

# West Corridor Noise Walls

June 2007

## Community Demonstrations

- *Noise Demonstration on May 5*

- Actual light rail sounds were demonstrated in three places along the corridor to give community members a feel for the sound of light rail along 13<sup>th</sup> Avenue

- Over 200 people attended the demonstration

- Noise wall heights were also demonstrated at this time

- *Lakewood Visual Simulation Meeting of noise walls*

- Computer simulations showing walls along 13<sup>th</sup> were presented by Lakewood at a public meeting on June 14

## Noise Analysis

- *West Corridor noise consultant KMChng determined existing/baseline noise levels along the corridor*
- *KMChng evaluated the implementation of light rail including track/train noise, bells & gongs at stations, existing grades, track crossovers and locations of homes/businesses.*
- *An analysis was completed which compared the existing noise levels with future noise levels due to light rail implementation and all properties were identified as No Impact, Moderate Impact, or Severe Impact.*
- *These categories are based on the increase in decibel levels according to federal criteria*

## Noise Mitigation

- *FTA requires that all “severe” impacts be mitigated (in this case, with 6 foot noise walls)*
- *FTA recommends each transit agency (RTD) devise a policy to mitigate “moderate” impacts that is fair, reasonable and effective*
- *RTD developed and adopted their Moderate Impacts Policy for all FasTracks corridors. FTA has determined this policy is fair, reasonable and effective.*

## Moderate Impacts Policy Criteria

*Properties with moderate impacts were evaluated as follows:*

1. *Is the impact on the property in the upper 50% of the moderate impact range?*
  - a. If not, then a noise wall is not effective (will not receive a perceptible benefit), and the property will not receive a noise wall
  - b. If so, then the next criteria is applied
  
2. *Is a noise wall cost effective for this property (no more than \$35,000 per property)*
  - a. If not, then a noise wall is not cost-effective, and the property will not receive a noise wall
  - b. If so, then the next criteria is applied

## Moderate Impacts Policy Criteria

3. *Are there at least 10 properties and/or 800 feet of properties affected (this can be a combination of severe and moderate impacts)?*
  - a. If not, then a noise wall is not reasonable or effective and the property will not receive a noise wall
  - b. If so, then a noise wall is planned.

## Noise Wall Location Process

*Step 1: Look at all locations with impacts along the corridor, based on KMCng's assessment*

*Step 2: Apply the first criteria of the Moderate Noise Impacts Policy (if a property falls into the lower 50% of moderate, it is eliminated)*

*Step 3: Using the maps with the remaining impacts, apply the noise wall location criteria*

## Noise Wall Location Criteria

*All severe impacts receive a noise wall*

*All walls in front of severe properties will be extended a minimum of 100' on either side of the affected structure or to the nearest cross street.*

*When that 100' extends in front of a residential property adjacent to the severe property, the wall will be continued to property line of that adjacent property.*

*Moderate Impact Policy steps 2 & 3 are applied.*



## Property Categories

*After noise wall locations were determined, there were three categories of properties*

*A. Impacts (moderate and severe) that DO HAVE a noise wall*

*B. Impacts (moderate) that DON'T HAVE a noise wall*

*C. Properties with no impacts that DO HAVE a noise wall*

## Category A Impacted properties with Walls

### ***Each wall is evaluated separately***

1. *Keep the wall as planned, no action necessary*
2. *Eliminate, Lower or Raise the wall*
  - a. *This requires 75% of all affected properties (anyone covered by the wall) to agree*
  - b. *Requires each individual agreeing to complete the Noise Barrier Change Form. Each property owner covered by the wall has an equal say, the impact or lack of impact doesn't count in this calculation.*
  - c. *To raise a wall height, the cost is borne by the affected property owners (est. \$30/sq foot)*

## Category A

3. *If a wall is eliminated, RTD will work with each individual property owner with a noise impact to provide –*
  - A. *6-foot wooden privacy fence along the property line facing the rail line.*
    1. *This must meet city code –*
    2. *Property owner responsible for maintenance and ownership of fence once it's installed*
  - B. *Cash equivalent of 6-foot wooden fence on property line*
    1. *Based on lineal footage of property line facing tracks*
    2. *Can be used for whatever mitigation works best for that individual property (landscaping, windows etc)*
    3. *Price based on \$30/lineal foot*

## Options for Category B

Impacted Properties (moderate) without Walls

*RTD will work with each individual property owners with a noise impact to provide –*

*A. 6-foot wooden privacy fence along the property line facing the rail line.*

*1. This must meet city code –*

*2. Property owner responsible for maintenance and ownership of fence once it's installed*

*B. Cash equivalent of 6-foot wooden fence on property line*

*1. Based on lineal footage of property line facing tracks*

*2. Can be used for whatever mitigation works best for that individual property (landscaping, windows etc)*

*3. Price based on \$30/lineal foot*

## Options for Category C

Properties with Walls but no impact

*These properties do have an equal vote in determining whether the wall is eliminated, lowered or raised. They count toward the 75% because they are affected by the wall itself.*

*If the wall is eliminated, they do not receive the privacy fence or cash equivalent option, since there is no impact to mitigate for.*

## Next Steps

*Determine if your property has a noise wall planned.*

*Find out how many people are affected by your same wall. Determine how many people will be needed for a 75% majority.*

*Discuss the pros and cons of a wall with your group – City of Lakewood Planners are available for assistance with this.*

*If you decide to eliminate, raise or lower the noise walls, work with RTD to fill out the Noise Barrier Change Form*