

# 173<sup>rd</sup> Street Improvements

*Council Workshop Presentation  
July 25, 2011*



- 1. Project Overview**
- 2. Basis of Project**
- 3. Project Parameters**
- 4. Project to Date**
- 5. Next Steps**
- 6. Questions & Comments**



# 1. Project Overview

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Proposed 173<sup>rd</sup> Street Alignment



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## *173<sup>rd</sup> Street Improvements*



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*Transportation need*

- *West Arlington Sub Area Plan*
- *Regional Traffic*
- *Accident Rate*

*Technical Studies*

- *Cultural Resource Assessment*
- *Asbestos Survey*
- *Geotechnical*
- *SEPA*
- *Traffic Study*
- *Noise Analysis*

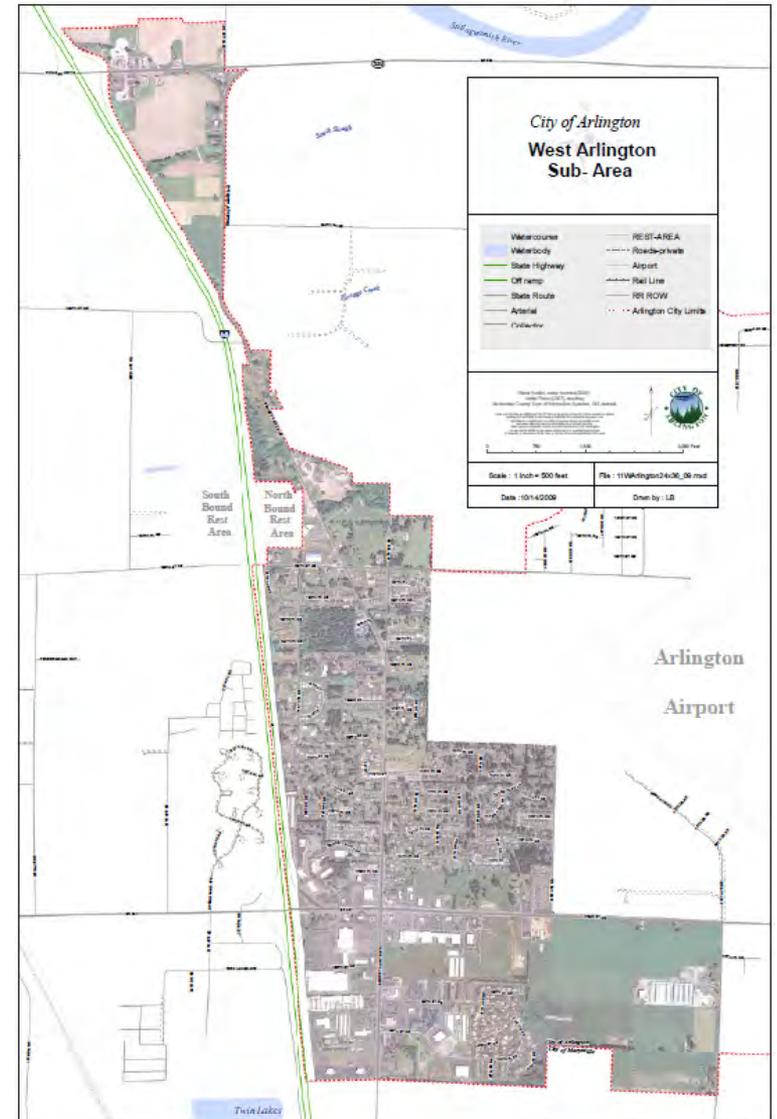
*Community Outreach*

- *Neighborhood Concerns*



## West Arlington Sub-Area

A detailed, unifying plan that effectively manages growth and development in the western region of the city.



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### Legend

-  Proposed Road Right of Way (ROW)
-  City Purchased Property
-  Smokey Point Town Ctr (includes La Quinta)
-  Smokey Pt Ambulatory Medical Center
-  Walmart
-  County Parcels
-  Public ROW
-  Private Roads

## Commercial Development



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# 173<sup>rd</sup> Street Improvements



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Future Expansion at Airport Business Park



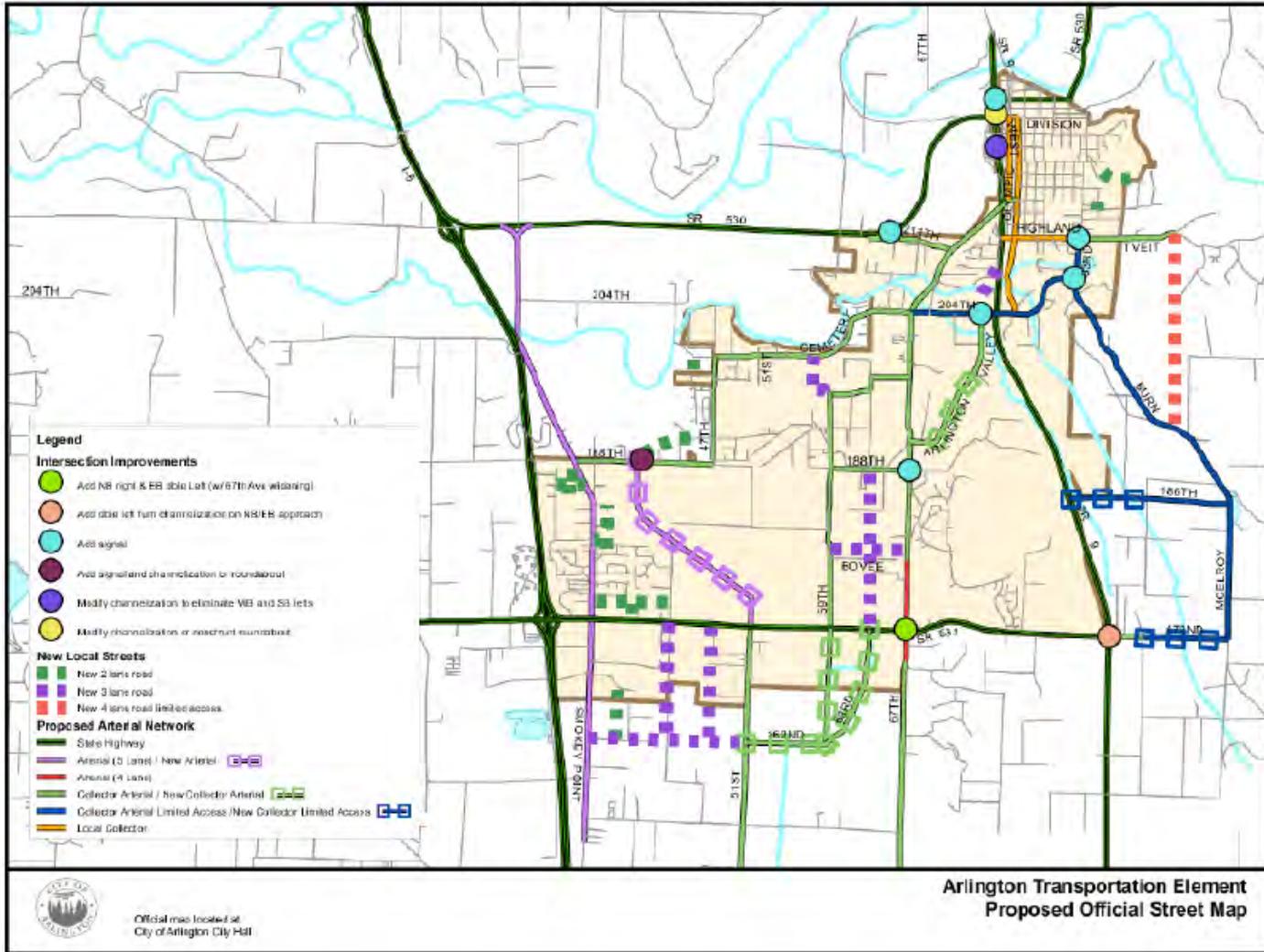
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# 173<sup>rd</sup> Street Improvements



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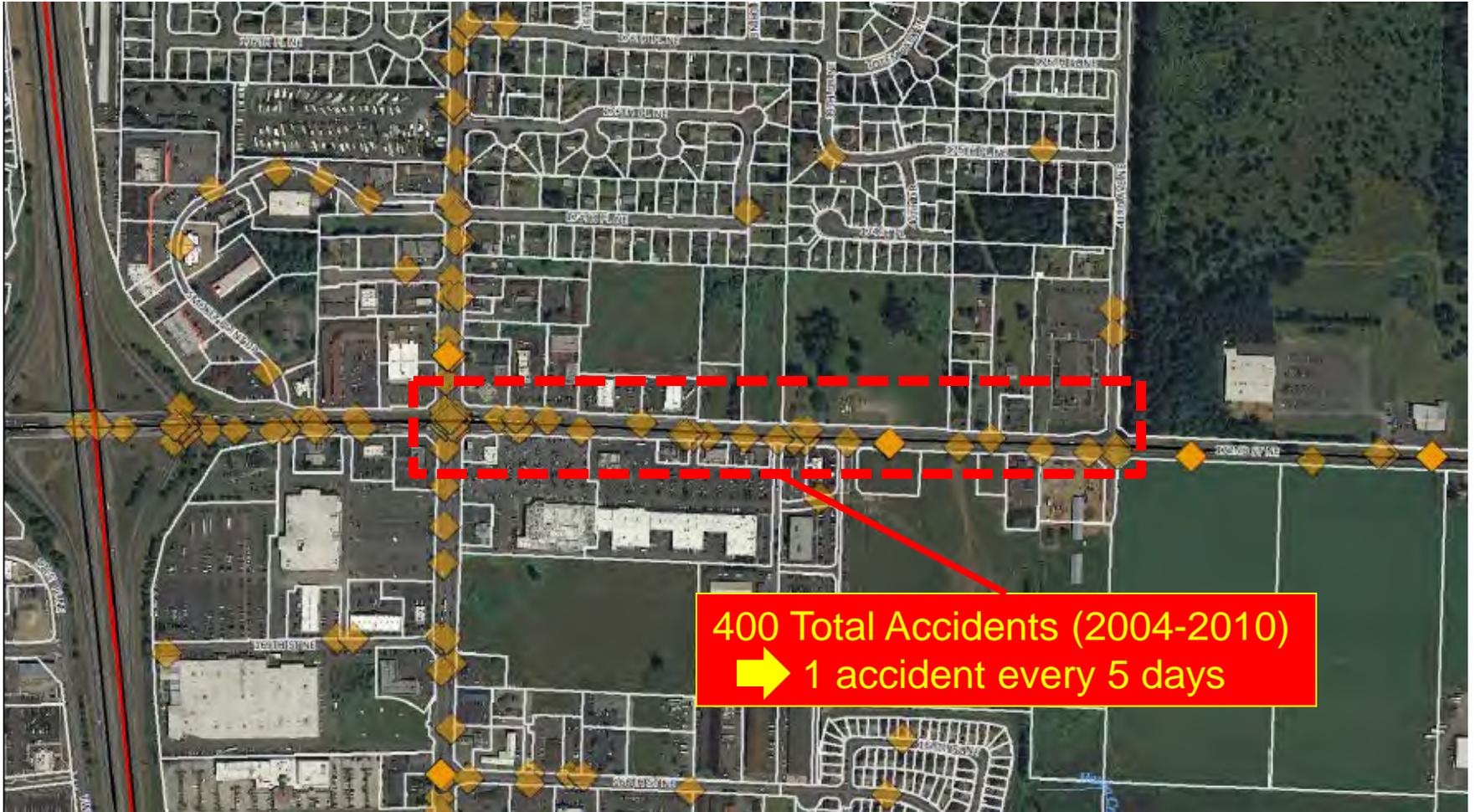
Figure 8- 1: Official Street Map



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# 173<sup>rd</sup> Street Improvements





**Traffic Accident Rate on 172<sup>nd</sup> Street**



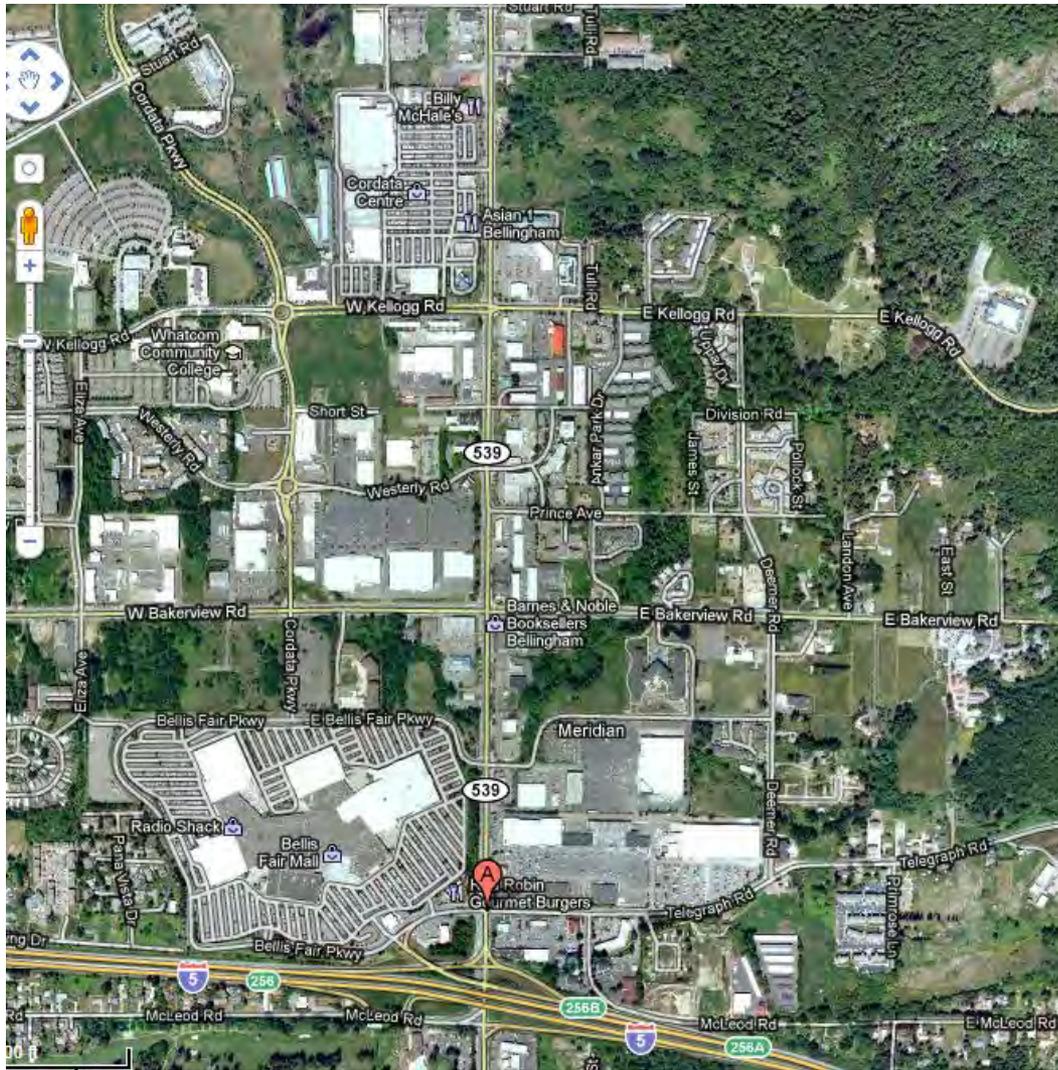
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## *173<sup>rd</sup> Street Improvements*



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# Meridian Street Bellingham, WA



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## *173<sup>rd</sup> Street Improvements*



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*Community Outreach*

- Neighborhood Concerns



# Traffic Analysis



## Smokey Pt. Blvd

1. 174<sup>th</sup> St
2. 173<sup>rd</sup> St
3. 172<sup>nd</sup> St

## 43<sup>rd</sup> Avenue

4. 172<sup>rd</sup> St
5. 173<sup>rd</sup> St

## Scope

Studied five intersections

Studied 2011, 2012, and 2032 traffic levels

Performed three scenarios

No action

With signalization at SPB

Without signalization at SPB

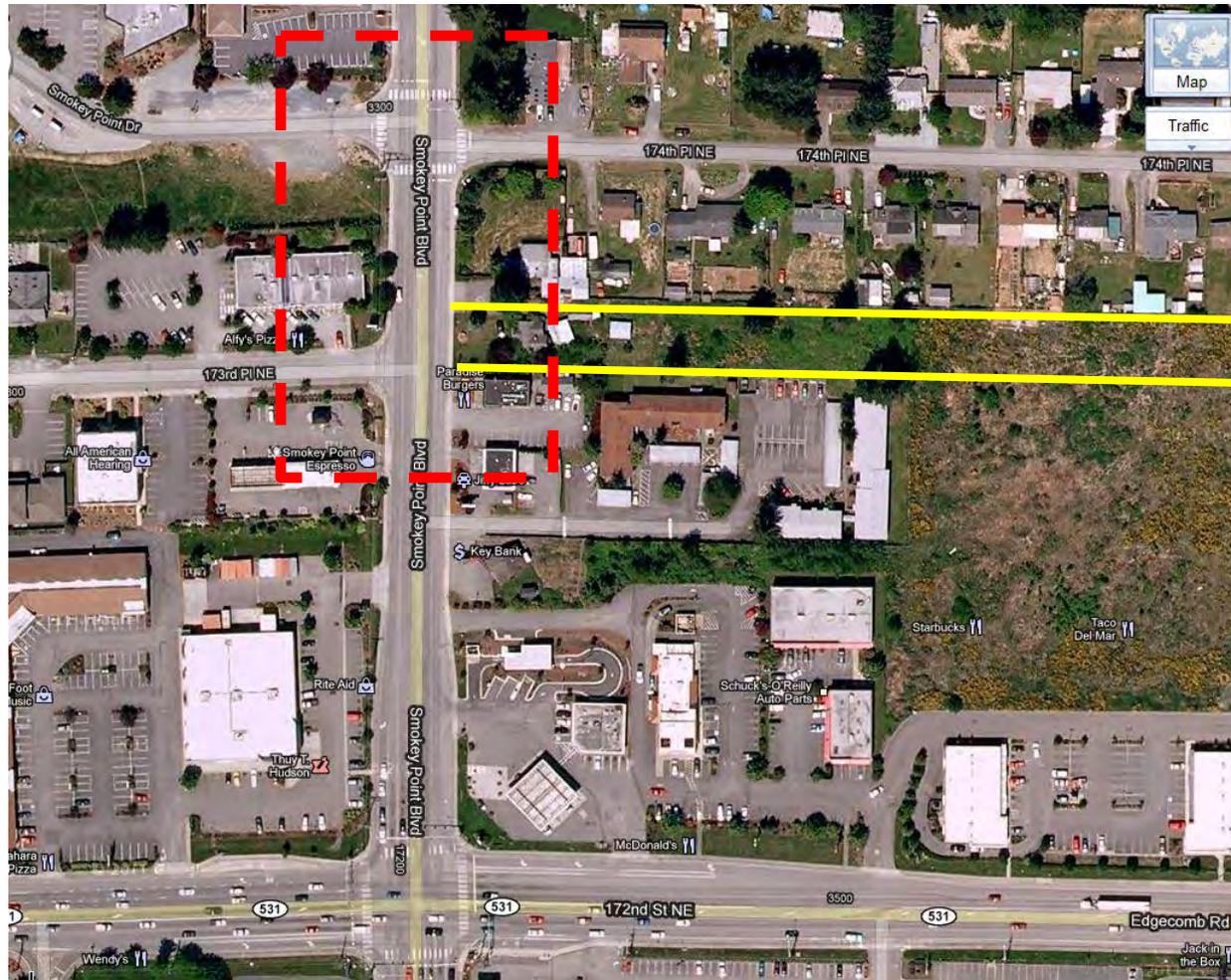


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## 173<sup>rd</sup> Street Improvements



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Signalization at 173<sup>rd</sup> & Smokey Point Blvd



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## 173<sup>rd</sup> Street Improvements





Planned WSDOT Roundabout at 172<sup>nd</sup> and 43rd



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## *173<sup>rd</sup> Street Improvements*



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Intersection	2032 - N No Action		2032 - A 173rd Street With Coordinated Signals		2032 - B 173rd Street with Right-in/Right-out at Smokey Point Blvd	
	LOS	Delay	LOS	Delay	LOS	Delay
1. Smokey Point Blvd at 174th Place NE - (Smokey Point Drive)	A	8.8	B	15.2	B	13.0
2. Smokey Point Blvd at 173rd Place NE - (173rd Street Extension)	A	0.9	B	19.4	A	1.9
3. Smokey Point Blvd at 172nd Street NE (SR 531)	F	146.2	F	138.6	F	140.6
4. 172nd Street NE (SR 531) at 43rd Avenue NE	F	167.3	F	83.5	F	103.0
With Planned Two-Lane Roundabout	F	123.0	F	111.9	F	113.1
5. 43rd Avenue NE at 173rd Street Extension – (Airpark West Access)	F	10.2	B	24.7	C	25.5



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# 173<sup>rd</sup> Street Improvements



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# 173<sup>rd</sup> Street Improvements



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# 173<sup>rd</sup> Street Improvements



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## Traffic Volumes

### *Average Daily Traffic*

No Build Option: NA

w/ signalization: ~6,000 vehicles per day

w/o signalization: ~3,100 vehicles per day

### *PM Peak Hour Traffic*

No Build Option: NA

w/ signalization: ~600 peak hour vehicles

w/o signalization: ~310 peak hour vehicles

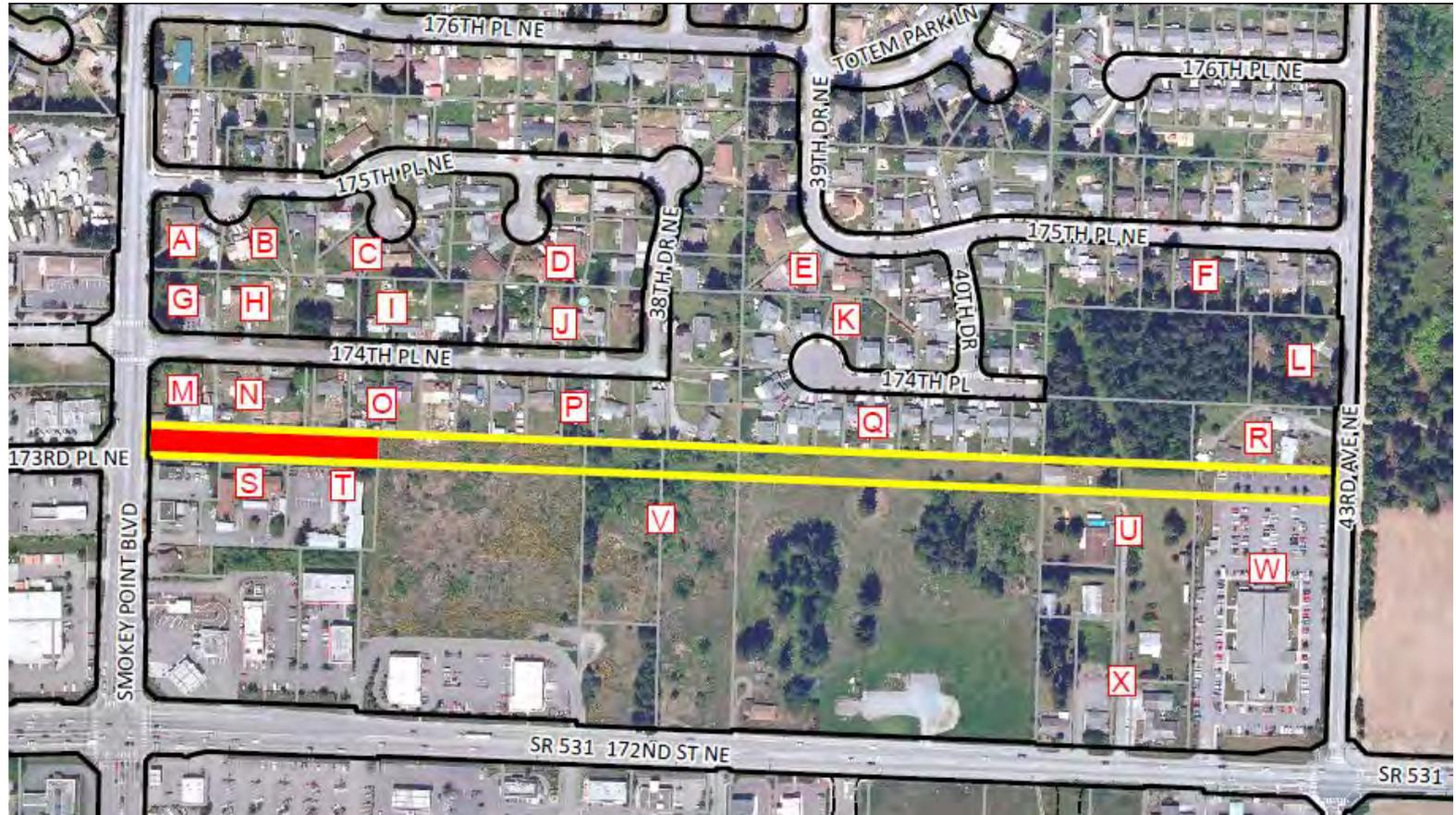
### *Observations*

- Traffic volumes exist whether or not 173<sup>rd</sup> is built
- 173<sup>rd</sup> would reduce traffic loading on 172<sup>nd</sup> by that amount

### *Comparisons*

- 188<sup>th</sup> St east of Smokey Point Blvd has ~4,000 vehicles per day, currently
- 67<sup>th</sup> Ave near 204<sup>th</sup> St. has ~12,000 vehicles per day, currently
- 172<sup>nd</sup> west of 43<sup>rd</sup> Ave has ~20,000 vehicles per day, currently





Noise Analysis Locations



## Noise Analysis Summary

### *Regulations*

AMC 20.44.210

WAC 173-62

72 dBA allowed for vehicles less than 10,000 GVW

86 dBA allowed for vehicles over 10,000 GVW

WSDOT Traffic Noise Policy and Procedures

Applicable if project is federally funded

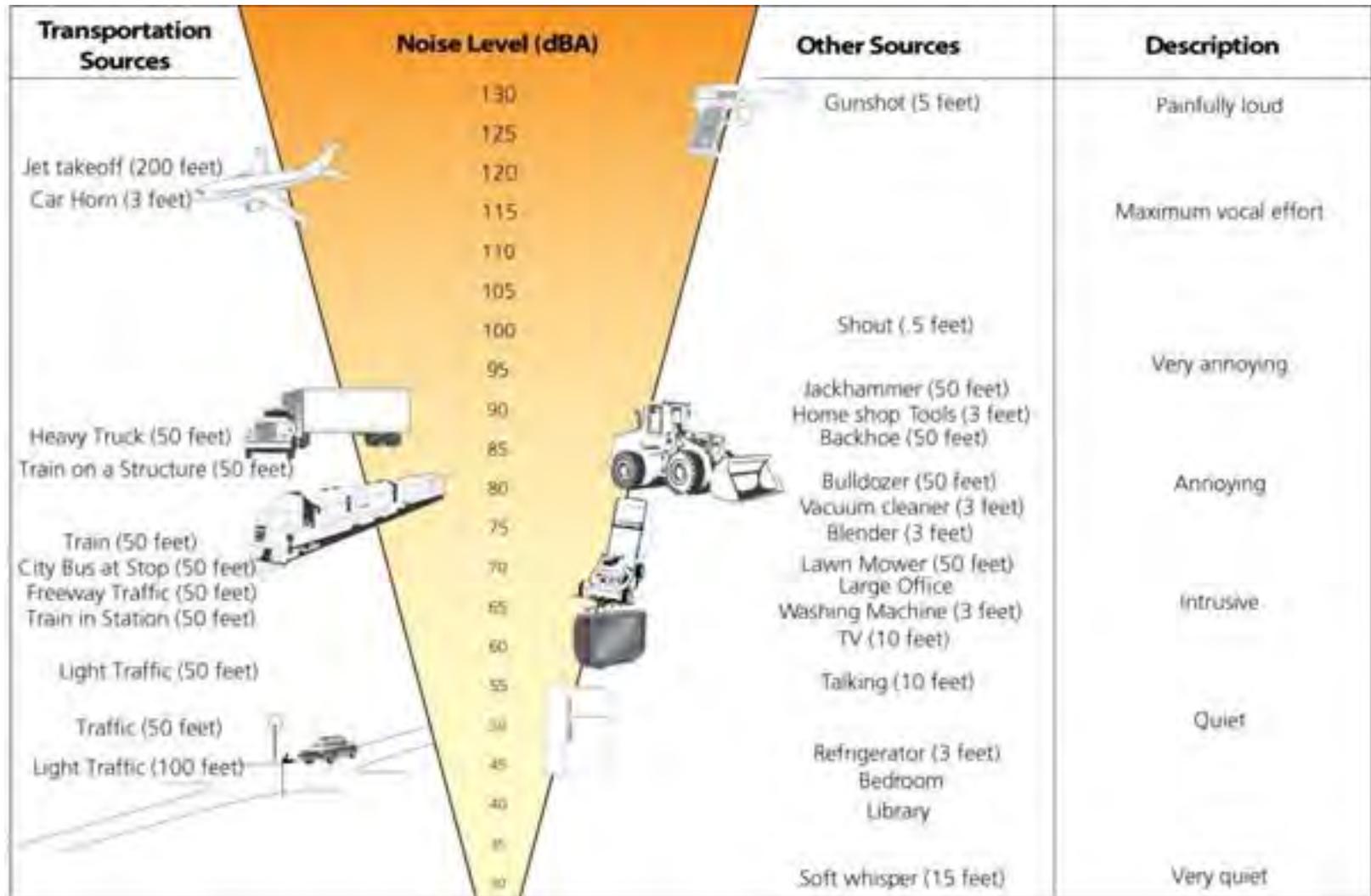
Mitigation may be needed for increases greater than 10 dBA

Residential limit of 67 dBA

### *Observations*

- Noise increases are higher at the intersections than along the length
- Existing noise levels along alignment are between 42 dBA to 65 dBA, with an average of 48 dBA along the length.
- 3 lane option has noise levels between 50 dBA to 67 dBA, with an average of 59 dBA along the length. Maximum increase is 15 dBA
- 2 lane option has noise levels between 51 dBA to 67 dBA, with an average of 56 dBA. Maximum increase is 12 dBA.
- Total noise levels for all options are below thresholds stated in WAC 173-62, and approaching thresholds stated by WSDOT
- If project receives federal funding, some sound mitigation may be needed. Mitigation may require 8-12' high walls at some locations, but residents can decide against these heights.





Source: Federal Transit Administration (FTA), 1995; EPA 1971; EPA 1974



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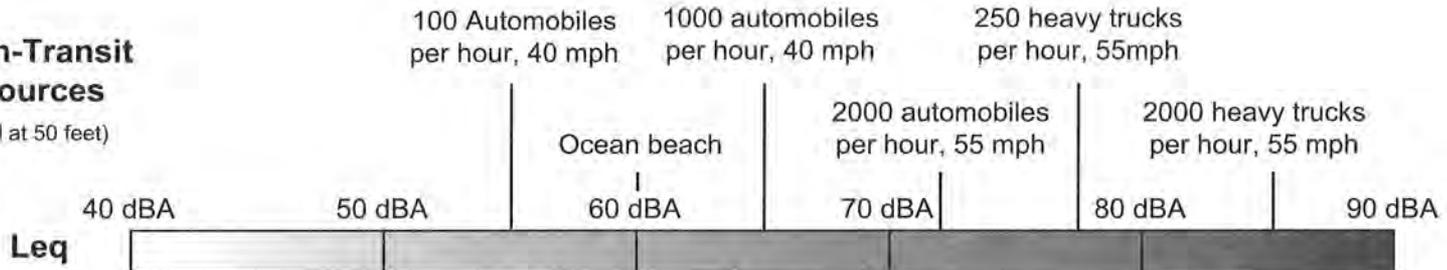
# 173<sup>rd</sup> Street Improvements



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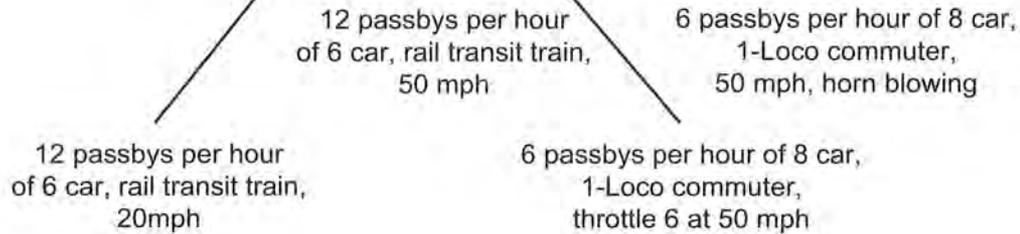
**Non-Transit Sources**

(All at 50 feet)



**Transit Sources**

(All at 50 feet)



Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, April 1995



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*173<sup>rd</sup> Street Improvements*



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*Studies*

- Cultural Resource Assessment
- Asbestos Survey
- Geotechnical
- SEPA
- Traffic Study
- Noise Analysis

***Community Outreach***

- **Neighborhood Concerns**



## Initial Community Outreach Meeting (Dec 2010)

### *Well Attended*

- 30-40 residents
- Representatives from LDS Church
- Representatives from Cascade Health Alliance

### *Neighborhood Concerns*

- Encouraged inclusion of the trail
- Noise, and thus inclusion of a screening element and buffer
- Speeding
- Crime
- Property values
- Commercial development next to residential neighborhood
- Special assessments
- LDS Church was concerned with loss of parking and future roundabout



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• *Proposed Alignment*

• *Project Issues*

• *Roadway Sections*

• *Neighborhood Screening*

• *Funding*

• *Schedule*





Proposed 173<sup>rd</sup> Street Alignment





Alignment Constraints



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# 173<sup>rd</sup> Street Improvements



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## Existing Conditions

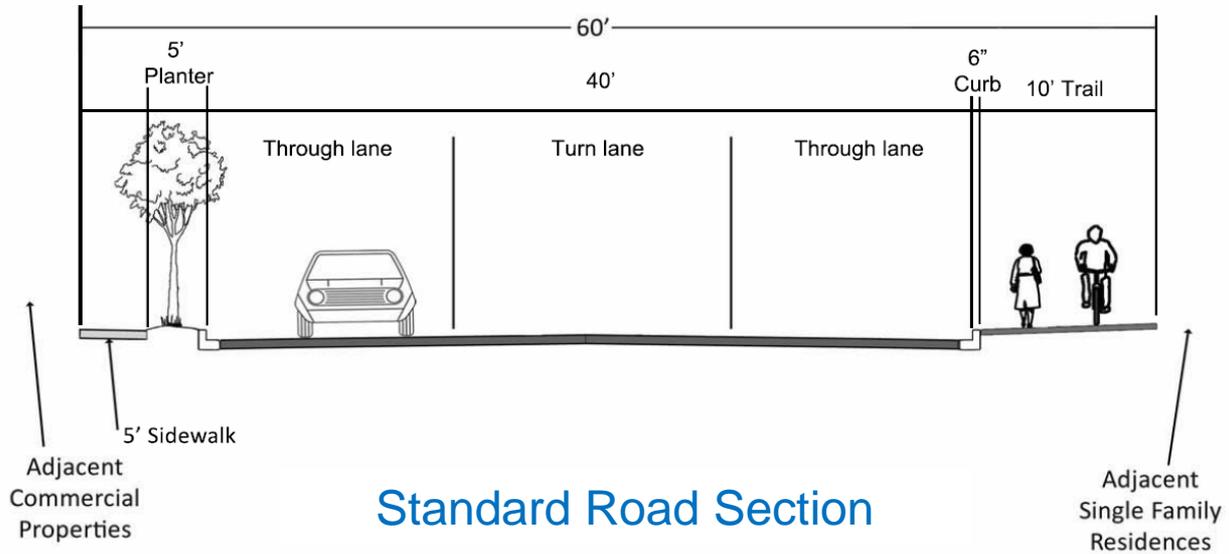


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## *173<sup>rd</sup> Street Improvements*



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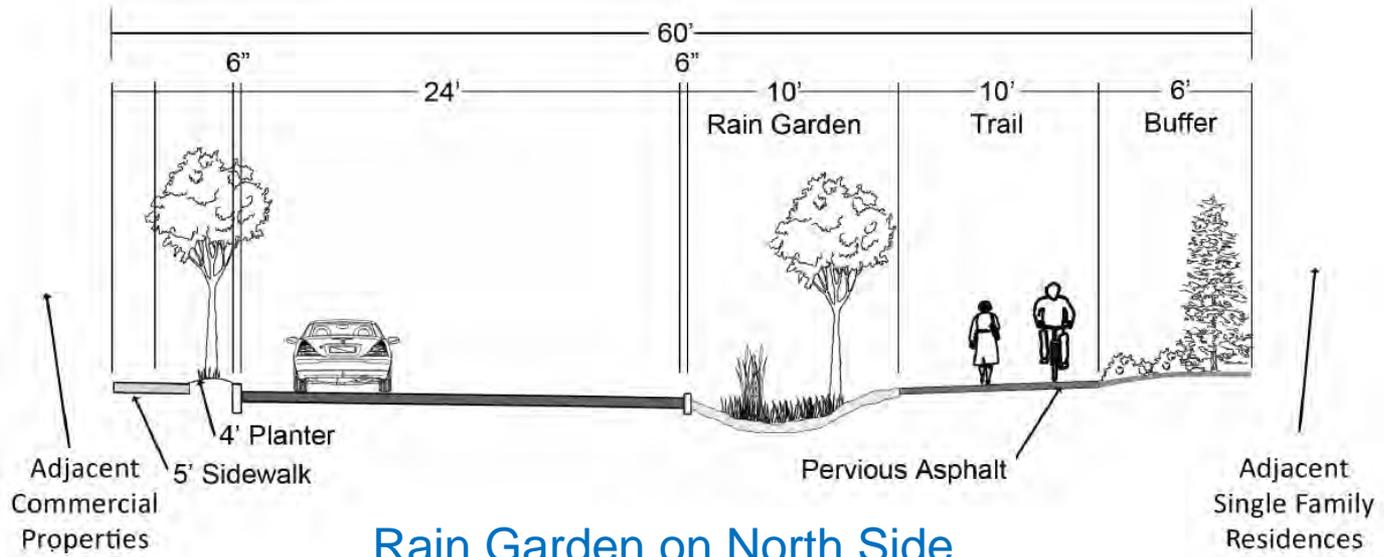


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# 173<sup>rd</sup> Street Improvements



Pertee

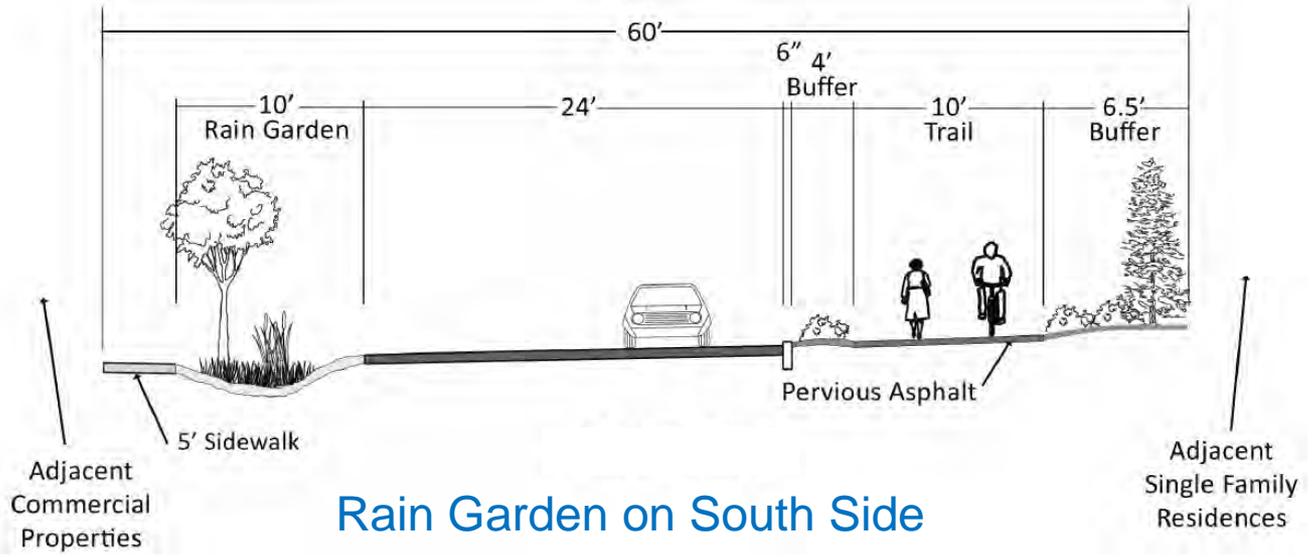


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## 173<sup>rd</sup> Street Improvements



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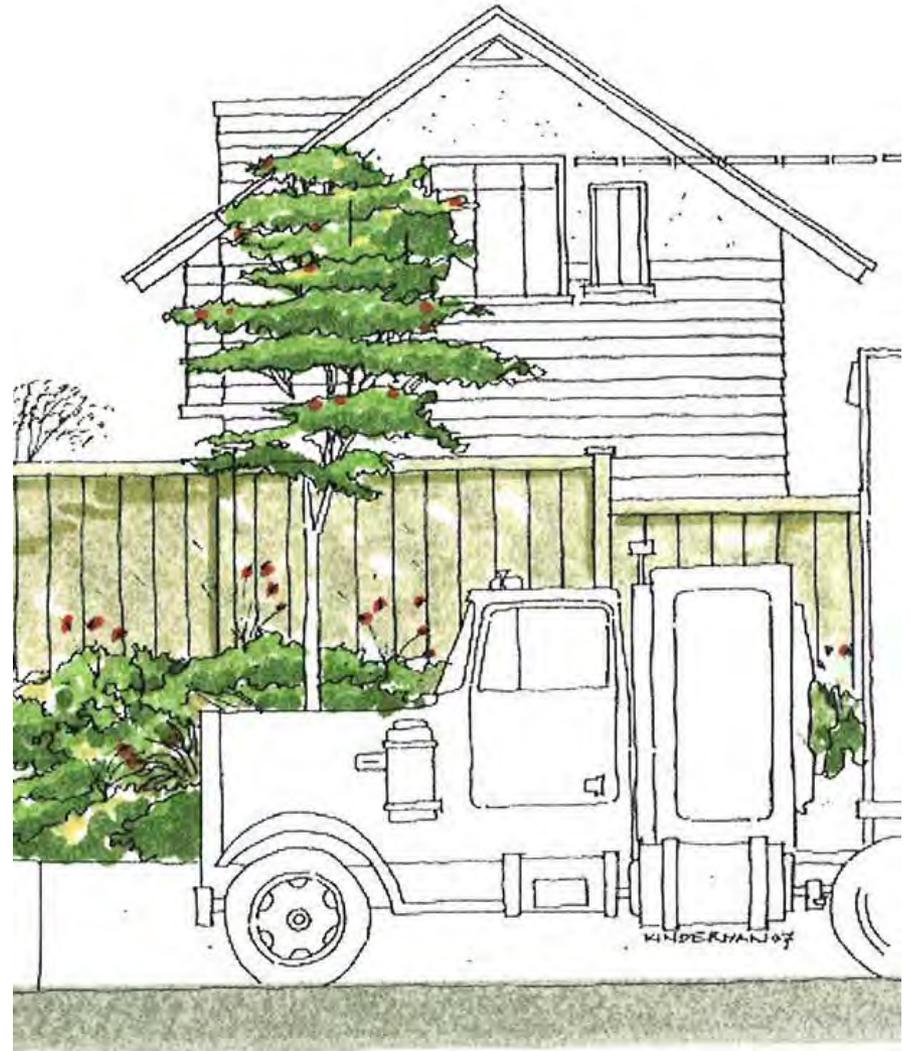
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# 173<sup>rd</sup> Street Improvements



## Residential Screening Options

- Vegetation
- Wood fence
- Vinyl fence w/ foam insulation
- Chain link with slats
- Cement board
- CMU wall



## Other Parameters

### *Funding*

- Estimated construction cost approx. \$1,000,000, excluding land acquisition
  - Project can be phased
- City expenditure to date
  - \$445,000 purchase of Conner Property
  - \$142,000 for consultant fees
- Traffic Mitigation received to date
  - Cascade Health Alliance \$204,655
  - La Quinta \$ (Pending)
  - Future Development \$ (Pending)
- Balance of project expenditure to be paid by City and/or grant opportunities

### *Schedule*

- Complete design by Fall 2011
- Possible start construction in Summer 2012, pending funding



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- *Purchase of Conner Property*
- *Held an initial community outreach meeting*
- *Hired Transportation Consultant*
- *Performed Technical Studies*
- *Developed preliminary road sections*



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- *Present project to public on August 9 at 6pm*
- *Demolition of Conner Property*
- *Decide on preferred road section*
- *Complete design phase*
- *Pursue funding opportunities*
- *When design is complete, decide to construct in 2012 or later.*



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