

# Energize Eastside

## *South Sub-Area Committee Workshop #1*

**Andy Wappler**

*Vice President, Corporate  
Affairs, Puget Sound  
Energy*

energize**EASTSIDE**

March 27, 2014

# Energize Eastside overview

- Growth is straining our region's existing transmission system
- Conservation alone is not enough
- We need to act now
- We will work with the community to identify solutions

***Energize Eastside*** will build new electric transmission infrastructure to ensure dependable power

# Eastside system: 1930s to today

System first installed in the **1930s**



3rd Avenue looking west, 1920s - Renton



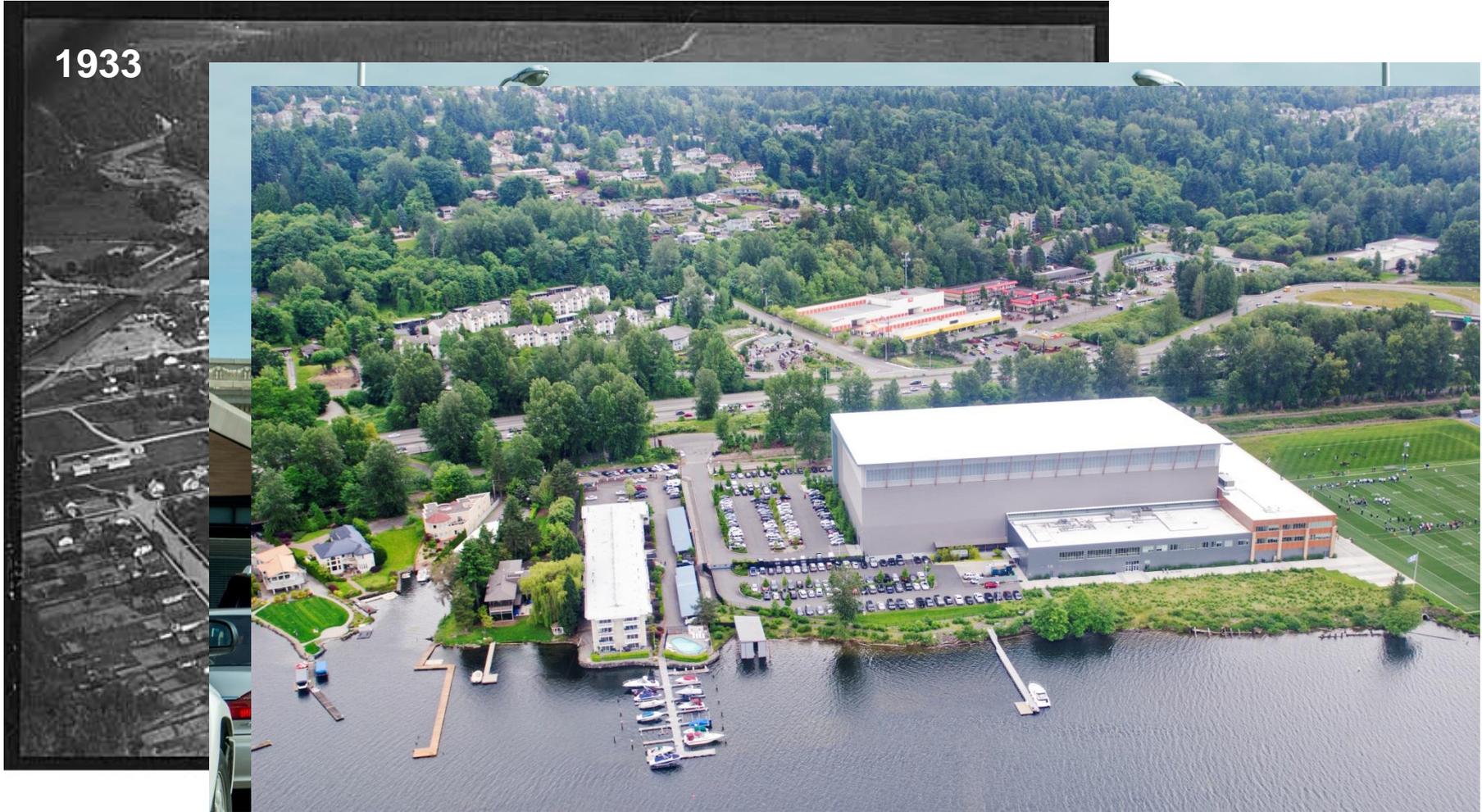
Leary Way, 1940 - Redmond



NE 8th Avenue and Bellevue Way, 1930s - Bellevue

# Eastside then and now

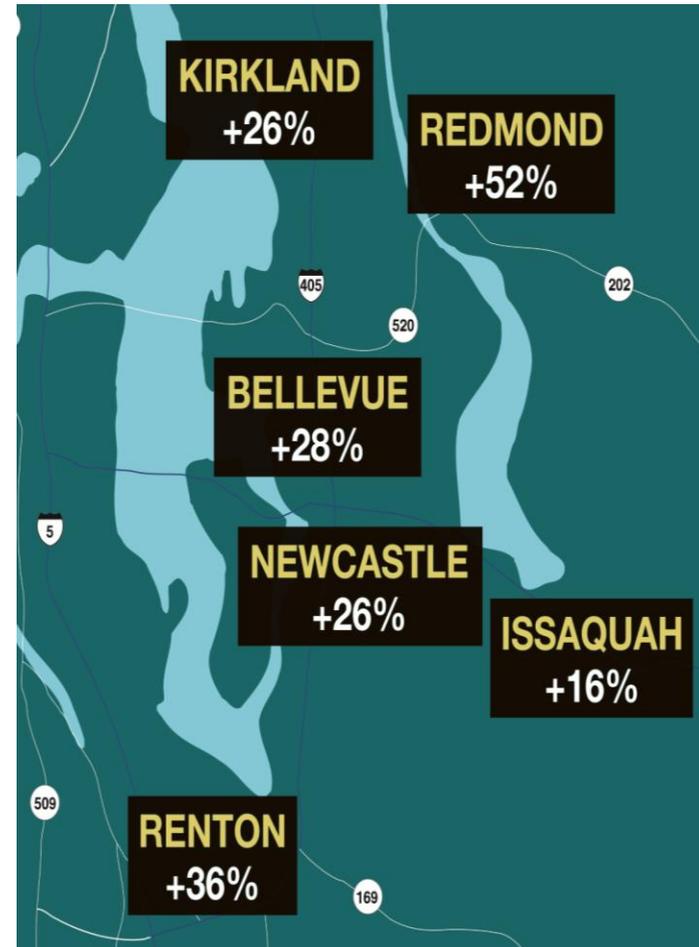
## Renton



# Growth is straining the system

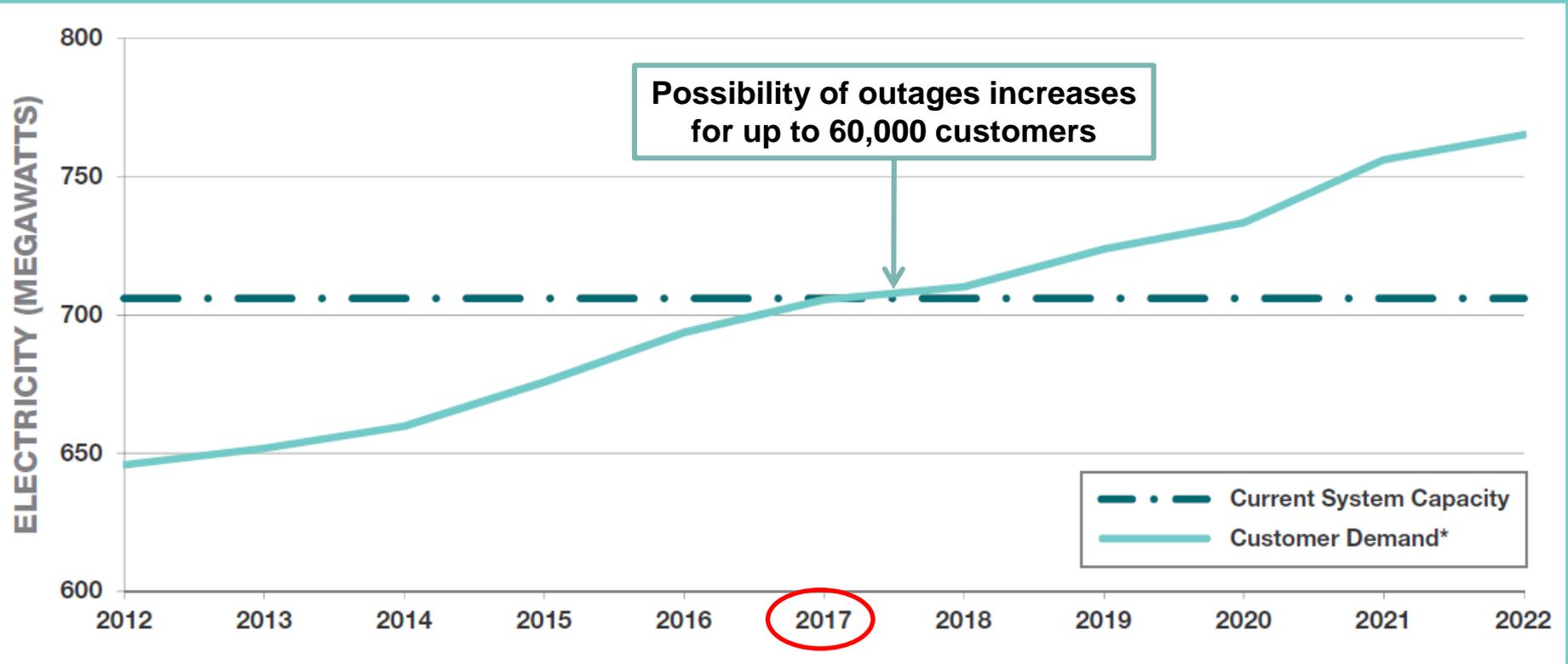
## Regional growth

- Population predicted to grow by more than a third
- Employment to grow 70% between 2012 and 2040



# We need to act now

## EASTSIDE CUSTOMER DEMAND FORECAST



\*Customer Demand assumes 100% of conservation goals are met.

# Conservation alone is not enough

Energy demand will be met through **both** increased, aggressive **conservation efforts**



**And infrastructure upgrades** needed to provide reliable power



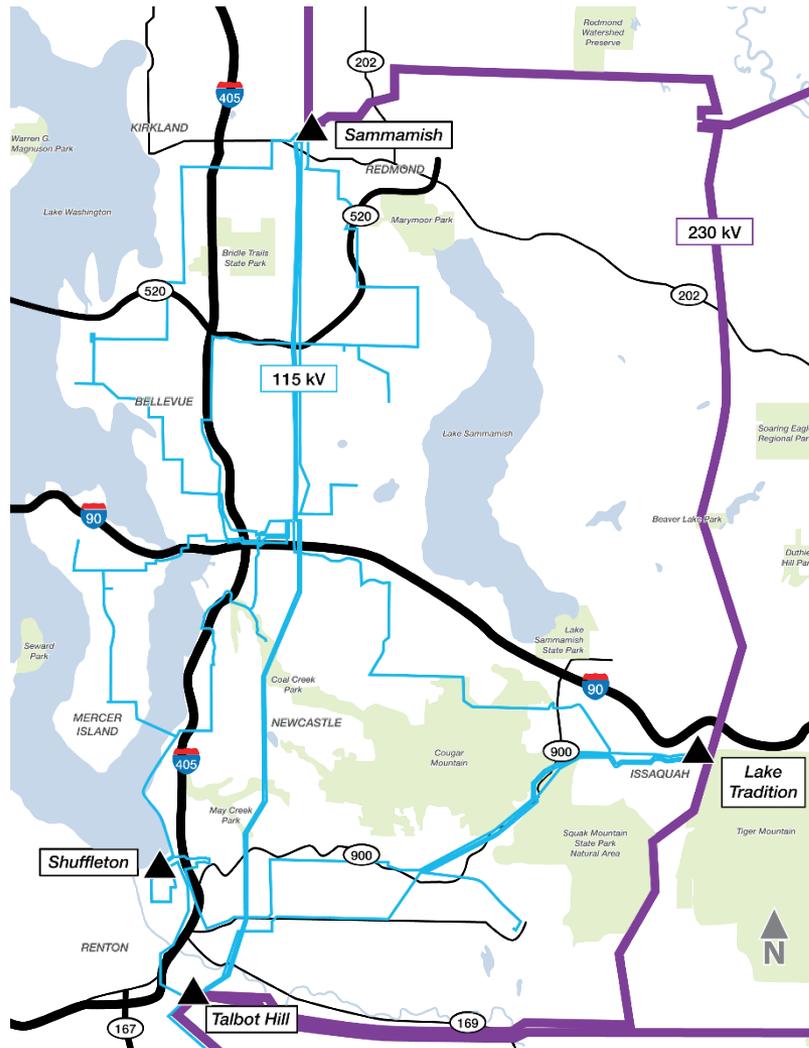
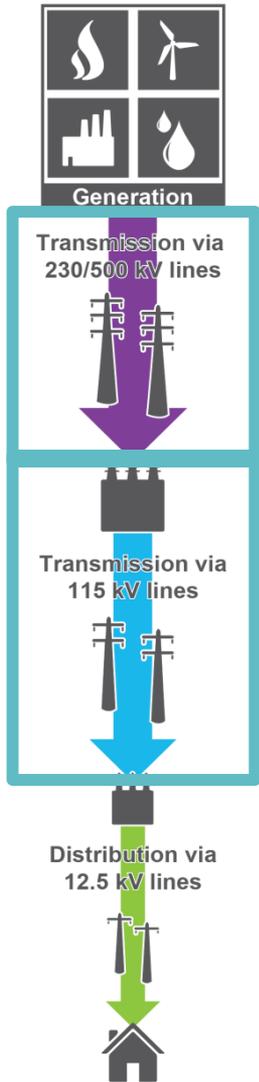
# Our solution

## energize**EASTSIDE**

Builds approximately 18 miles of **new 230 kV transmission lines** from Redmond to Renton

**Supports** the area's **growth**

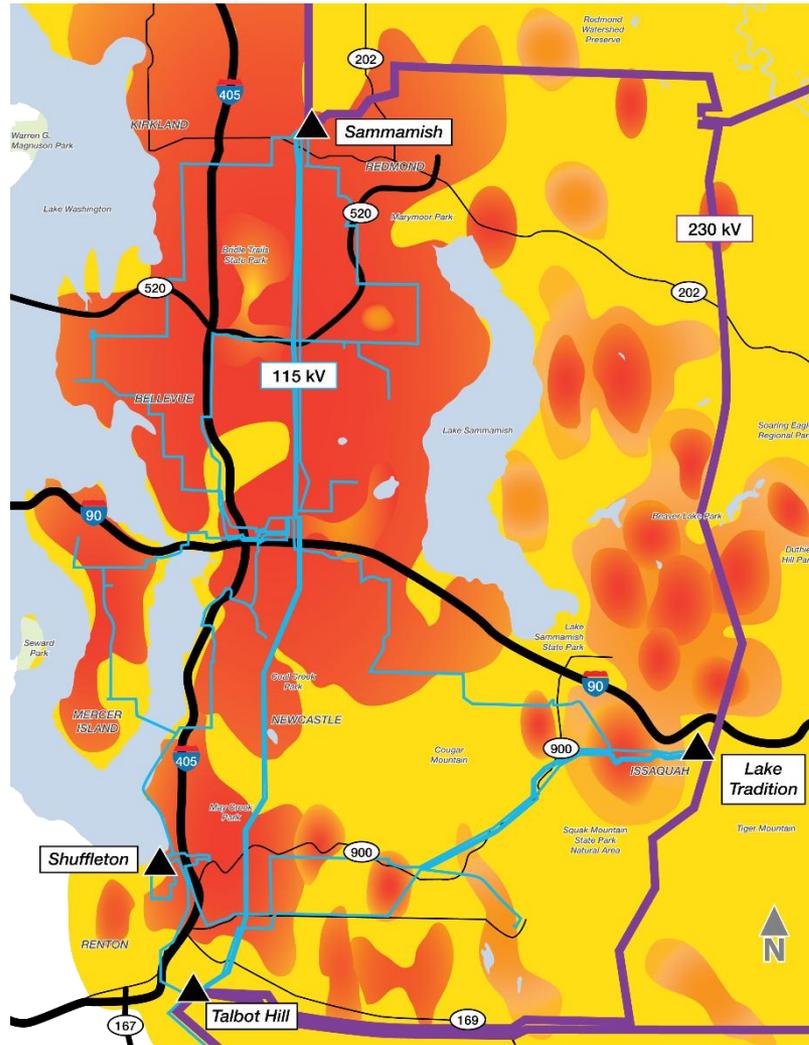
# How power gets to the Eastside



## Legend

-  Existing bulk transmission lines (230 kV)
-  Existing transmission lines (115 kV)
-  Substations

# Where energy use is growing most



## Legend

- Existing bulk transmission lines (230 kV)
- Existing transmission lines (115 kV)
- Substations

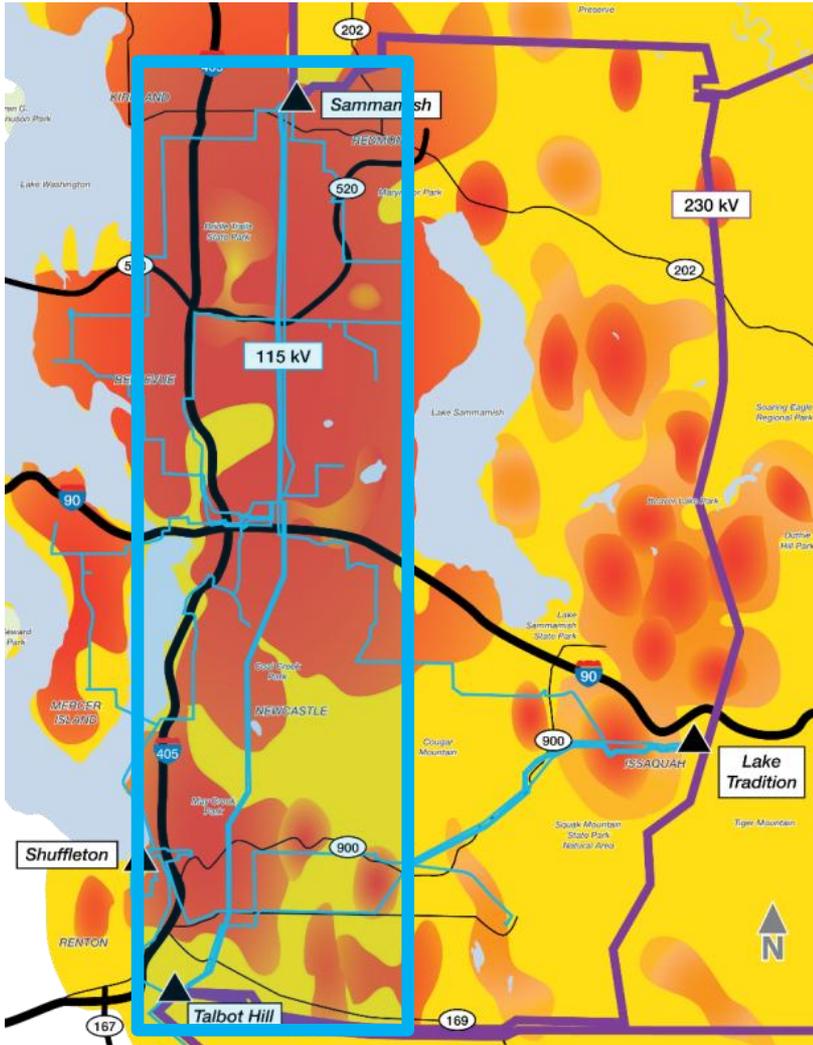
## Electric demand density



# Potential route segments



# Bringing power to where it's needed



# What we're not building



# Sample transmission lines

Typical pole height: 95 to 125 feet depending on topography

Typical span range: 400 to 700 feet depending on topography



# What about undergrounding?

- PSE is proposing an overhead transmission line project
- The reasons:
  - **No. 1: Cost \$**

<b>Underground</b>	<b>Overhead</b>
\$20-28 million per mile (estimated labor, material and equipment costs)	\$3-4 million per mile (estimated labor, material and equipment costs)

# Who pays to underground?

Requesting group pays the delta between undergrounding and overhead

- Requesting group needs to initiate and identify the specific members of the group
- Money paid up front for both engineering and construction

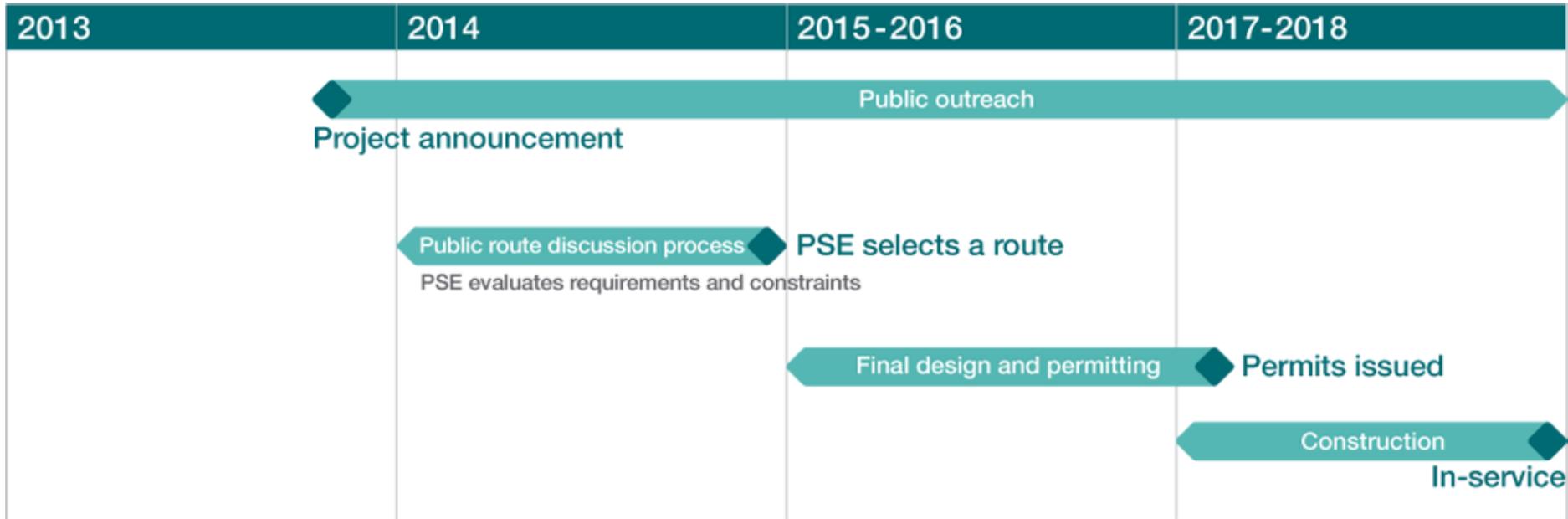


# What about undergrounding?

- Other reasons:
  - Construction impacts
  - Environmental impacts
  - Operational impacts



# Project schedule



# Opportunities for public involvement

Community Advisory Group

Sub-Area Committees

Community Meetings

Other Opportunities

## WINTER

### 1 Education

Learn about electric system and project need

**Community Meeting #1**  
Feedback on project need, potential segments and route selection process

- Discuss community concerns
- Learn about the factors involved in developing the route segments
- Bus tour of project area

## SPRING

### 2 Identify route options

Develop sub-area segment input for full Community Advisory Group discussion

- Discuss community concerns
- Develop potential route options based on input from Sub-Area Committees

## SUMMER

### 3 Narrow route options

**Community Meeting #2**  
Feedback on potential route options

- Discuss community concerns
- Weight community values for evaluation process
- Narrow route options to one recommended route

## FALL

### 4 Recommended route

**Community Meeting #3**  
Feedback on Community Advisory Group recommended route

- Discuss community concerns
- Consider public input and validate recommended route and provide route recommendation to PSE for consideration

Neighborhood and community group briefings, fairs and festivals, public kiosks, online surveys

# Sub-area boundaries



# Workshop #1 goals

- Provide input on the potential route segments
- Begin discussing key evaluation factors

# Directions for the workshop

- Choose one person at your table to be the recorder
- Follow the guiding questions provided
- The recorder will write down your group's key points on the flip chart
- We will have facilitators available to help and subject matter experts available to answer specific questions

# Route segment conversation

## Question 1:

- For this segment, what key issues should be considered?
  - Part A: **Individually**, complete the issues checklist worksheet
  - Part B: **As a group**, discuss and identify the top five issues for this segment

# Route segment conversation

## Question 2:

- For this segment, what are specific considerations, unique characteristics and any other information that hasn't already been discussed?
- What should the Sub-Area Committee and the Community Advisory Group know about your segment?

# Evaluation

- How do tough decisions get made?
- How do community values get considered?

# Evaluation factors

## Community value

- Community values pristine parks

## Evaluation factor (question)

- How many parks are crossed or adjacent to each segment?

# Evaluation factors

## Question 1: Values and factors

- What evaluation factors should be considered by the Sub-Area Committees when considering route segments in this sub-area?

*Example:*

- Community value = Limited infrastructure in residential areas
- Evaluation factor (question) = How many residences are adjacent to each segment?

## Question 2: Factors

- Thinking about the factors you considered earlier:  
What data does your group think would be useful to make an objective comparison across segments?

# Evaluation factors report out

- What evaluation factors did your group come up with?
- Share three key factors

# Upcoming meetings

- **South Sub-Area Committee Workshop #2**  
April 24 from 6:30 to 9 p.m. at Renton  
Technical College
- **South Sub-Area Committee Meeting**  
May 15 from 6:30 to 9 p.m. at Renton  
Technical College

# Thank you!