

# Ordinance 2213: Commerce City Oil & Gas Roadway Impact Study

## Planning Commission Meeting

June 18, 2019



# Agenda

- Oil & Gas Impact Fee – Overview of Methods and Assumptions
- Fee Calculations
- Questions and Comments

# What is a Roadway Impact Fee?

- Fee charged to new development to pay for expenditures on capital facilities required as a result of the new development
- Required for traffic-generating development
  - Single and multi-family homes
  - Commercial/industrial developments
  - Study Objective: Add Oil & Gas
    - Calculate an oil & gas impact fee per pad and per well to allow the City to offset impacts to the City road system

# Unique Characteristics of Oil & Gas Impacts

## ■ Impact Based on Truck Loads

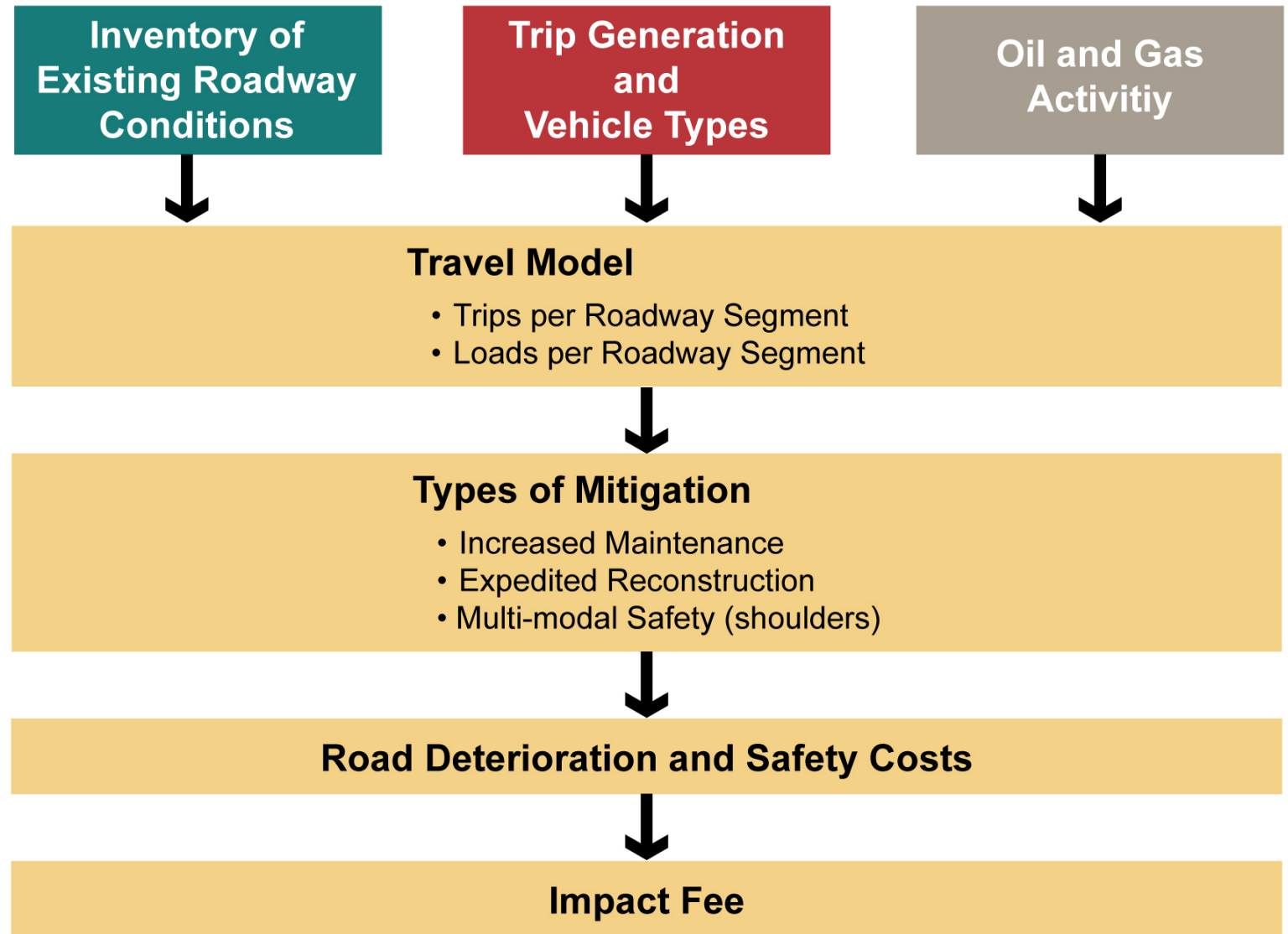
Vehicle:	Passenger Car	Water Tanker	Specialized Trucks
Unit:	1	1	1
Weight:	1	20 x a car	40 x a car
Impact:	1	8,000 x a car (asphalt) 14,000 x a car (concrete)	23,000 x a car (asphalt) 46,000 x a car (concrete)



Credit:  
PACCAR  
Inc

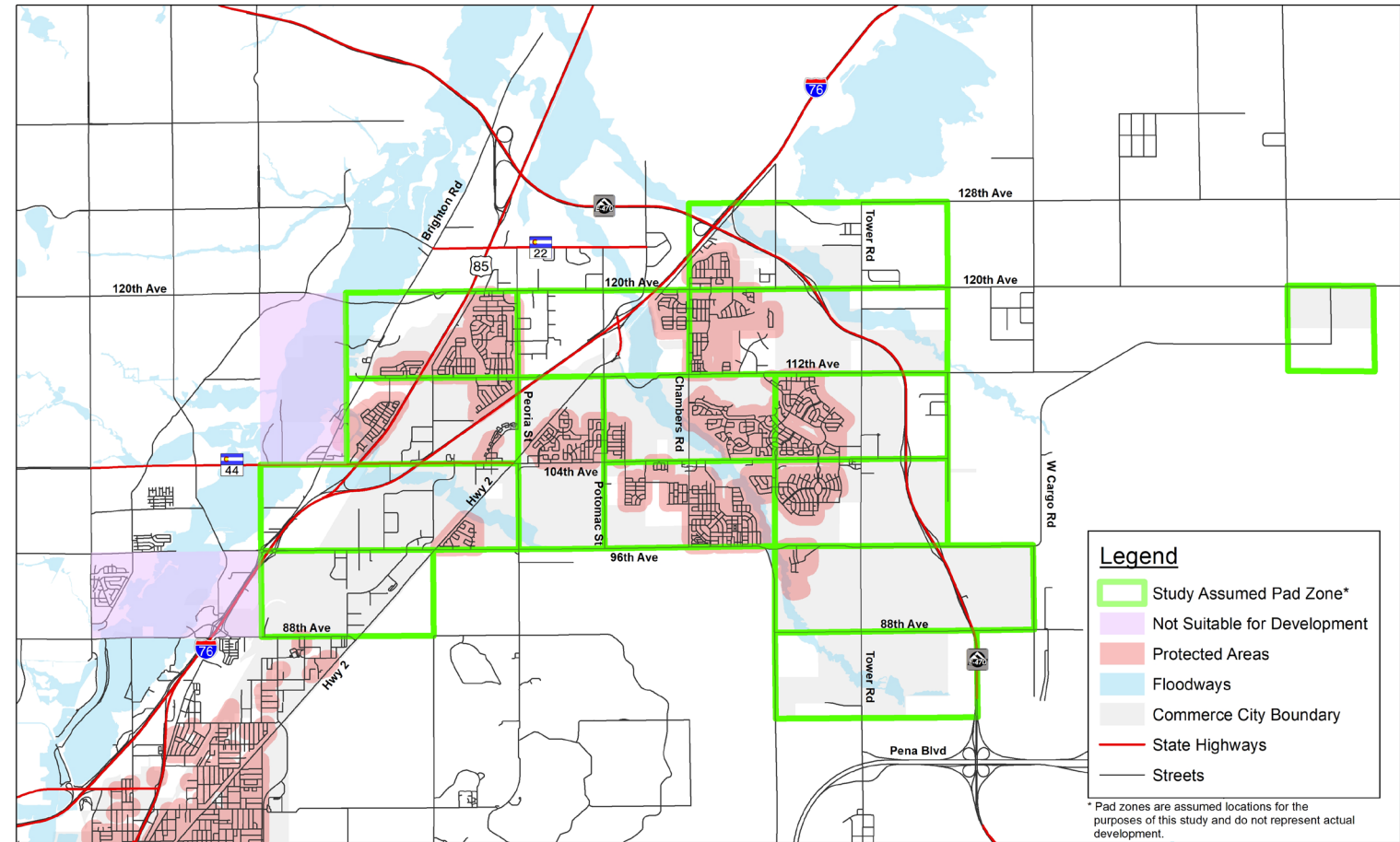
## ■ Much of Impact is During Development Phase (2-6 Months)

# Oil & Gas Process



# Oil & Gas Well/Pad Density Assumptions used for Analysis

Assumed Pad Zones and Sites for Study Purposes



- Study Area: City Limits, generally north of 88<sup>th</sup> Avenue
- Develop Test Scenario to Measure Average Impact per Pad and per Well
  - 15 Pad Zones
  - 18 Pads
  - Average 23 Wells/Pad

# Trip Generation Estimates for a 23-Well Pad

Stage	Activity	Sensitivity	No Pipelines	Fresh Water, Produced Water & Product Pipelines
Construction	Pad & Road Construction	Pad	470	470
Drilling	Drilling Rig & Crew	Pad / Well	3,425	3,425
	Drilling Fluids & Materials	Well	2,645	2,645
	Drilling Equipment	Well	1,334	1,334
Completion	Completion Rig & Crew	Pad	11	11
	Completion Equipment	Pad	67	67
	Fracturing Equipment	Pad	140	140
	Fracture Water	Well	24,173	-
	Fracture Sand & Chemicals	Well	4,761	4,761
	Produced Water Disposal	Well	10,327	-
Miscellaneous (Other Crew)		Well	2,645	2,645
<b>Development Phase Total for 23-well pad</b>		<b>Varies</b>	<b>49,998</b>	<b>15,498</b>
<b>Annual Production Trips for 23-well pad</b>		<b>Well</b>	<b>16,790</b>	<b>8,395</b>

# Fee Calculation Method by Improvement Type

Improvement Type	Fee Calculation Method
Asphalt Overlay	ESAL-Based Average Cost per Pad & per Well
Concrete Reconstruction	
Gravel Maintenance	Trip-Based Average Cost per Pad & Well
Paving Gravel Roads	
Road Widening	Trip-Based Fee Equivalent to Road Impact Fee Schedule for Other Uses



## Considerations for Impact Fee Schedule

- Report will provide a recommendation for defensible fees
- Include a fee per pad and a fee per well
- Include a full no-pipeline fee and reduced fees for pipelines for fresh water, water disposal, and product

## Potential Option to Allow Independent Fee Calculation

- City may allow operators to conduct independent fee calculation for City consideration
- Categories of possible independent proposed fee modifications:
  - Incorporate unique development plans (e.g. a drilling or fracking technique resulting in reduced truck trips/loads)

# Fee Range

Per Pad Fee: \$ 996			
Per Well Fee			
Completed Pipelines Servicing Pad (presence indicated by "X")			
Fresh Water Pipeline	Produced Water Pipeline	Product Pipeline	Fee per well
-	-	-	\$ 21,172
X	-	-	\$ 20,260
-	-	X	\$ 13,853
-	X	-	\$ 13,217
X	-	X	\$ 12,703
X	X	-	\$ 12,067
-	X	X	\$ 3,295
X	X	X	\$ 2,145

## Timeline and Next Steps

- Planning Commission Study Session (5/7) ✓
- Industry Stakeholder Meeting (5/10) ✓
- Public Meeting (5/23) ✓
- Final Report ✓
- City Council Study Session (6/17) ✓
- Planning Commission Recommendation (6/18)
- City Council Adoption (7/1)

## Questions & Discussion

- DRT Recommendation: Approval
- LDC: if enacted, impact fee will be located in LDC Section 21-9260.
- Planning Commission Discussion/Direction:
  - Questions about the study?
  - Recommendation to City Council