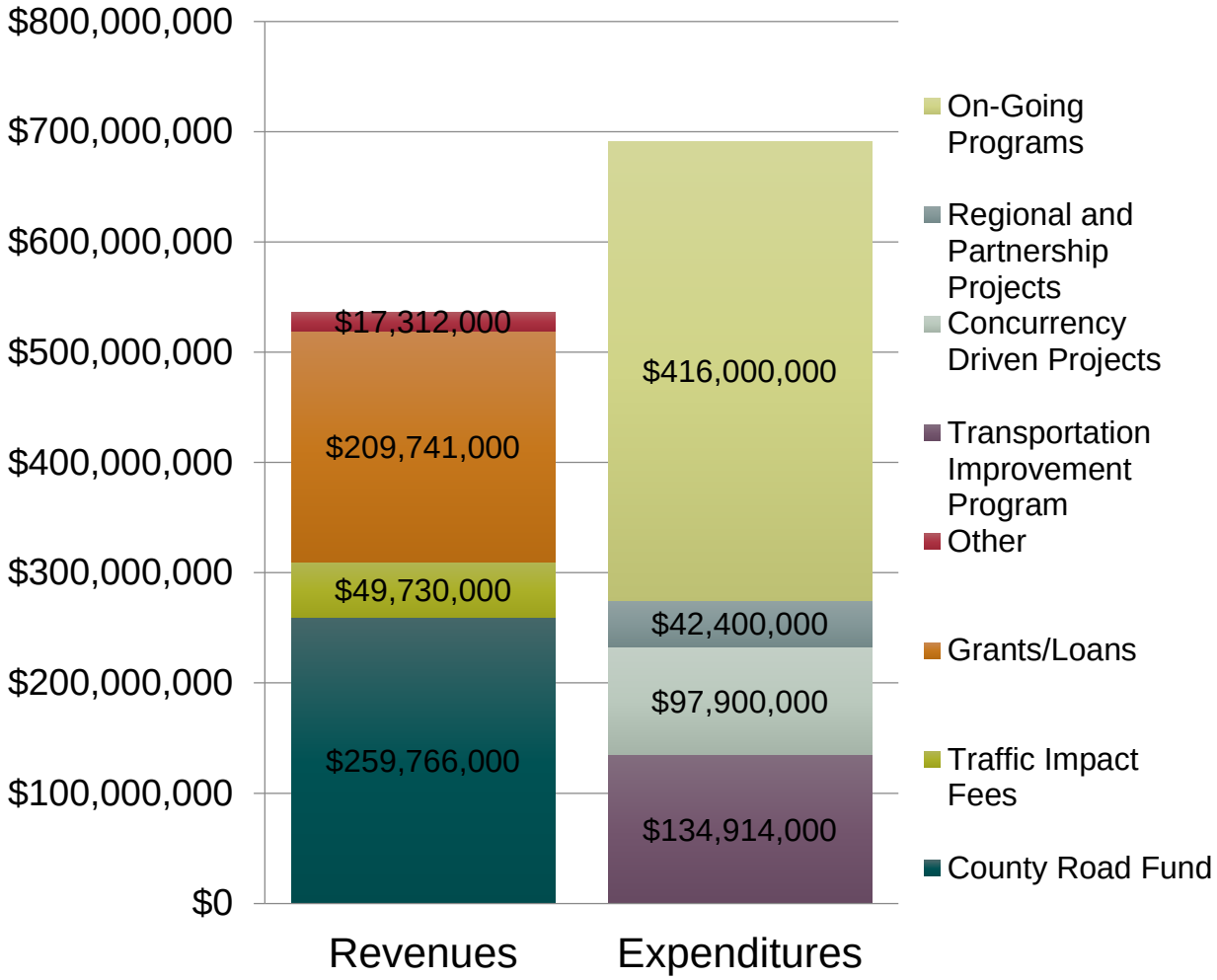

Volume-to-Capacity Ratio
@vc
0.00 - 0.70
0.70 - 0.80
0.80 - 0.90
0.90 - 1.00
1.00 - 1.69
1.69 - 2.03
Venersborg
Mount Vista
Felida
Lake Shore
Five Corners
Vancouver Lake Park
Vancouver Lake
Minnehaha
Northeast 58th Street
Smith Lake
Northeast Marine Drive

Land Use and Transportation

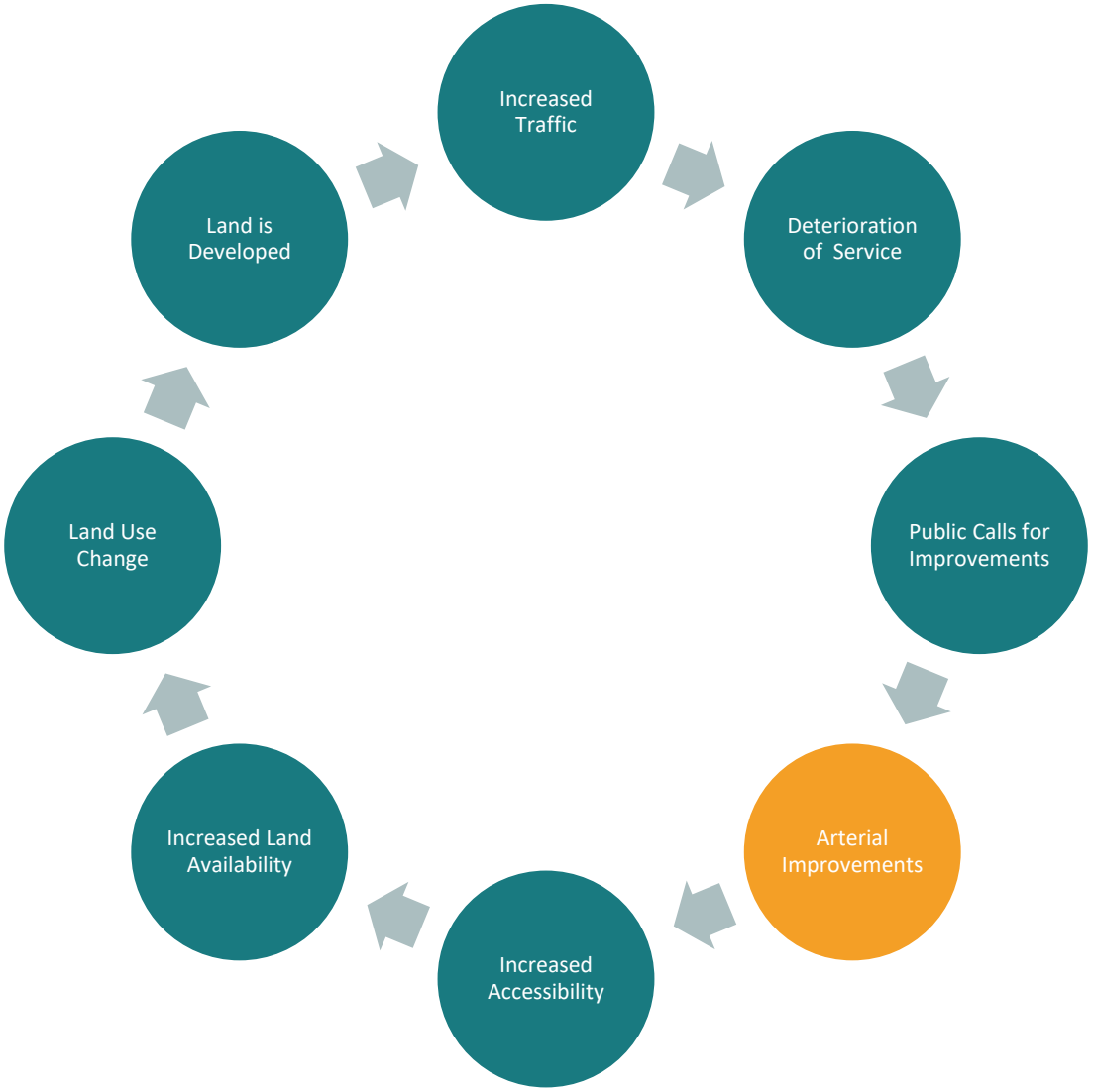


20-Year Transportation Financial Forecast

20-year Transportation Finances	
Revenue	$533,110,000
Expenditure	$691,214,000
Balance	-$158,104,000



Land Use and Transportation



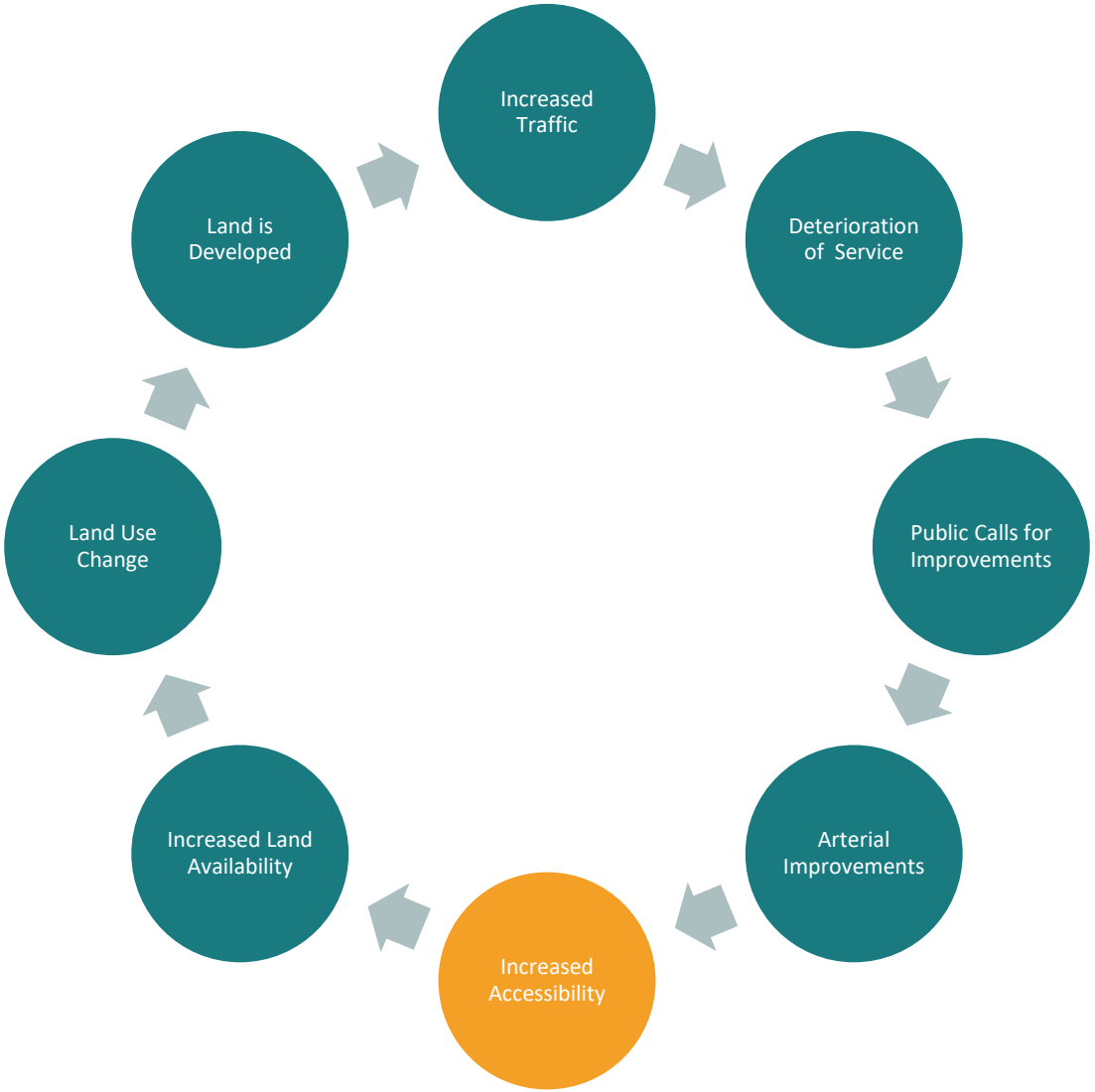
Project Prioritization

- Safety
- Future Need
- Congestion Relief
- Multimodal
- Route Connectivity
- Public and Outside Agency Support
- Economic Development
- Leverage of Non-County Funding
- Environmental Impacts

Road Improvements

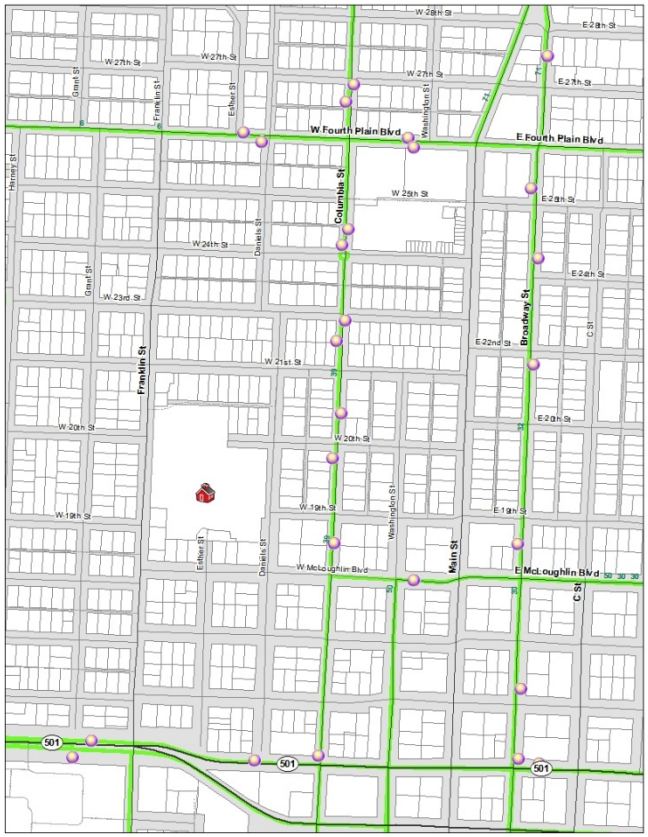
Road Improvements

Land Use and Transportation



Access to Transit

Historic Neighborhood

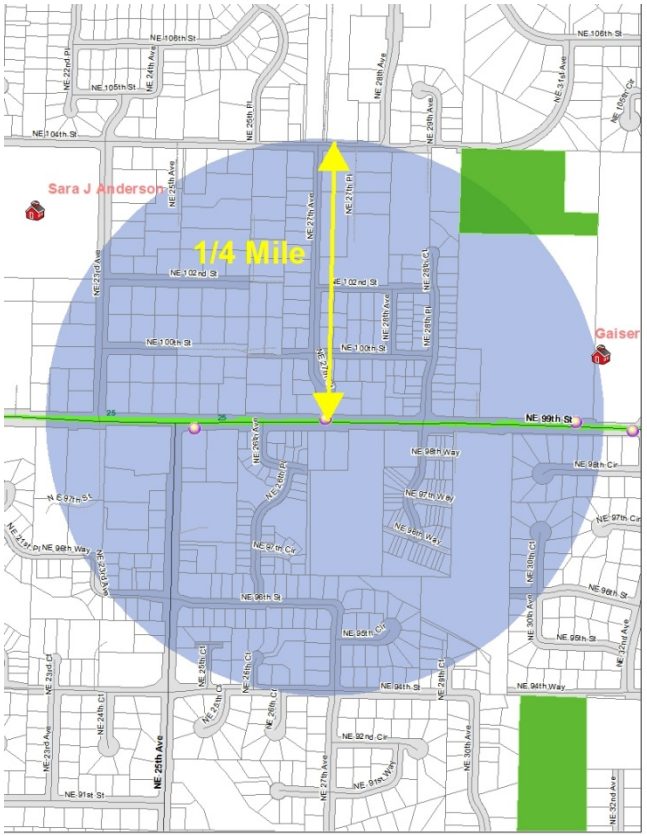


Suburban Neighborhood

Transit Catchment Area

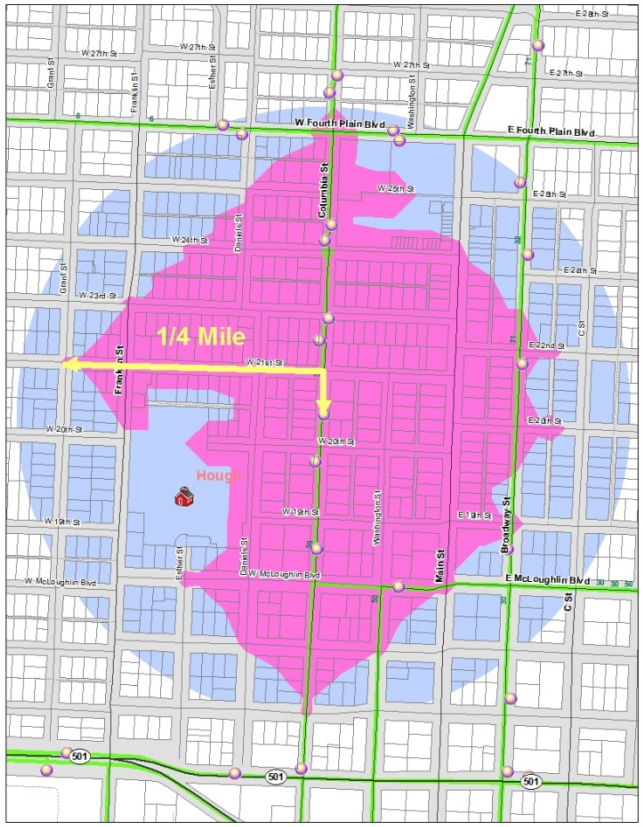
Historic Neighborhood

Suburban Neighborhood

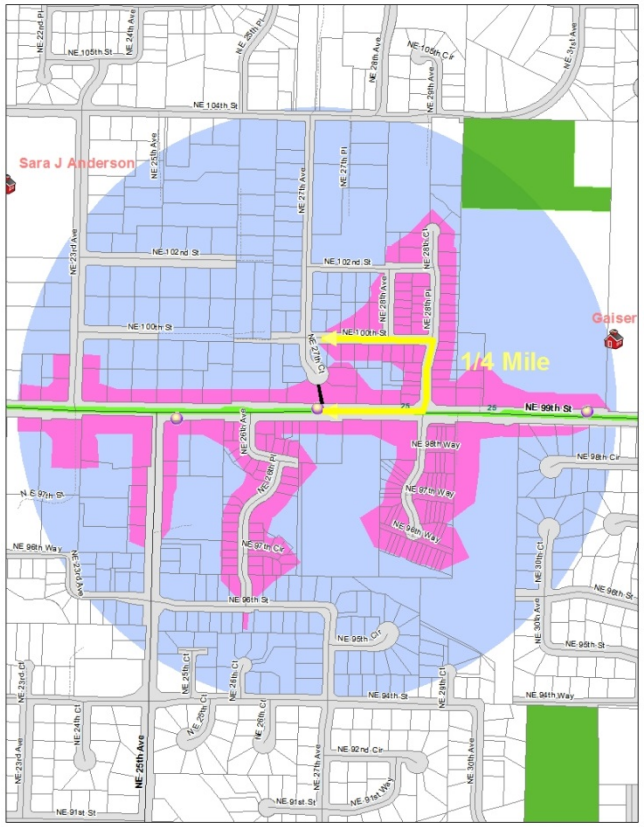


Quarter Mile Walking Distance

Historic Neighborhood



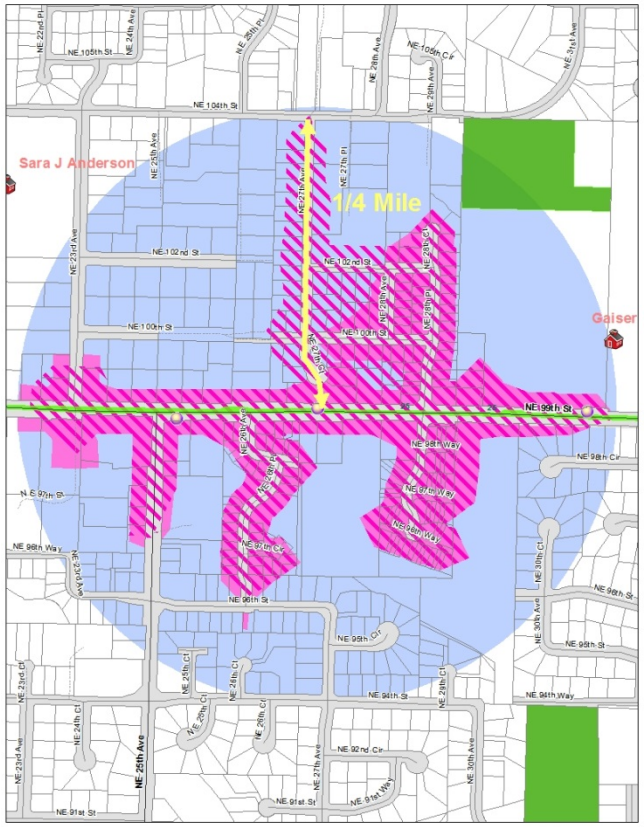
Suburban Neighborhood



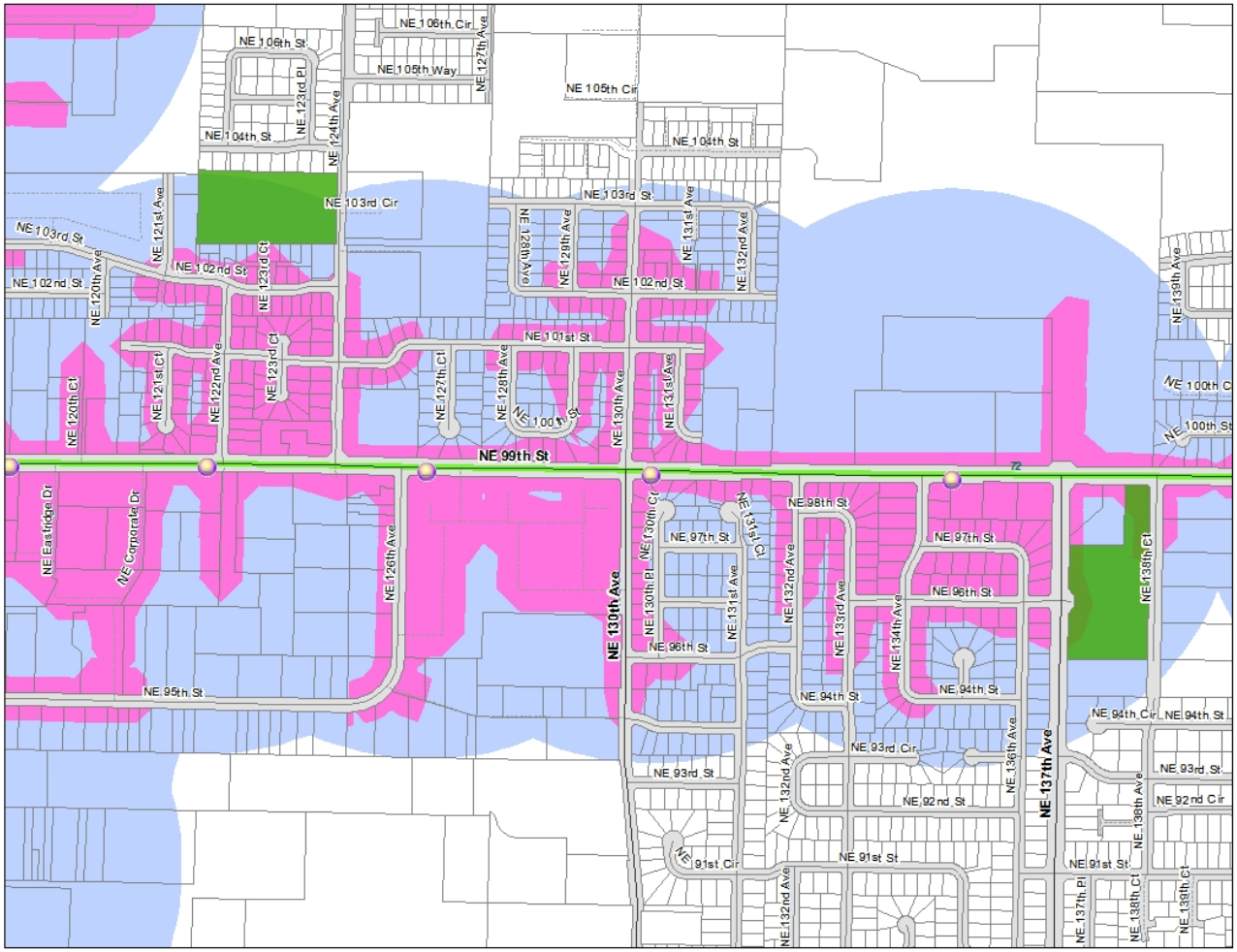
Pedestrian Easements

Pedestrian Access

Enlarged Catchment Area

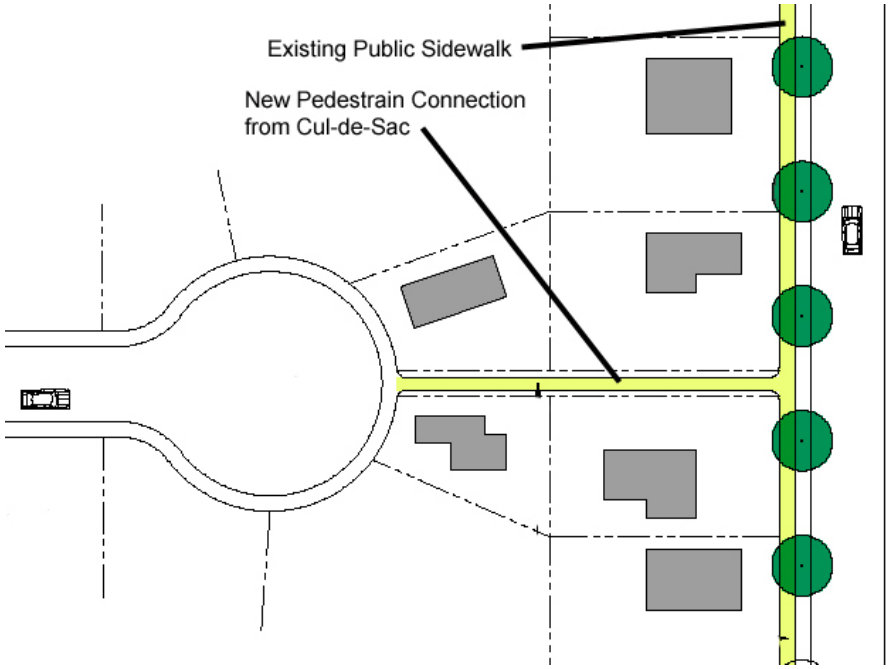


Plan for Transit in the Future

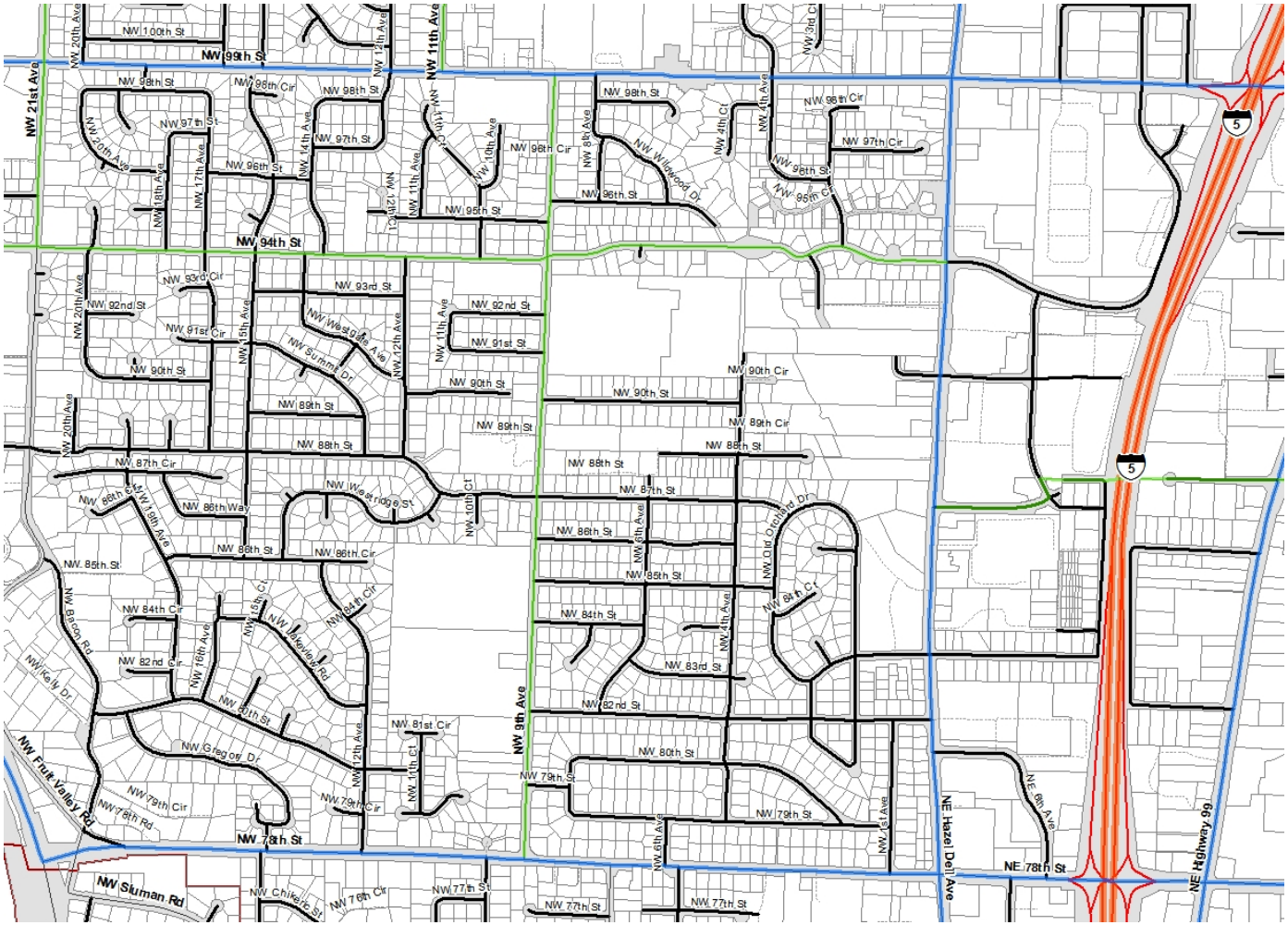


Planning for Access to Transit

- Pedestrian Easements are required when bus stop is present.
- Neighborhoods are designed before transit is accessible.
- Cul-de-sacs within a certain distance to collectors and arterials should be required to provide pedestrian easements to the street.



Street Classification



2-Lane Collector with Center Turn Lane and Bike Lanes

2-Lane Minor Arterial with Sidewalks and Bike Lanes

4-Lane Principal Arterial

2-Lane Rural Major Collector

Sidewalk Design

Street Classification	Sidewalk Width Required	Total Sidewalk Width	Roadway Width Required
Local	5 ft	10 ft	26-36 ft
Collector	6 ft*	12 ft	34-46 ft
Commercial/ Industrial	6-8 ft*	12-16 ft	40-42 ft
Arterial	6 ft*	12 ft	48-80 Feet
* May be reduced when detached			

Clark County Code:

- Sidewalks shall be provided on both sides of all public streets in urban areas and within rural centers

State Law:

- Sidewalks shall be 5-feet wide, unobstructed, with vertical or horizontal separation, ADA compliant and included on both sides of the street unless otherwise stated in the grant.

- TIA funds may not be used for excessive design, mitigation beyond federal or state requirements, or other unusual project features.(WAC 479-05-131).

Sidewalks

Attached

Detached

Sidewalk Ranking Criteria

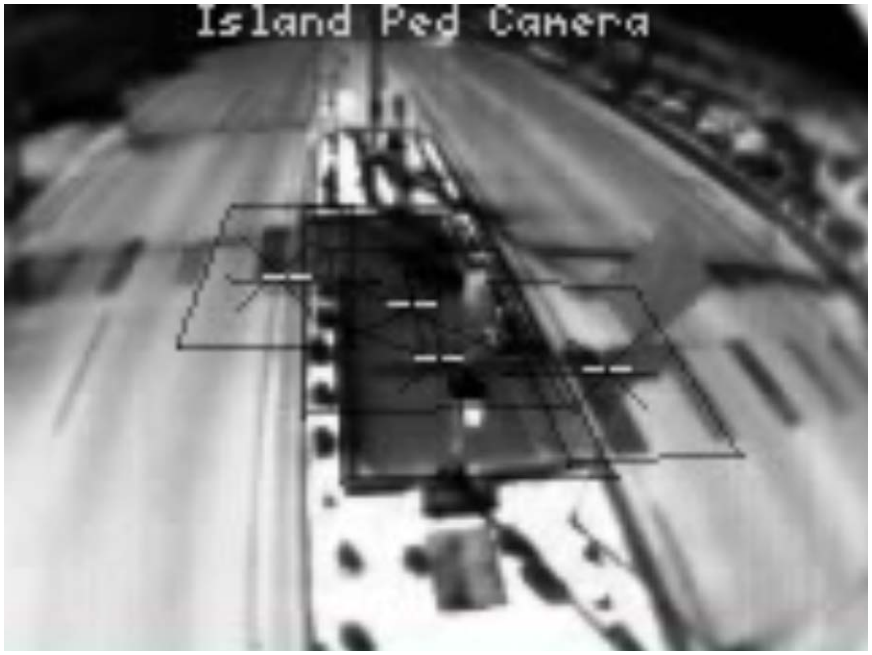
The Sidewalk Ongoing Program constructs small infill or gap projects not associated with private development or large capital road construction.

Criterion	Scoring
Safety & Comfort	50 Pts
Destination Access	25 Pts
Health Outcomes / Quality of Life / ADA	15 Pts
Implementation	10 Pts
Total	100 Pts Possible

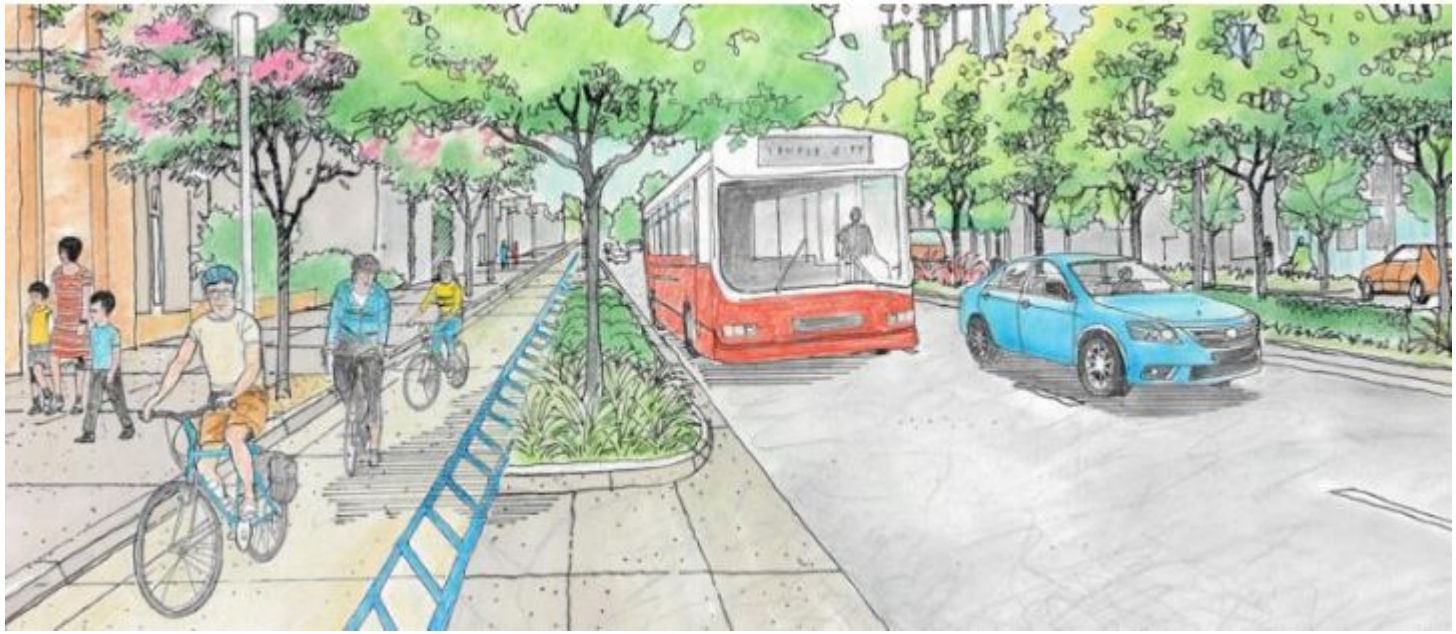
What is Clark County doing to change this cycle?

Pedestrian Detection

HAWK Beacon on NE Hwy 99 south of NE 78th St



Complete Streets



Strategies to improve mobility for Seniors

Pedestrian connection requirements

Green Streets Program

Change in zoning/development codes for future development

Neighborhood level planning

Questions?

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