

# Streamlining MOVES for CO Project Level

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# Outline

- MOVES Concerns
- Streamlining MOVES
- Data Templates
- Challenges
- Projects & Categorical CO Finding
- Conclusions & Concerns

# Concerns

## Project Level MOVES

- Data
- Consistency with Regional Modeling
- Time & budget
- QA/QC

# Streamlining

- Early Interagency consultation
- Share MOVES Templates
- Update SOW (consultants)
- Communicate- Region/local agency/consultant



# MOVES Data Share

- MOVES (DEQ, ODOT, LCOG and MPO) (2012)
- ODOT and Consultant work together (2013)
  - Project level templates
    - Age distribution (MPO)
    - Fuel formulation/Fuel Supply, I/M, Meteorological (DEQ)
    - Links & Link Source Type (Consultant)
    - Average Speed
- ODEQ & LCOG partnered with DMV and ODOT to obtain VMT data twice a year (2014)

# MOVES Project Level Challenges

- Data collection
- Running the Model
  - Update issues
  - Default data
- Link source type
- QA/QC

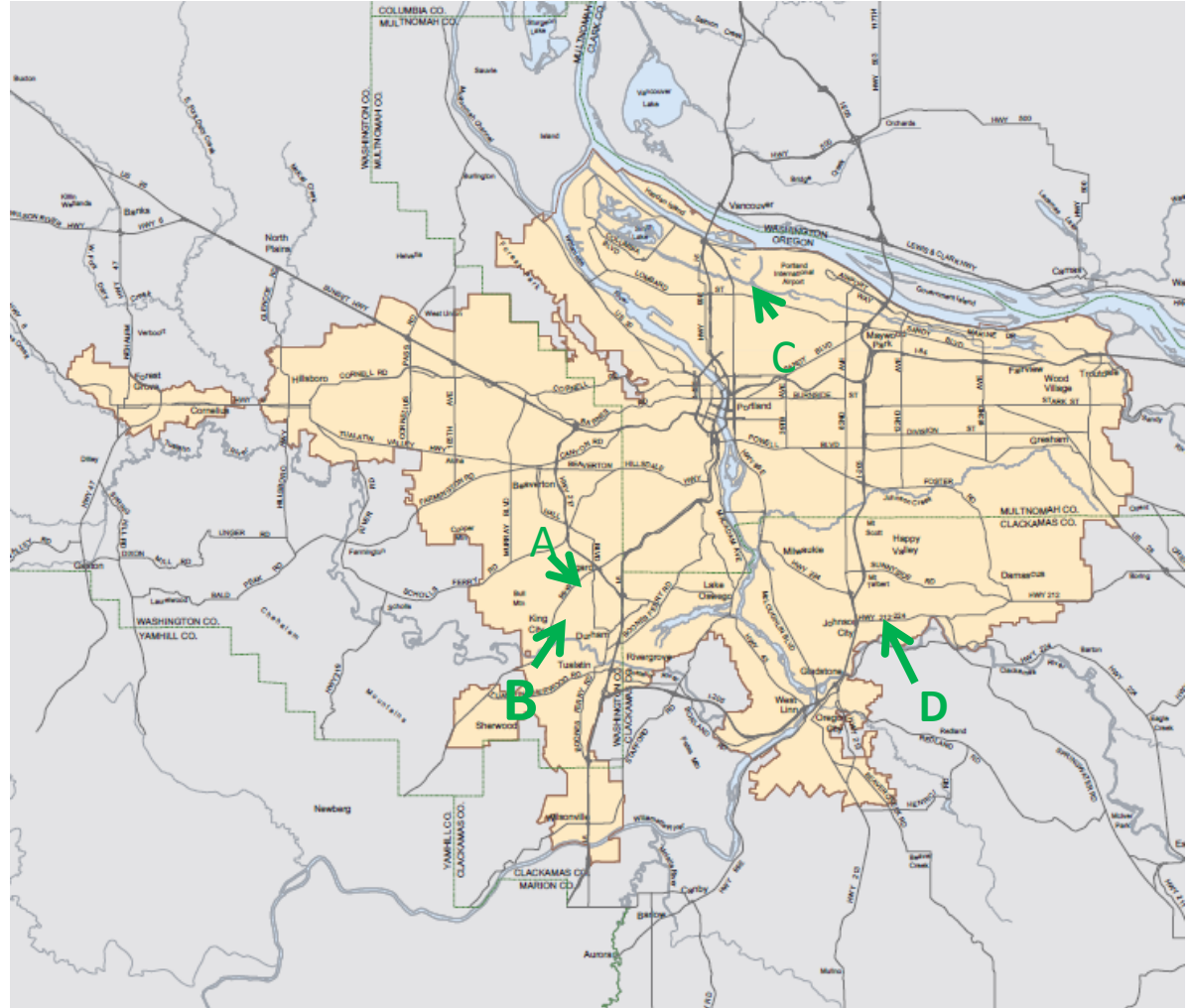
# CO Hot Spot Projects (Portland, OR)

A. Gaarde/McDonald  
(ODOT)

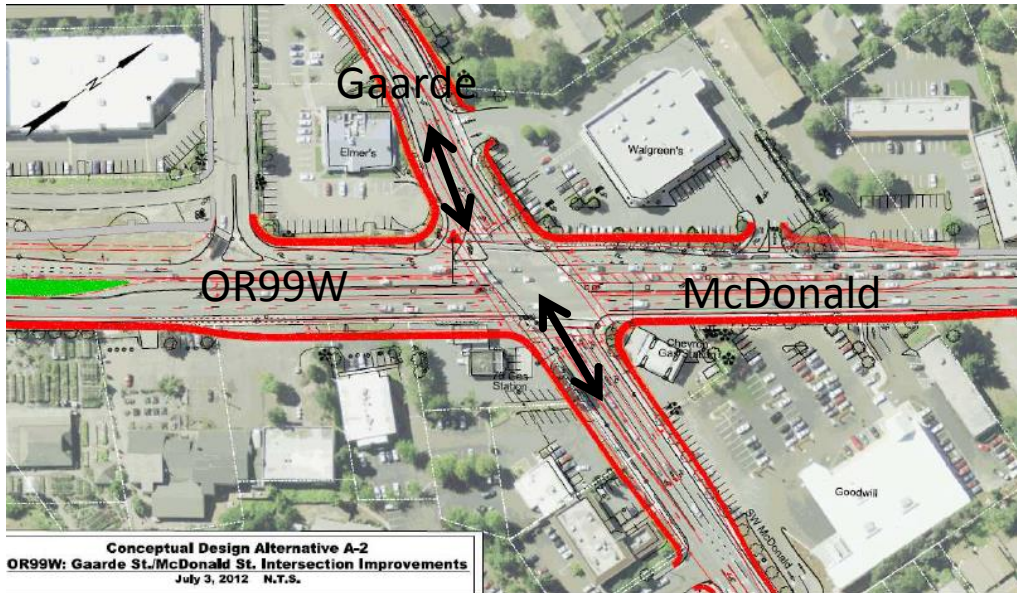
B. OR99W/Durham  
(ODOT)

C. MLK and Columbia  
(local agency)  
consultant

D. OR224 and 135<sup>th</sup>  
(ODOT)



# OR 99W/Gaarde /McDonald Intersection



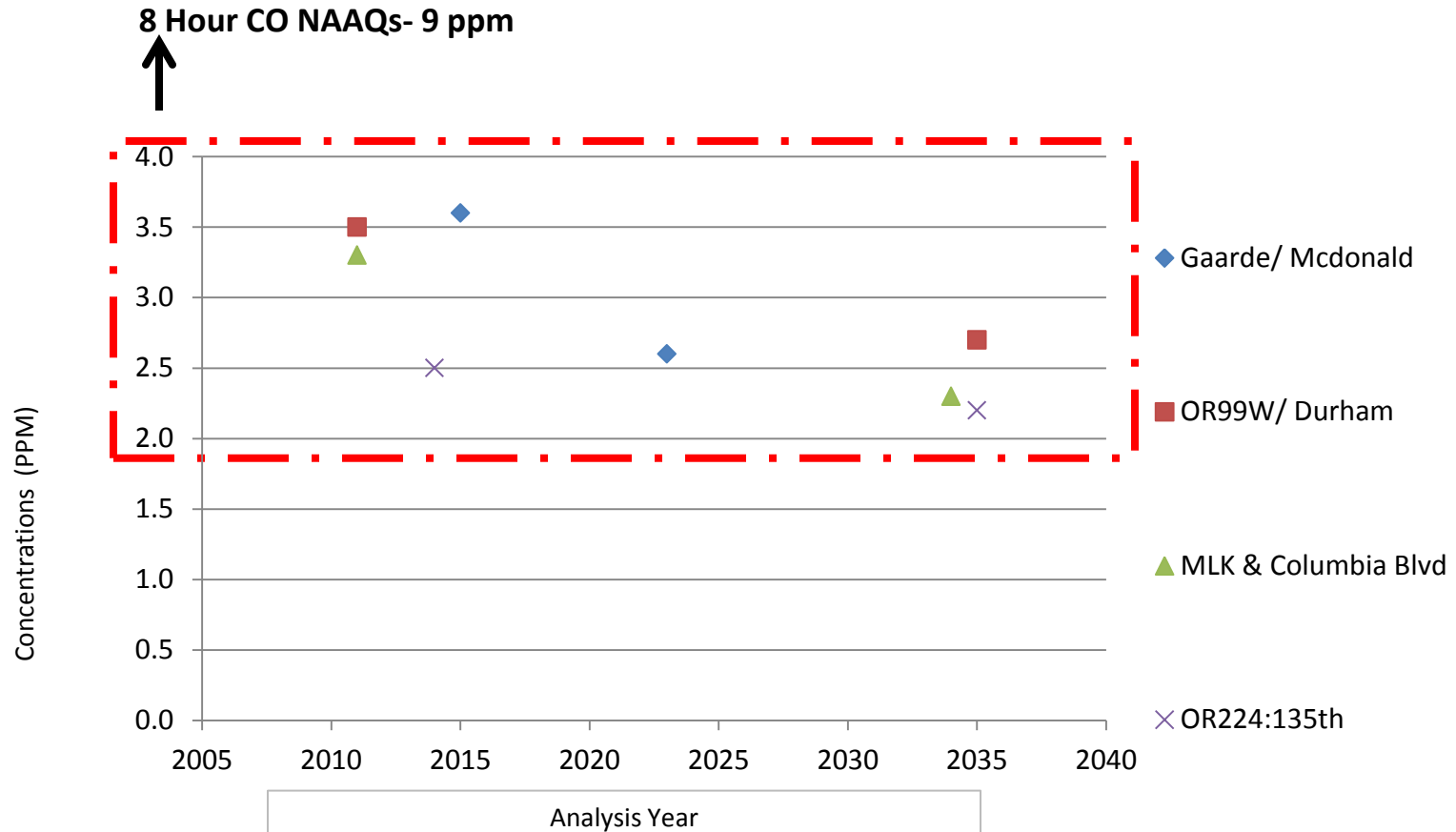
Gaarde/Mcdonald		
Number of through lanes	2 for 3, 3 for south	
Number of left turns	2 for 3, 1 for south	
Approach Volume range	490-2130	
Approach Speeds (mph)	35-40	
90 degree angles	no	X
Worst Level of Service	D	
Categorical applies?	no	X
Reason not applicable	Not 90	

Emissions Rates		
	2015	2023
idle	58.3	25.5
35	7.6	5.2
40	7.0	4.9

8 Hour Concentrations (ppm)	
Exist (2015)	3.6
Build (2023)	2.6



# 8 Hour CO Concentrations Comparison



# Could Categorical be used?

<b>CO Hot Spot Projects in Portland, Oregon</b>				
<b>Intersection</b>	<b>Categorical applies?</b>	<b>Reason not applicable</b>	<b>8 Hour Conc. (exist)</b>	<b>8 Hour Conc. (build)</b>
			<b>(PPM)</b>	
<b>Gaarde /Mcdonald</b>	No	Not 90	3.6 (2015)	2.6 (2023)
<b>OR99W/Durham</b>	No	LOS F, low speed	3.5 (2011)	2.7 (2035)
<b>MLK and Columbia Blvd.</b>	No	Not 90, low speeds	3.3 (2011)	2.3 (2034)
<b>OR224:135th</b>	No	LOS F and not 90	2.5 (2014)	2.2 (2035)
<b>8 CO Hour NAAQs</b>			<b>8</b>	

# Conclusions and Concerns

- Interagency consultation
- Data sharing
- Categorical was not applicable
  
- Concerns
  - Site specific change
  - MOVES updates