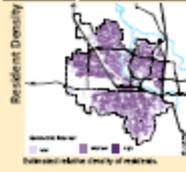


Eugene 20 Minute Neighborhoods

City of Eugene 20-Minute Neighborhood Analysis

Active Transport Factors

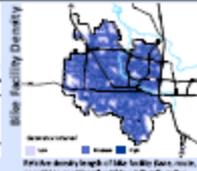
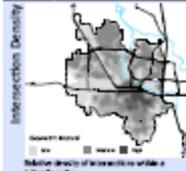
People



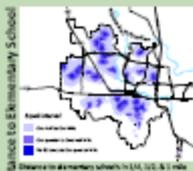
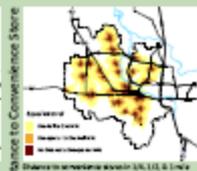
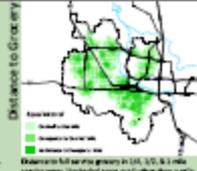
Timely and safe long block walks are an essential factor in creating a vibrant and walkable city. Many of the factors that contribute to good walking conditions are related to the density of people. High density areas are more likely to have a mix of uses, including residential, commercial, and recreational. This mix of uses creates a more vibrant and walkable city. High density areas are more likely to have a mix of uses, including residential, commercial, and recreational. This mix of uses creates a more vibrant and walkable city.



Infrastructure

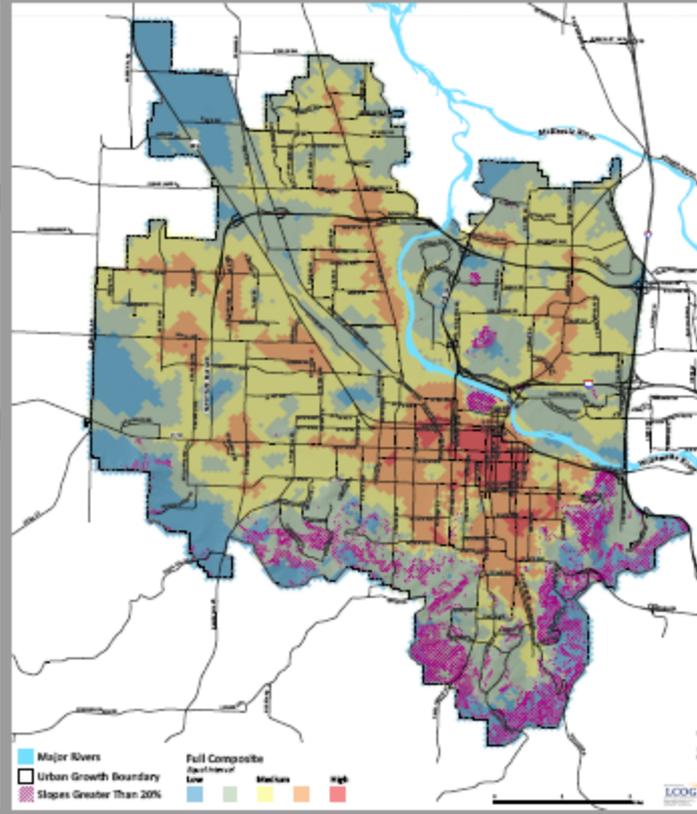


Destinations

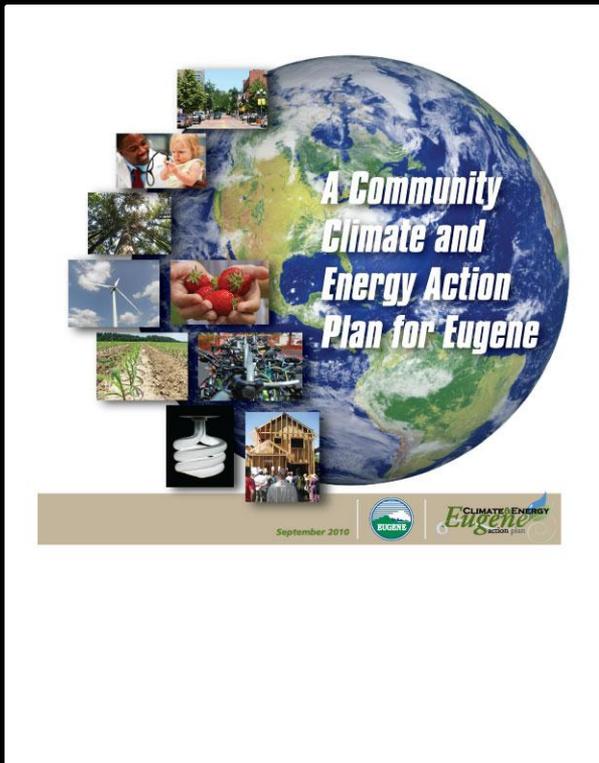


Full Composite Heat Map

Score from all eleven active transport factors



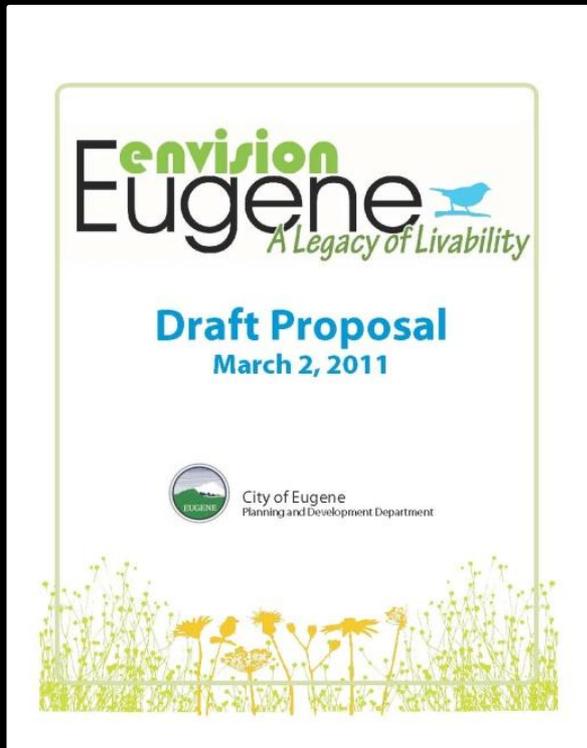
Eugene 20 Minute Neighborhoods: Background



“...where 90 percent of Eugene residents can safely walk or bicycle to meet most basic needs....”

“Make 20 minute neighborhoods a core component of Envision Eugene”

Eugene 20 Minute Neighborhoods: Background



Envision Eugene
Plan for Climate Change and Energy Uncertainty

Cities are the front line for mitigating the economic and social risks stemming from energy uncertainty, reducing greenhouse gas emissions associated with the built environment, and preparing for changes in regional climate.

Several strategies in other parts of this document also address climate change and energy uncertainty, particularly those under the pillar pertaining to compact urban development and efficient transportation options. In addition to those strategies, the following strategies are consistent with the *Climate and Energy Action Plan* and will work to protect our population and our environment, by mitigating and preparing for future uncertainties of a changing climate and rising fuel prices.

20-Minute Neighborhoods

20-Minute Neighborhoods are walk-able neighborhoods with plenty of services to meet most of residents' basic needs, such as parks, schools, shopping and dining. Walk-able neighborhoods are well connected with streets, sidewalks and paths, and offer trees, lights, safe crossings and a pleasant pedestrian environment. Supporting these qualities is an important recommendation of the Community Climate and Energy Action Plan for a healthier, more resilient community.

1. Plan for growth so that an increasing proportion of residents live in 20-Minute Neighborhoods where residents can meet most of their daily needs within walking distance from their homes. This strategy is intended to reduce the need for, and reliance on, motorized forms of transportation.

- Complete city-wide 20-Minute Neighborhoods assessment including location opportunities, and assessment of need for flexible codes, transportation infrastructure, parks, open space, partnerships and incentives.
- Plan residential expansion areas (if needed) to support 20-Minute Neighborhoods.

2. Make energy efficiency, including both in buildings and vehicles, the first line of action in reducing energy dependence and greenhouse gas emissions.

- Future policy decisions should support the efforts of the Pedestrian and Bicycle Master Plan, the Eugene Transportation System Plan, collaboration with Lane Transit District (LTD) to complete the TriX bus rapid transit system, and efforts to encourage existing and new houses to be energy efficient.
- Plan for changes in electricity generation and distribution methods and the resulting effects on land use.
- Take full advantage of energy efficiency opportunities in retrofits and renovations to existing buildings as a form of energy efficient redevelopment.
- Facilitate the use and generation of renewable energy for buildings as part of redevelopment, and facilitate the use of low-carbon transportation energy options as part of redevelopment.


Neighborhood business

“Plan...so that an increasing proportion of residents live in 20-Minute Neighborhoods....”

19 A ~~20~~ minute neighborhood is...

Distance



Density



Destinations



Walkability

Not just about the ability to take a stroll

Making trips without a car

(Making it possible to make trips without a car)



Why?

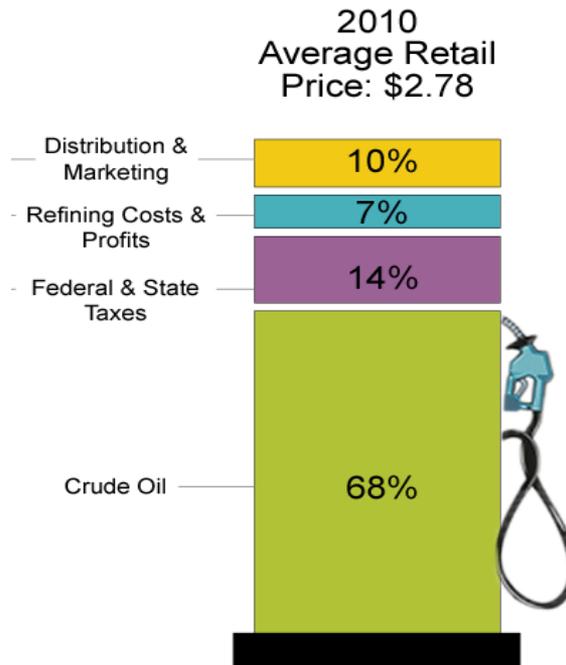
Transportation cost savings
Reduced traffic congestion
Health



Why?

Environment
Access for all
Keep dollars local

What do we pay for in a gallon of Regular Grade gasoline?



Source: U.S. Energy Information Administration.



What does a 20 minute neighborhood feel like?

Downtown



And....

Whiteaker

24th and Hilyard

28th and Friendly

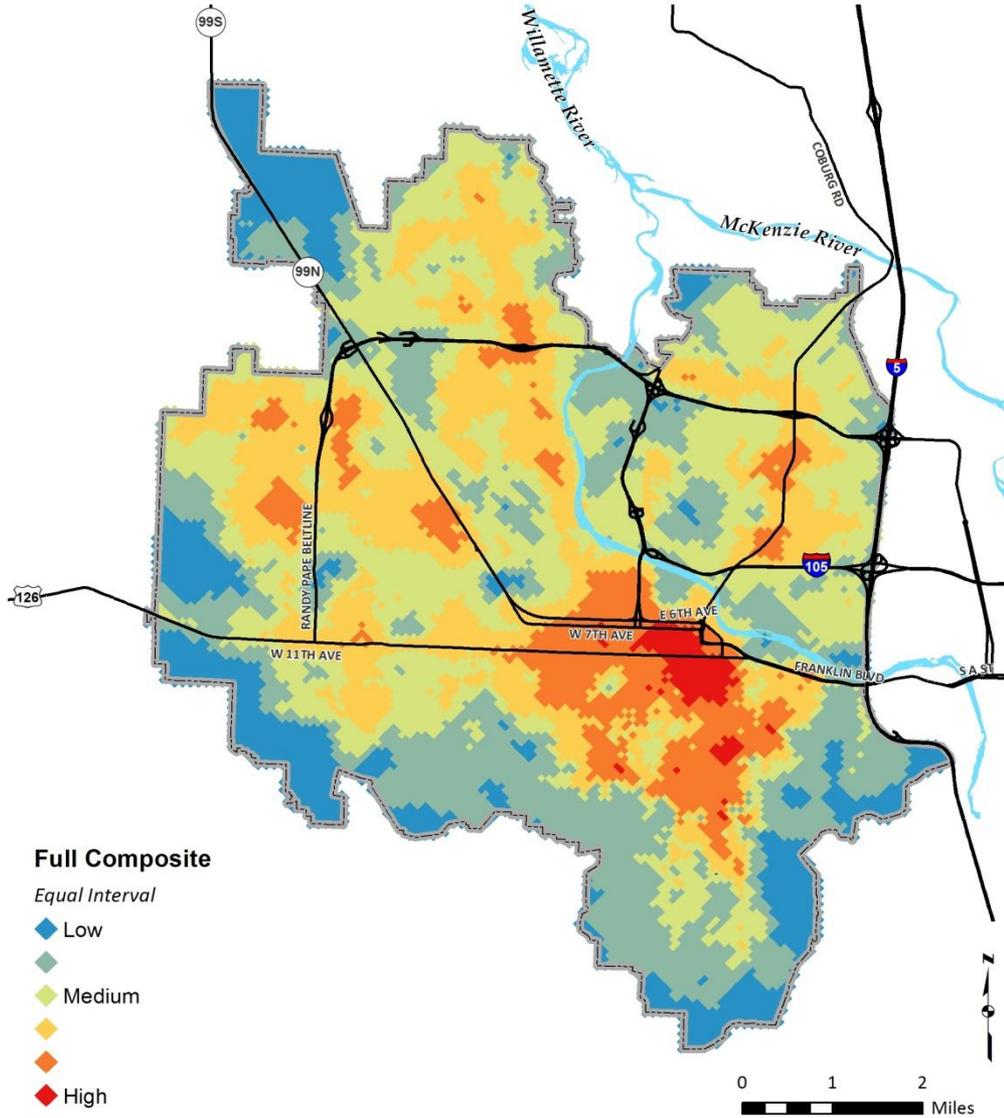


Full Composite

Population and employment plus all nine infrastructure and distance factors.

Composites

Urban Growth Boundary — Major Roads Major Rivers



Full Composite

Equal Interval

◆ Low

◆ Medium

◆ High

◆ Very High

The 20 minute criteria

- Distance
 - Intersection Density
 - Sidewalks
 - Bike Lanes
 - Transit



The 20 minute criteria

- Distance

 - Intersection Density

 - Sidewalks

 - Bike Lanes

 - Transit



- Destinations

 - Elementary schools

 - Parks

 - Full service grocery

 - Convenience stores

 - Other commercial (restaurants, salons, café's, and more..)



The 20 minute criteria

- Distance

 - Intersection Density

 - Sidewalks

 - Bike Lanes

 - Transit

- Destinations

 - Elementary schools

 - Parks

 - Full service grocery

 - Convenience stores

 - Other commercial (restaurants, beauty)

- Density

 - Population density (at home)

 - Employment density (at work)



The 20 minute criteria

- Distance

 - Intersection Density**

 - Sidewalks

 - Bike Lanes

 - Transit

- Destinations

 - Elementary schools

 - Parks**

 - Full service grocery**

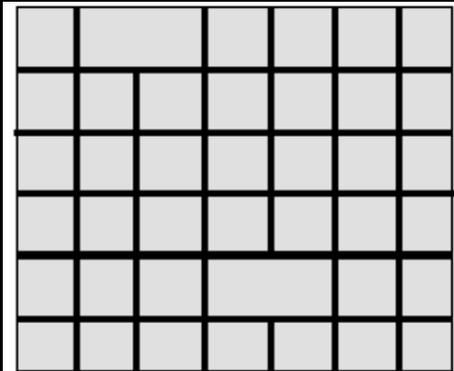
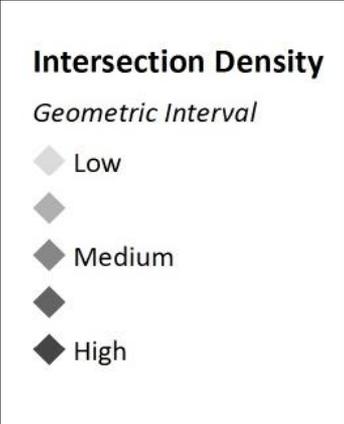
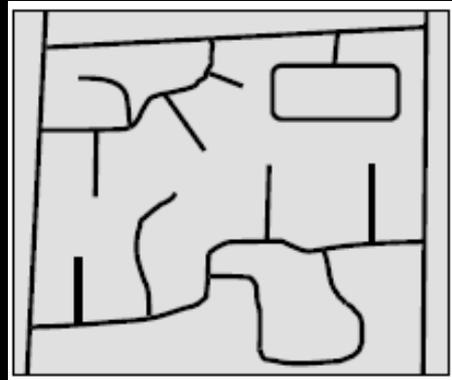
 - Convenience stores

 - Other commercial (restaurants, beauty shops, café's)

- Density

 - Population density (at home)**

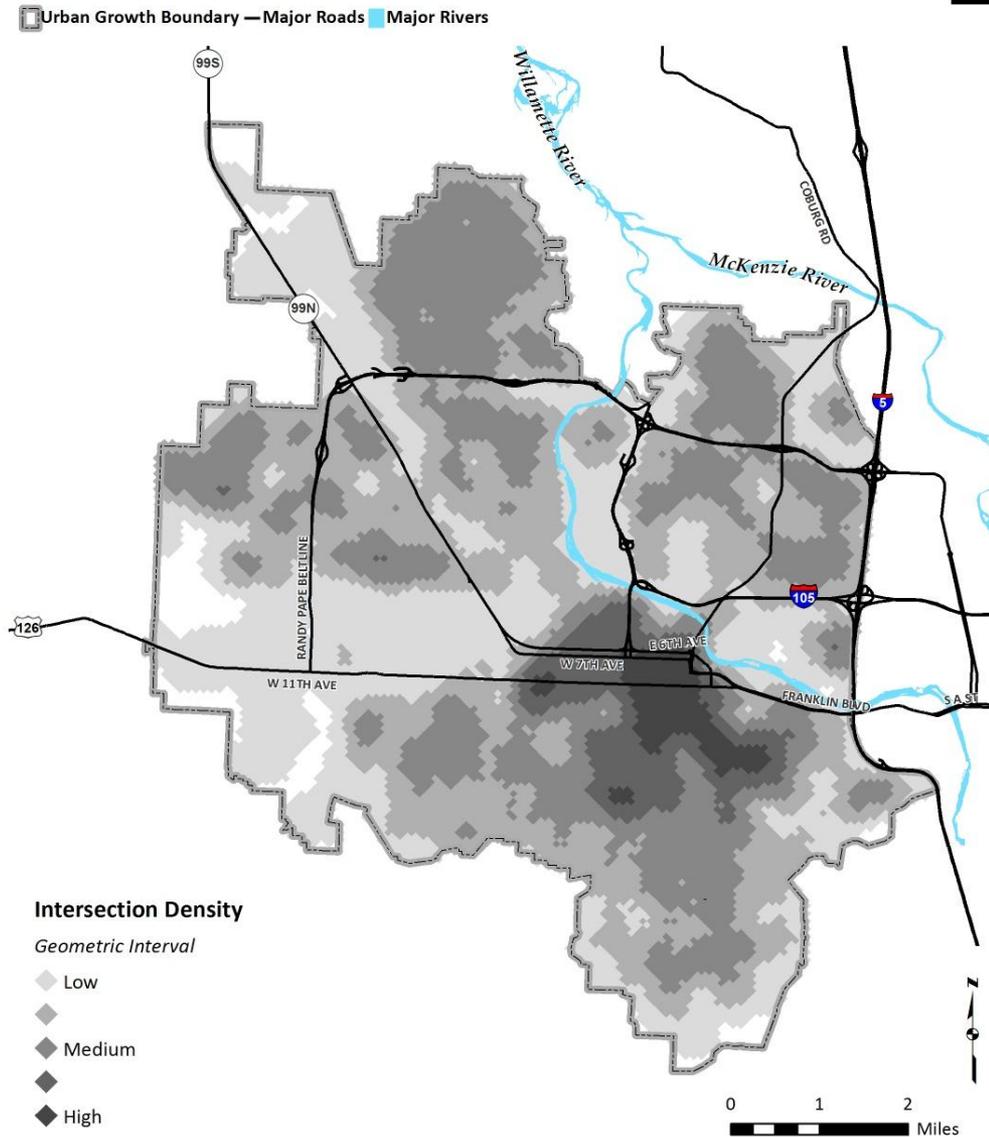
 - Employment density (at work)



Intersection Density

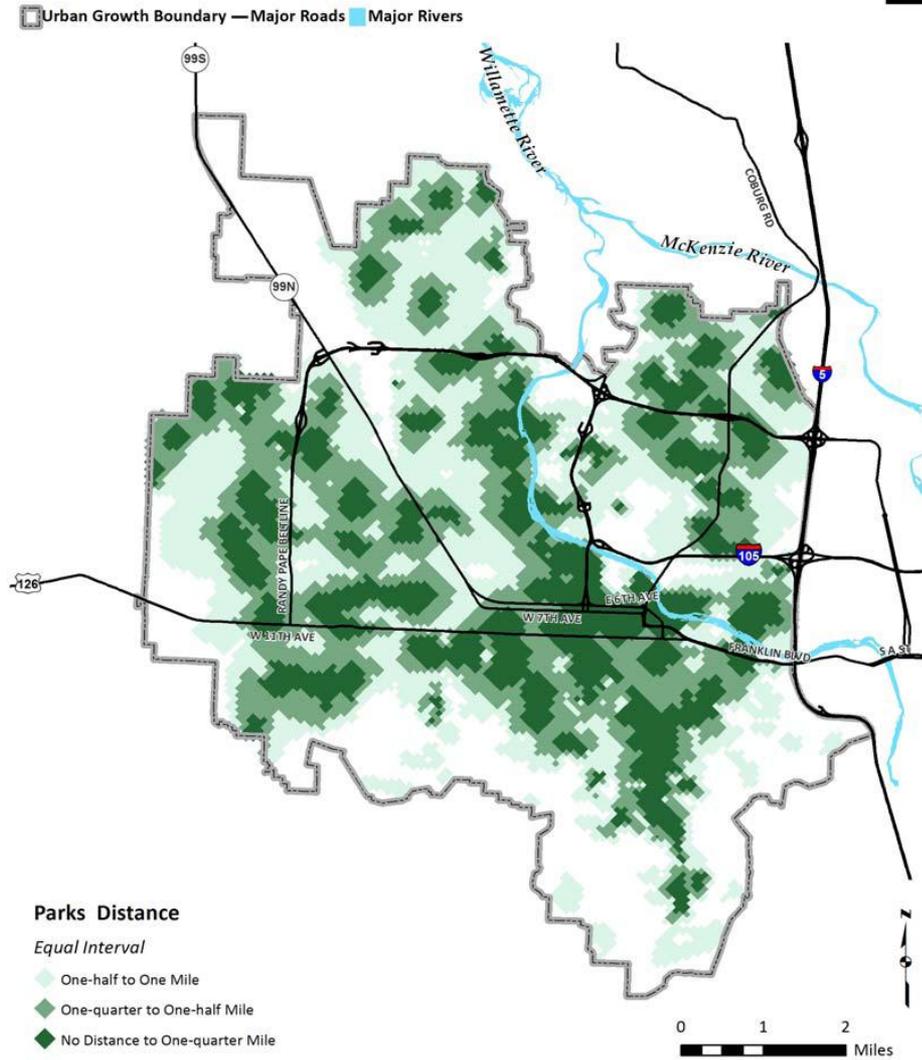
Number of intersections within 1/4 mile radius of each 33' cell averaged to a 330' tile.

Density



Park Distance

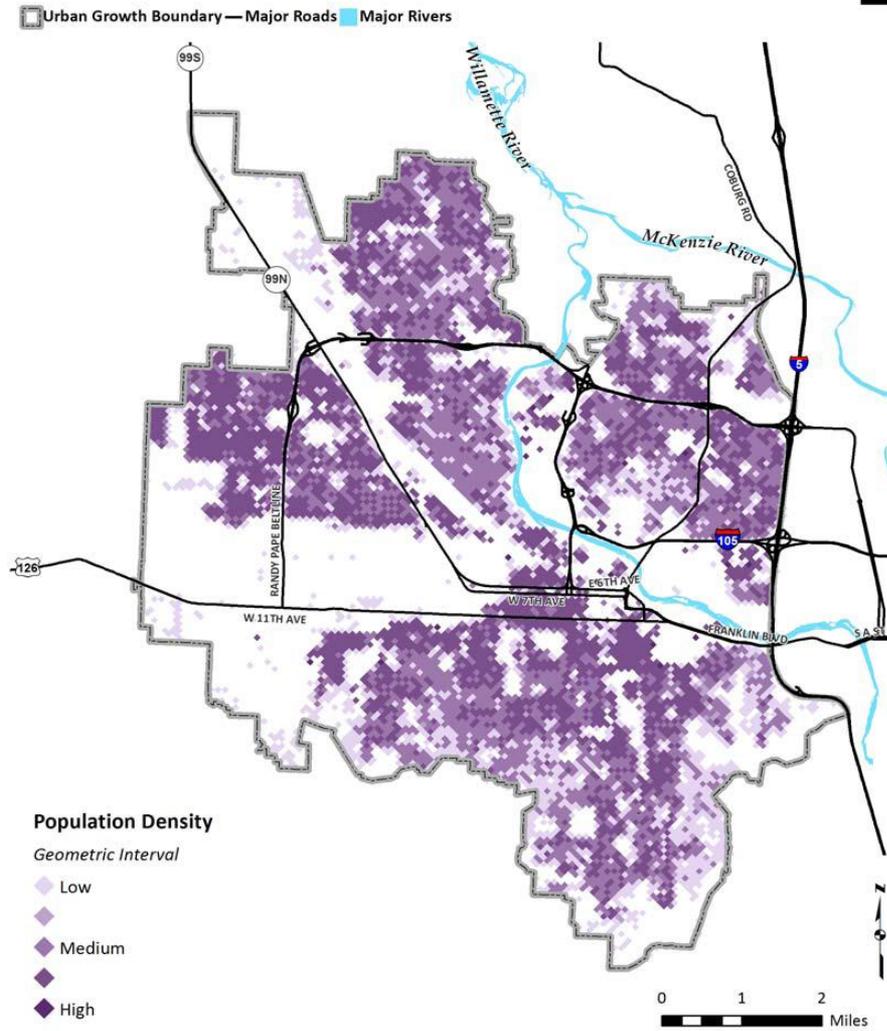
Average distance within 330' tile to park based on 1/4, 1/2, & 1 mile service areas weighted on an equal interval (99, 66, 33).



Resident Density

Estimated number of residents per 330' tile; see Appendix A for estimate assumptions.

People



Full Composite

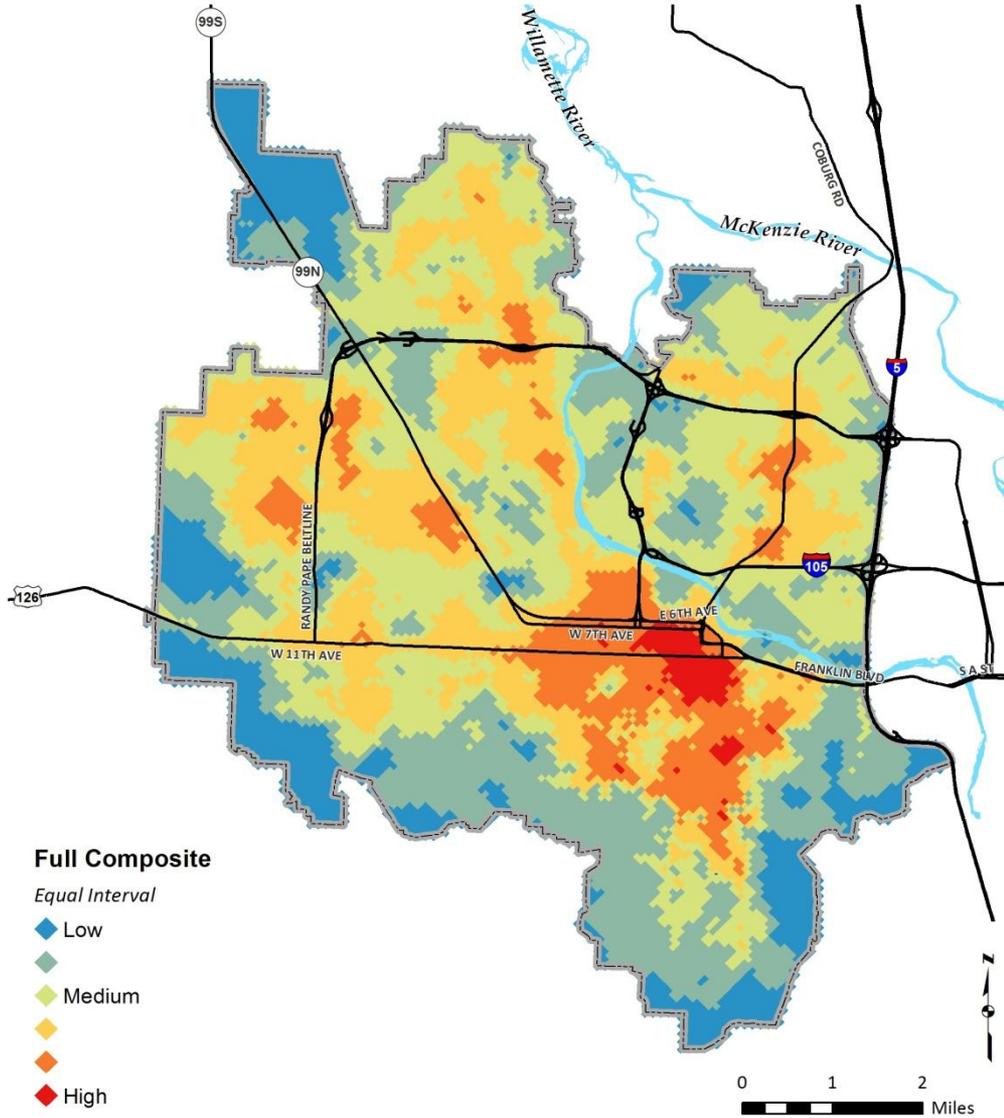
- Transportation elements
 - Intersection Density
 - Sidewalks
 - Bike Lanes
 - Transit
- Destination elements
 - Elementary schools
 - Parks
 - Full service grocery
 - Convenience stores
 - Other commercial (restaurants, beauty shops, café's)
- Population elements
 - Population density (at home)
 - Employment density (at work)

Full Composite

Population and employment plus all nine infrastructure and distance factors.

Composites

Urban Growth Boundary — Major Roads Major Rivers



Other influences

What's not included in these maps but still important to understand?

Aesthetics

Tree canopy cover
Street width



Safety and security

Auto traffic speeds
Signaled crosswalks
Crime rates



Other Considerations

What's other factors do we need to understand in order to prioritize?

Socioeconomics:

Income distribution

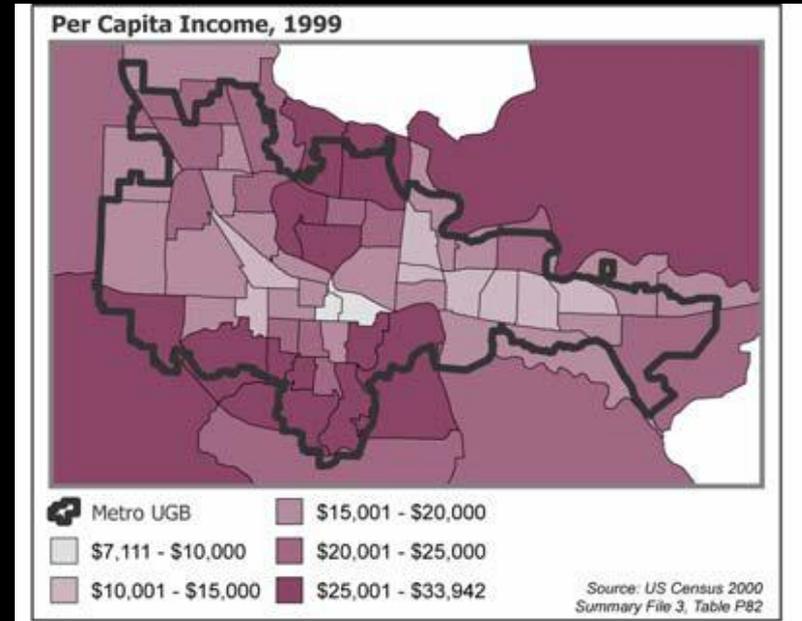
Age

Ethnicities

Other factors:

Auto ownership

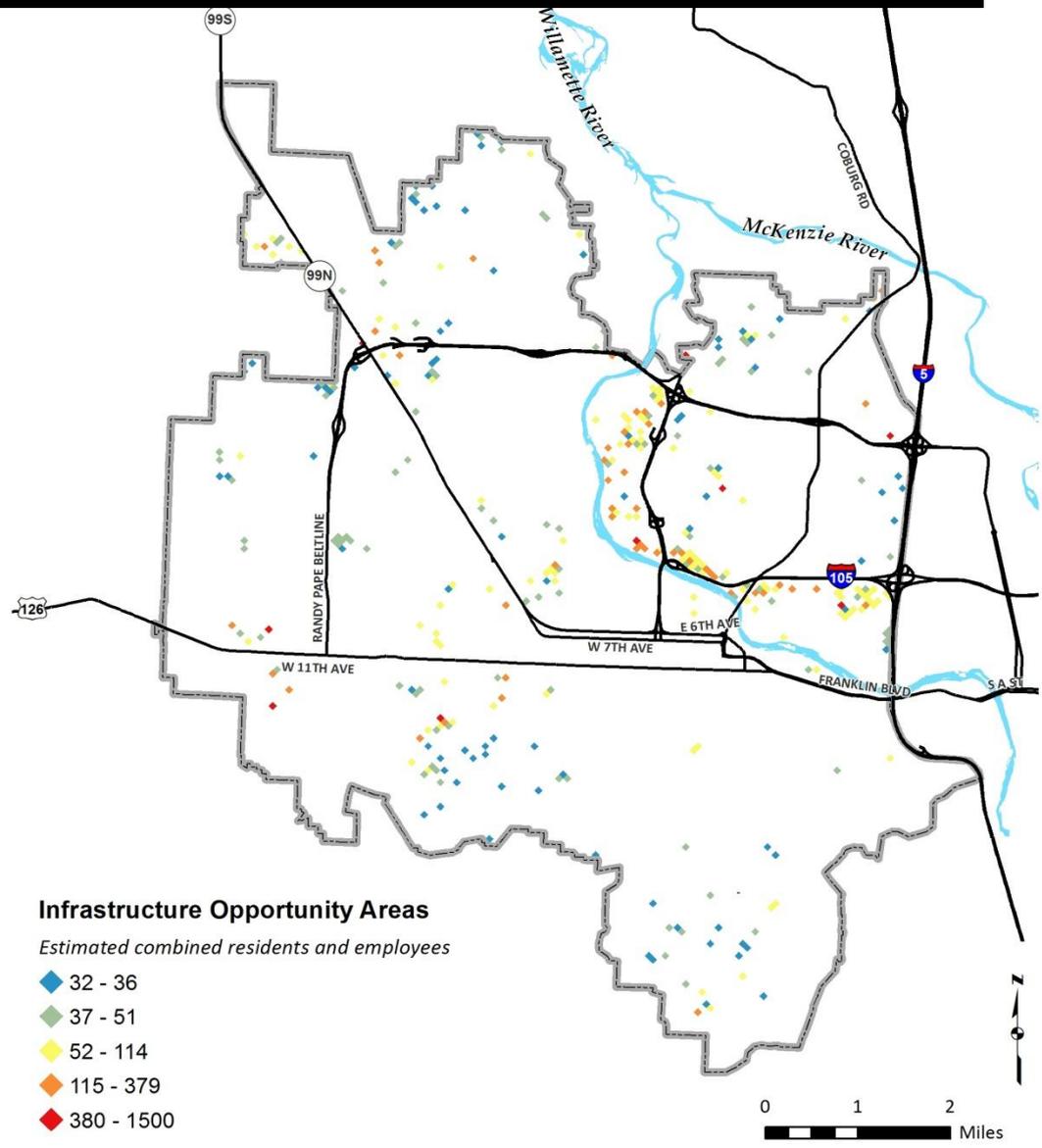
Current biking and walking trends



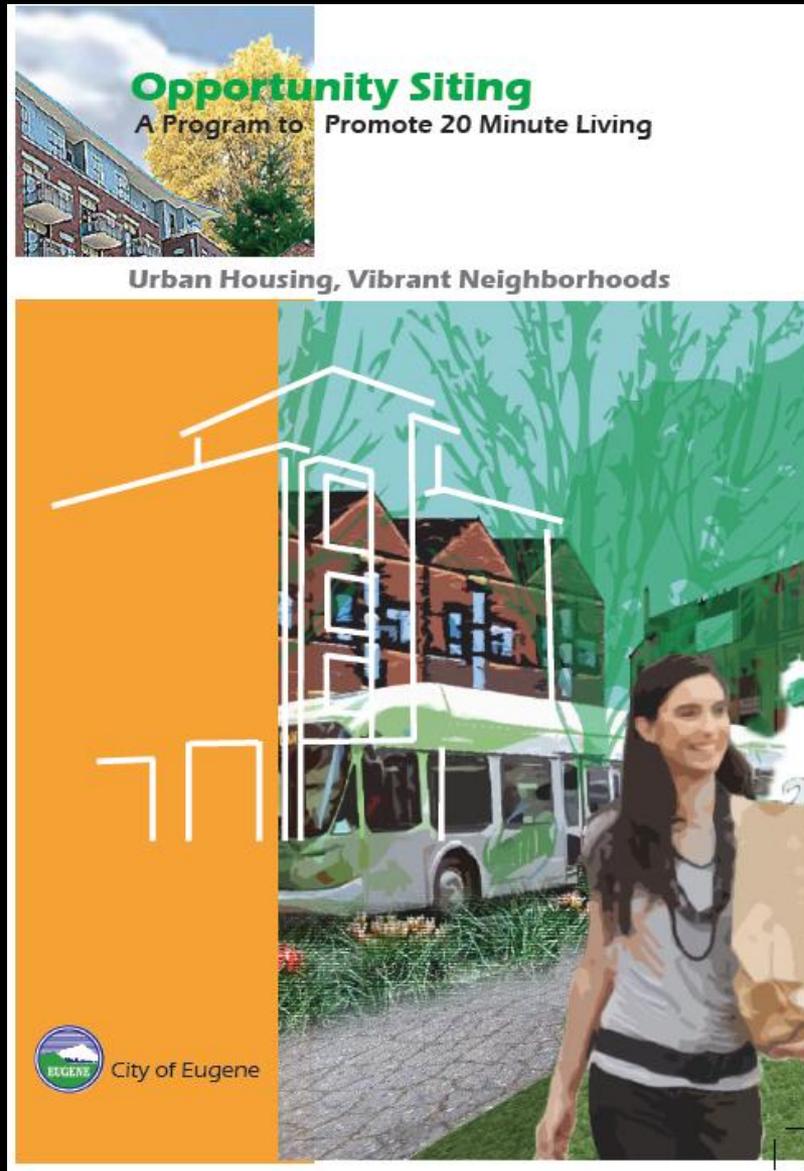
Where are we headed?

- Mapping the opportunities
- Opportunity siting
- Connecting commercial and residential

Mapping Opportunity



Opportunity Siting



Linking homes and services



Journal of Urbanism: International Research on Placemaking and Urban Sustainability

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<http://www.informaworld.com/smpj/title-content=t782882883>

Untapped density: site design and the proliferation of suburban multifamily housing

Nico Larco*

* Department of Architecture, University of Oregon, Eugene, OR, USA

Journal of Urbanism 169



Figure 1. Typical suburban multifamily developments from around the country: (clockwise from top left) Eugene, Oregon; Phoenix, Arizona; Pleasanton, California; and Sun Prairie, Wisconsin.

due to land cost, construction costs, and rental rates, these units are rarely less than two stories tall.

Based on housing density, these garden apartment/condominium developments are almost always in areas that have access to public sewer systems (US Census Bureau

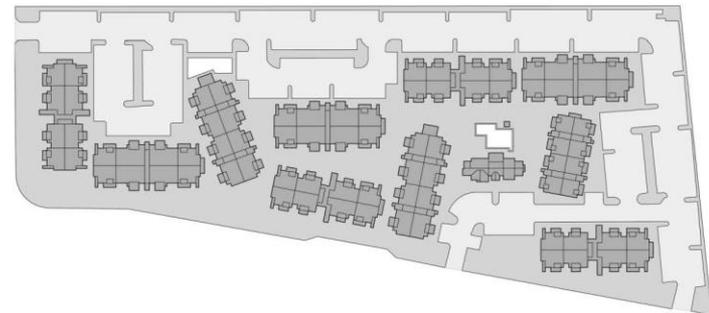
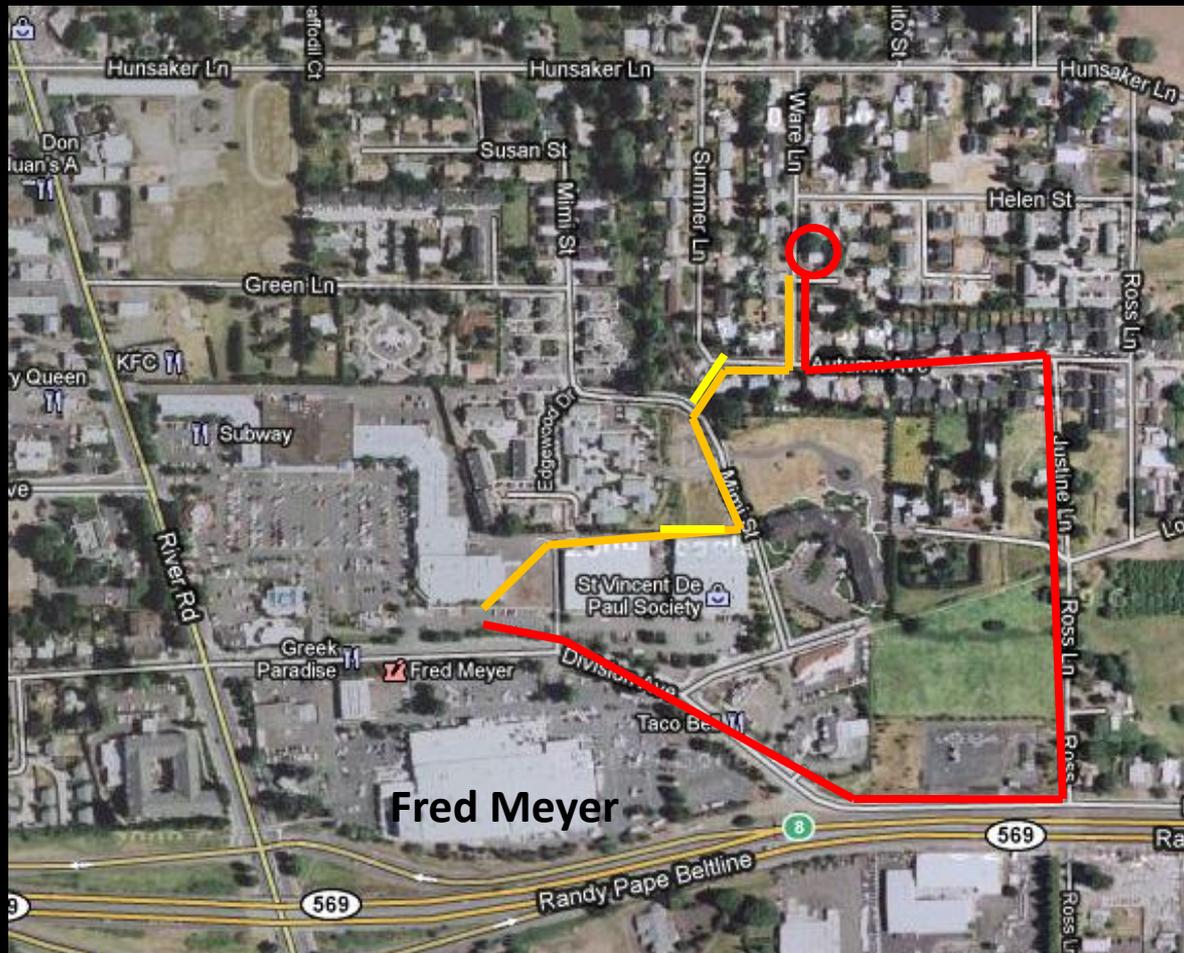


Figure 2. Typical suburban multifamily site plan with continuous parking drives, clustered buildings, and limited connections to adjacent parcels; Pleasanton, California.

Linking homes and services

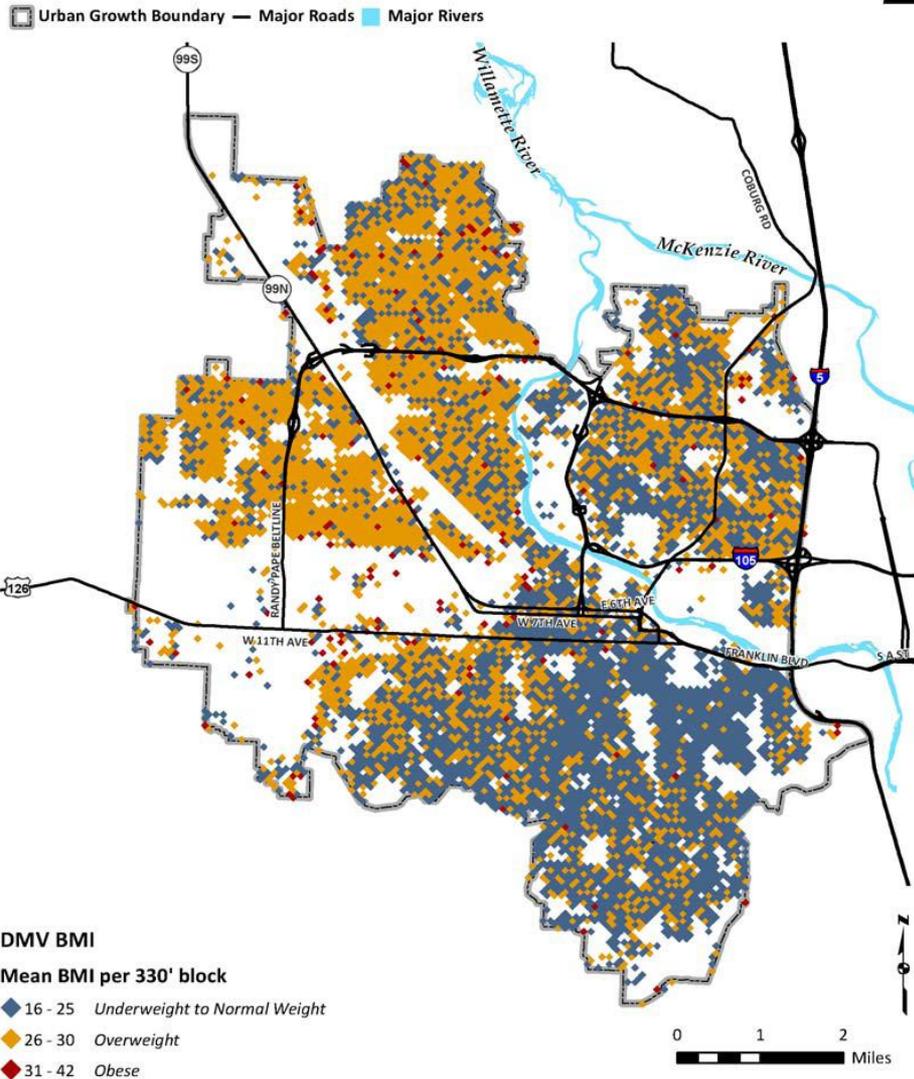


Questions?

Additional Maps of Interest

Mean Adult Body Mass Index 2009

Body mass index per block is calculated from Department of Motor Vehicles card holder renewal information for Lane County for the years 1999-2009. Data was not screened or verified save to match to current address file, and represents former as well as current residents of the area.,



Full Composite

Equal Interval

◆ Low

◆ Medium

◆ High

