Commerce City Oil & Gas Transportation Impact Study

City Council Study Session

June 17, 2019

Meeting Agenda

- Study Overview
- Oil & Gas Impact Fee Methods and Assumptions
- Questions and Comments
- Next Steps

What is a Transportation 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
    - Estimate general magnitude of oil & gas traffic on Commerce City roads
    - 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

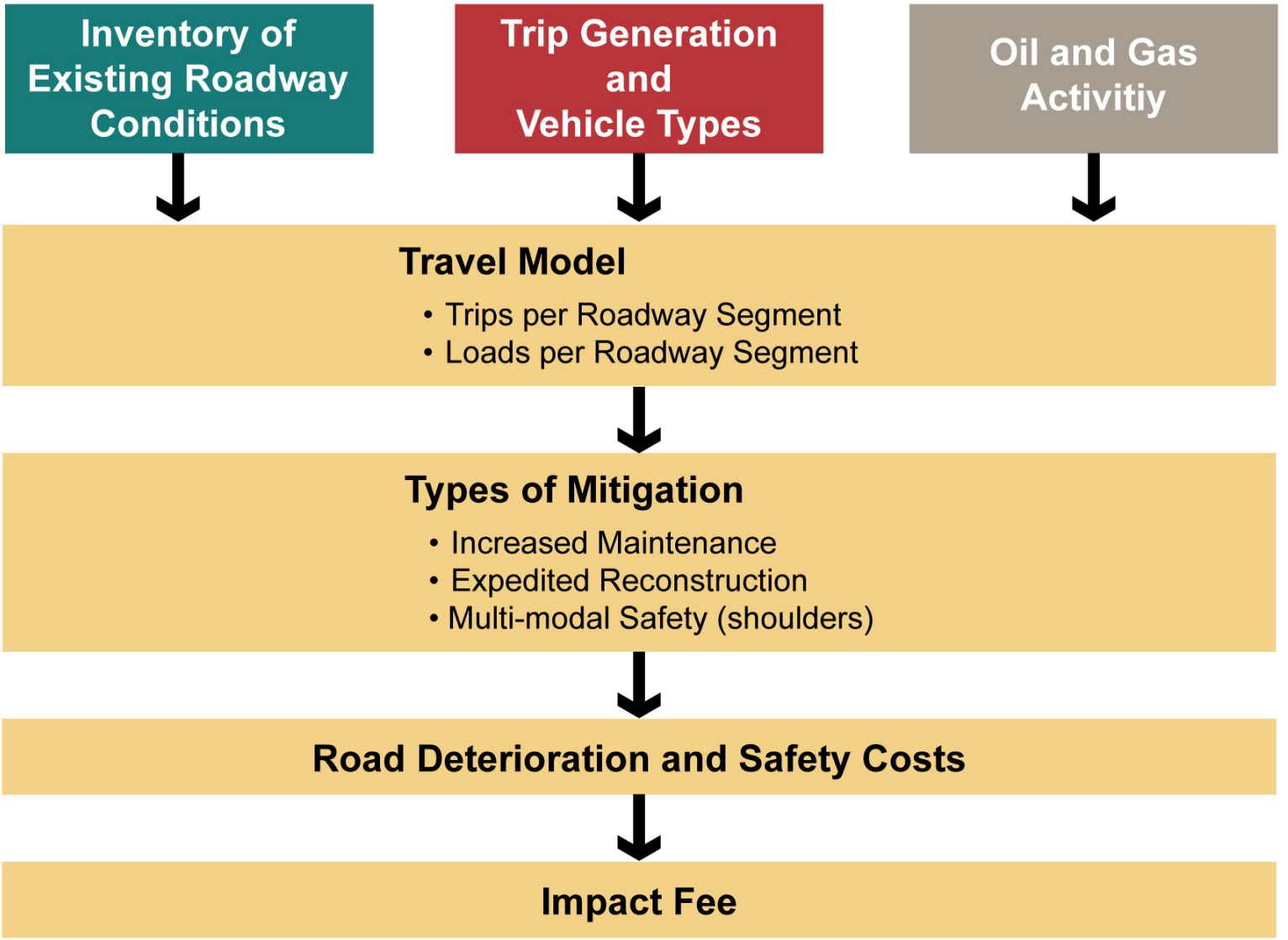
- Impact Based on Truck Loads

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

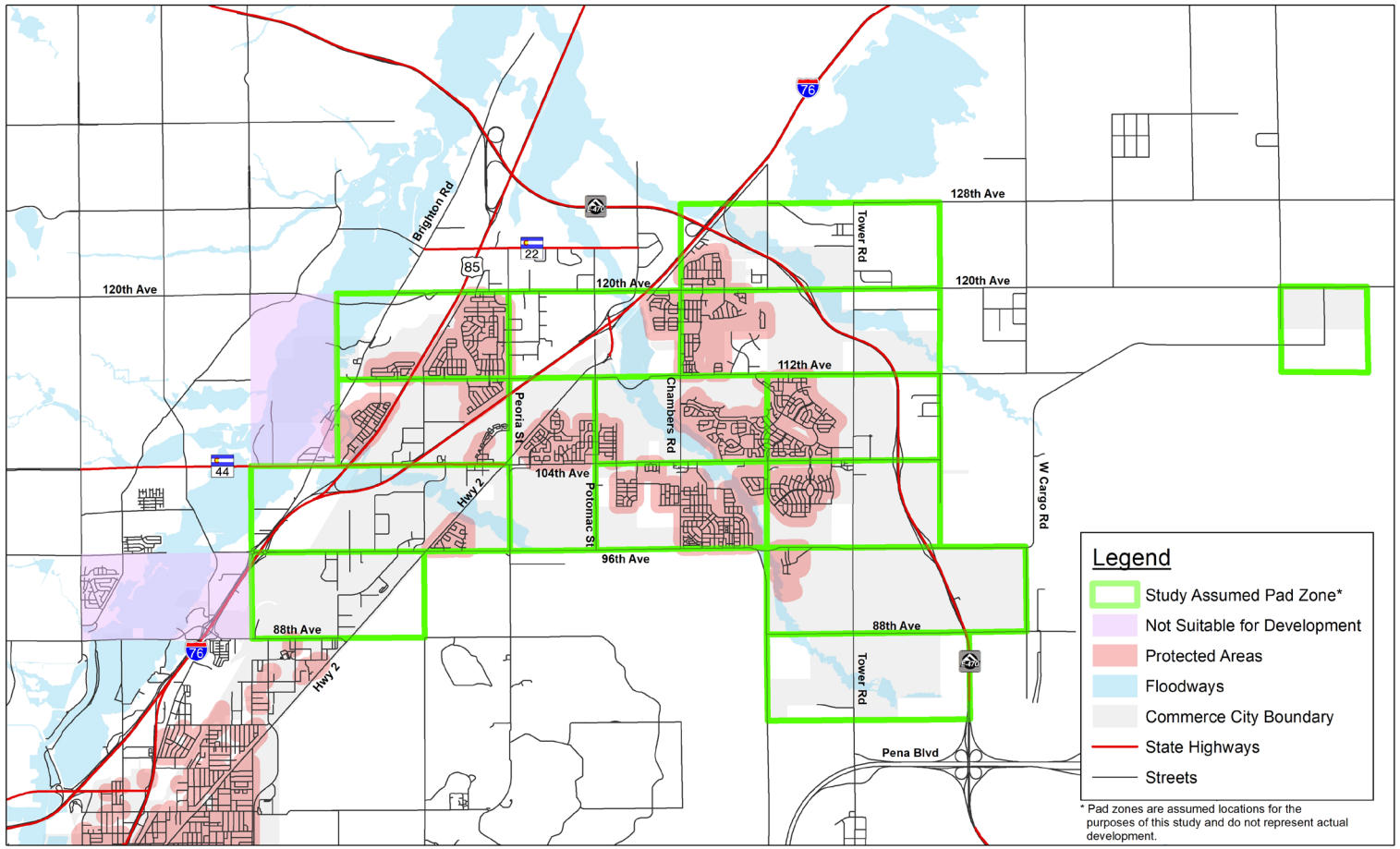
- Much of Impact is During Development Phase (2-6 Months)

Oil & Gas Study 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 88th 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
Development Phase Total for 23-well pad		**Varies**	**49,998**	**15,498**
Annual Production Trips for 23-well pad		**Well**	**16,790**	**8,395**

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

- Study will provide a recommendation to City Council 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
- *City may allow operators to conduct independent fee calculation*

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 Adoption (6/18)
- City Council Adoption (7/1)

Questions & Discussion

- City Council Discussion/Direction:
  - Questions about the study?
  - Is the project team on the right path?
  - Initial direction on independent fee calculation?