

Study Summary

1. *Study Scope*

- Single-family homes
- Impact on property value only
- Included drill sites, well sites, compressor stations and collection facilities

2. *Relevance to the Town of Flower Mound*

- Higher priced homes in the Flower Mound market was found to be impacted
- Lower valued homes in the Flower Mound market were not found to be impacted

3. *Impact on Value*

- Homes less than \$250,000 in value exhibited no damages (about 56% of all homes)
- Most diminution in value observed in neighborhoods with values greater than \$300,000 with no market transactions observed over \$750,000

4. *Quantified Damages*

- Generally 5% to 10% for proximity to drill sites
- Maximum distance of impact = 1,000 feet
- Property must be virtually adjacent to well site
- Based on past experience, impact on value is believed to dissipate over time
- No difference found between well site and compressors or collection facilities

Methodology

1. Price-Distance Relationship

- The sale prices of houses on a per square foot basis were compared to the distance to the well site in feet.
- Observed the rate of change in price compared to distance from the well.



2. Sales Comparison Analysis

- The sales of houses adjacent to well sites were compared to sales of houses not adjacent to well sites.
- Observed any differences in value.



3. Statistical Analysis

- Performed linear regression analysis on homogenous neighborhoods with some houses near well sites.

4. Survey of Market Participants

- Real estate agents, builders and developers in Flower Mound and surrounding communities were interviewed to determine if buyers and sellers considered proximity to gas well sites.

Methods #1 and #2

No damages found to homes valued less than \$250,000

Damages to Flower Mound homes over \$250,000:

Price-Distance Relationship

- Damages indicated are -2% to -7%
- Dissipate at 1,000 to 1,500 feet

Sales Comparison

- Damages indicated are -3% to -14%
- No damages past 750 to 1,000 feet
- Effect is near zero if a buffer is present

Methods #3 and #4

Statistical Analysis

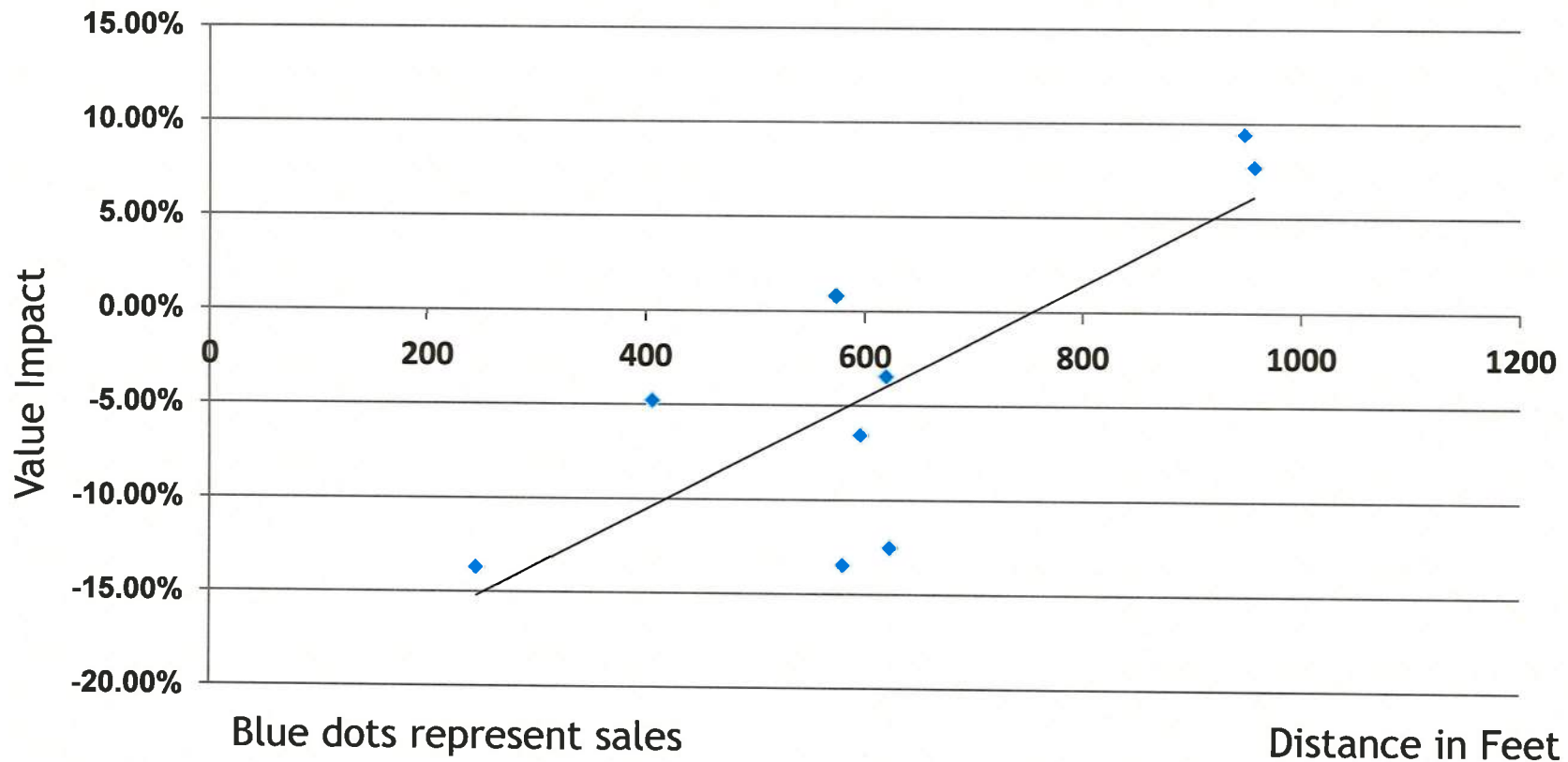
- Multiple linear regression used and included subdivisions
- A sufficient number of sales in close proximity required to utilize this method
- This method considers other quantifiable components of value
- Proximity to well not found to be *statistically significant*

Survey of Market Participants

- Impact is generally during drilling operations
- Visibility of the natural gas facilities is the primary concern
- Impact can be up to 10% if located immediately adjacent to a well site
- Participants were not willing to estimate impact during drilling operations
- Greatest impact is to marketing time
- The stated concerns of buyers and sellers pertaining to natural gas facilities is somewhat different from purchasing behavior observed in the market

Sales Comparison Summary

Value Differential by Distance in Feet (Flower Mound Market Only)



Maximum distance at which damages were observed = 624 feet
Linear trend line crosses zero at about 750 feet

Conclusion

- At this time, little data is available that suggests damages from compressor stations and collection facilities are different from well sites in the Flower Mound market. This is assumed to be a result of sound baffling technology.
- Measureable damages were found to houses in the Flower Mound market if:
 - Value of homes over \$250,000 to \$300,000
 - House is immediately adjacent to the well/drill site
 - No buffer such as trees or other buildings is between the house and the well or other facilities
- These conclusions can change over time depending upon:
 - Media influence
 - Results of environmental and health studies
 - Past experience suggests as the market becomes accustomed to natural gas facilities, impact upon property value will diminish