Alternative Transportation Financing Techniques

Growth & Infrastructure Consortium, Denver, CO

Clancy Mullen

duncan associates

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Session Overview

- Alternatives to traditional funding (gas/property taxes & bonds) for road capital and maintenance:
  - Road reconstruction impact fees
  - Transportation utility fees
  - Special districts
  - Mileage fees

Road Reconstruction Impact Fees

- How impacts and capacity are measured
- Issues with impact fee approaches
  - Consistency among land uses
  - Overlap with traditional road impact fees
  - Level of service
- Colorado Examples

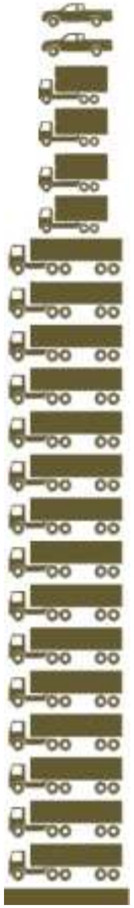
Measuring Road Impacts

- Road wear-and-tear depends on the number of trips, the length of the trips and the weight of the vehicles

- Standard unit of weight is 18,000 lb. Equivalent Single Axle Load (ESAL)

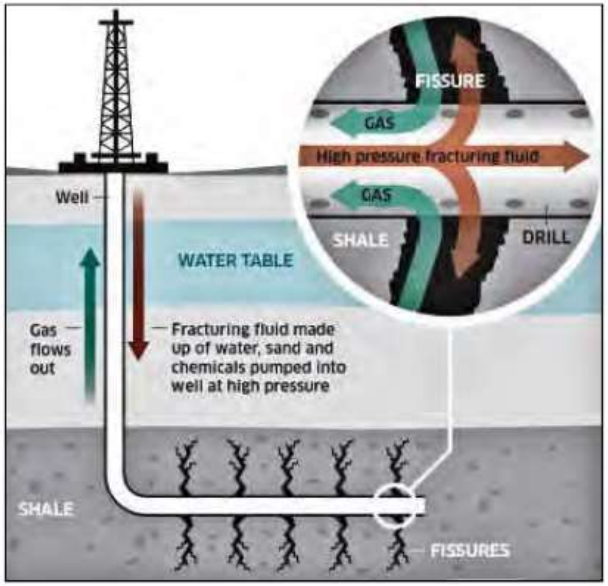
- Different vehicle types have different ESALs

- Service unit: ESAL-trips or ESAL-miles



Issues

- Consistency among land uses
  - Targeting oil & gas exclusively creates equity, free-rider issues
- Overlap with traditional fees
  - Every road has both vehicle capacity and load-bearing capacity
  - Vehicle capacity improvements also create new load capacity
  - Overlap can pose double-charging issues

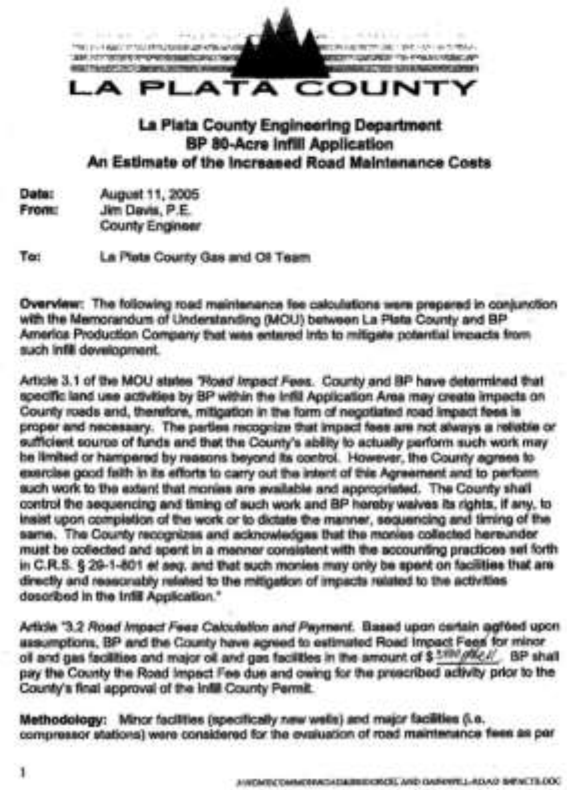


Issues

- Level of service
  - Basic principle – don’t charge new development for higher LOS
  - Question: to what extent has existing development pre-paid for it future road reconstruction impacts?
  - Measure existing LOS in terms of average <u>number of years</u> existing road system can accommodate existing traffic loads
  - Charge new development the cost to maintain the existing LOS

La Plata Co. – Negotiated Exaction

- Oil companies must obtain State permit for new wells
- County agrees not to protest permit application
- County calculates the cost per well to use in negotiating a Memorandum of Understanding



LA PLATA COUNTY

La Plata County Engineering Department
BP 80-Acre Infill Application
An Estimate of the Increased Road Maintenance Costs

Date: August 11, 2005
From: Jim Davis, P.E.
County Engineer

To: La Plata County Gas and Oil Team

Overview: The following road maintenance fee calculations were prepared in conjunction with the Memorandum of Understanding (MOU) between La Plata County and BP America Production Company that was entered into to mitigate potential impacts from such infill development.

Article 3.1 of the MOU states "*Road Impact Fees.* County and BP have determined that specific land use activities by BP within the Infill Application Area may create impacts on County roads and, therefore, mitigation in the form of negotiated road impact fees is proper and necessary. The parties recognize that impact fees are not always a reliable or sufficient source of funds and that the County's ability to actually perform such work may be limited or hampered by reasons beyond its control. However, the County agrees to exercise good faith in its efforts to carry out the intent of this Agreement and to perform such work to the extent that monies are available and appropriated. The County shall control the sequencing and timing of such work and BP hereby waives its rights, if any, to insist upon completion of the work or to dictate the manner, sequencing and timing of the same. The County recognizes and acknowledges that the monies collected hereunder must be collected and spent in a manner consistent with the accounting practices set forth in C.R.S. § 29-1-801 *et seq.* and that such monies may only be spent on facilities that are directly and reasonably related to the mitigation of impacts related to the activities described in the Infill Application."

Article "3.2 *Road Impact Fees Calculation and Payment.* Based upon certain agreed upon assumptions, BP and the County have agreed to estimated Road Impact Fees for minor oil and gas facilities and major oil and gas facilities in the amount of $______. BP shall pay the County the Road Impact Fee due and owing for the prescribed activity prior to the County's final approval of the Infill County Permit.

Methodology: Minor facilities (specifically *new wells*) and major facilities (i.e. compressor stations) were considered for the evaluation of road maintenance fees as per

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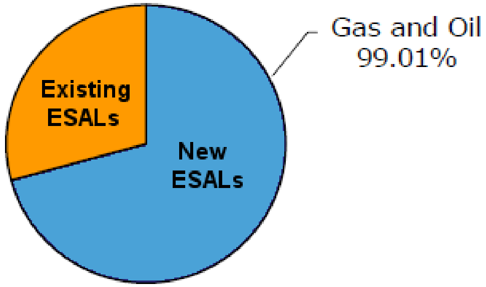
Garfield County – 2005

- Fee for most uses based on standard capacity
- Proposed fee for oil & gas based on ESAL loads
  - Calculated cost per equivalent axle-load over 20 years
  - Was apparently not adopted
- Issues
  - Need to charge **ALL** land uses for wear and tear
  - Can't combine two types of capacity, since a road expansion creates both kinds
  - Need to determine existing LOS; e.g., existing roads could accommodate traffic from existing development for 10 years without needing to be reconstructed

Rio Blanco County – 2008

- Fee assessed on all land uses
  - $600 per home; $17,700 per well

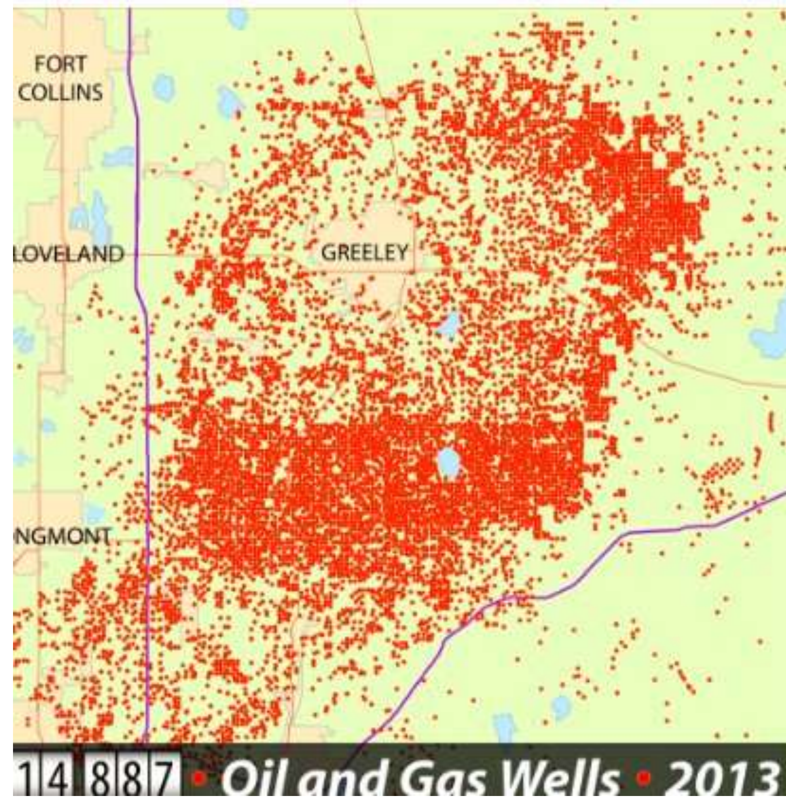


- Planned improvement costs divided by development at end of 15 years

- Not a total substitute for existing LOS analysis
  - Simple park fee example
    - Expected growth from 10,000 – 50,000 residents
    - Planned acres to increase from 50 – 350 acres
    - Park LOS increases from 5 – 6 acres per 1,000 residents
    - New development pays for 6 acres per 1,000

Weld County – 2009

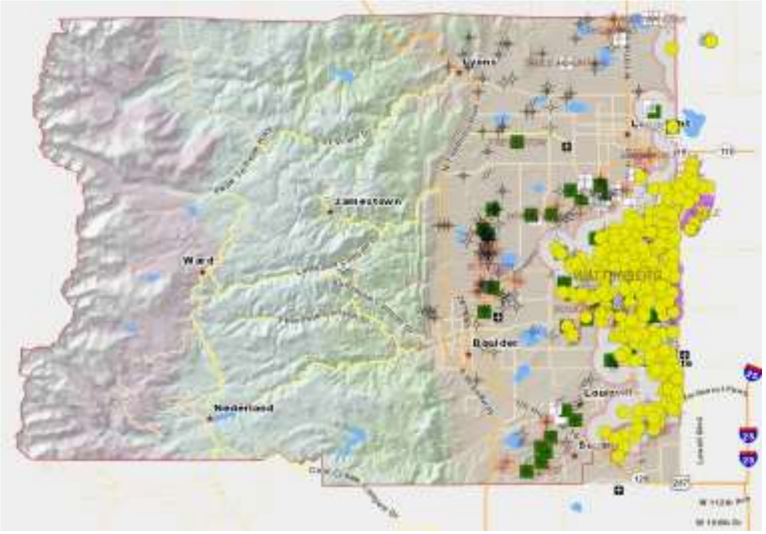
- Considered oil & gas fee when updating traditional road impact fee
- Looked at road reconstruction fee in rural areas, traditional fee in urban areas
- Unworkable – most well activity in urban area



Boulder County, 2015

- Study of cost impact of oil & gas on County roads
  - Modeled impact of anticipated oil & gas activity over 16 years
  - Divided total cost by anticipated new wells
  - Calculated fee of $36,800 per well

- Issues
  - Targets oil & gas only
  - No existing LOS analysis
  - Possibility of separate service area



Conclusion and Practice Points

- Different conceptions of road capacity
  - Ability to withstand repeated loads over time before needing reconstruction, vs. ability to accommodate traffic volumes
- The two types of capacity overlap
  - This can raise issues of double-charging if both types of fees charged in same area
- Impact fees should be assessed on all uses
  - Not targeted exclusively to oil & gas development
  - Other developments can also generate heavy truck traffic
- Impact fee studies should include LOS analysis
  - It's not that hard to calculate existing and future LOS
  - In absence of long-range plan, base the fee on existing LOS

Resources

- All presentations will be available at GIC website
  - Go to www.growthandinfrastructure.org
  - Click on “Conferences” tab
- Session handout on website
  - Brief 4-page paper, with copies of example studies