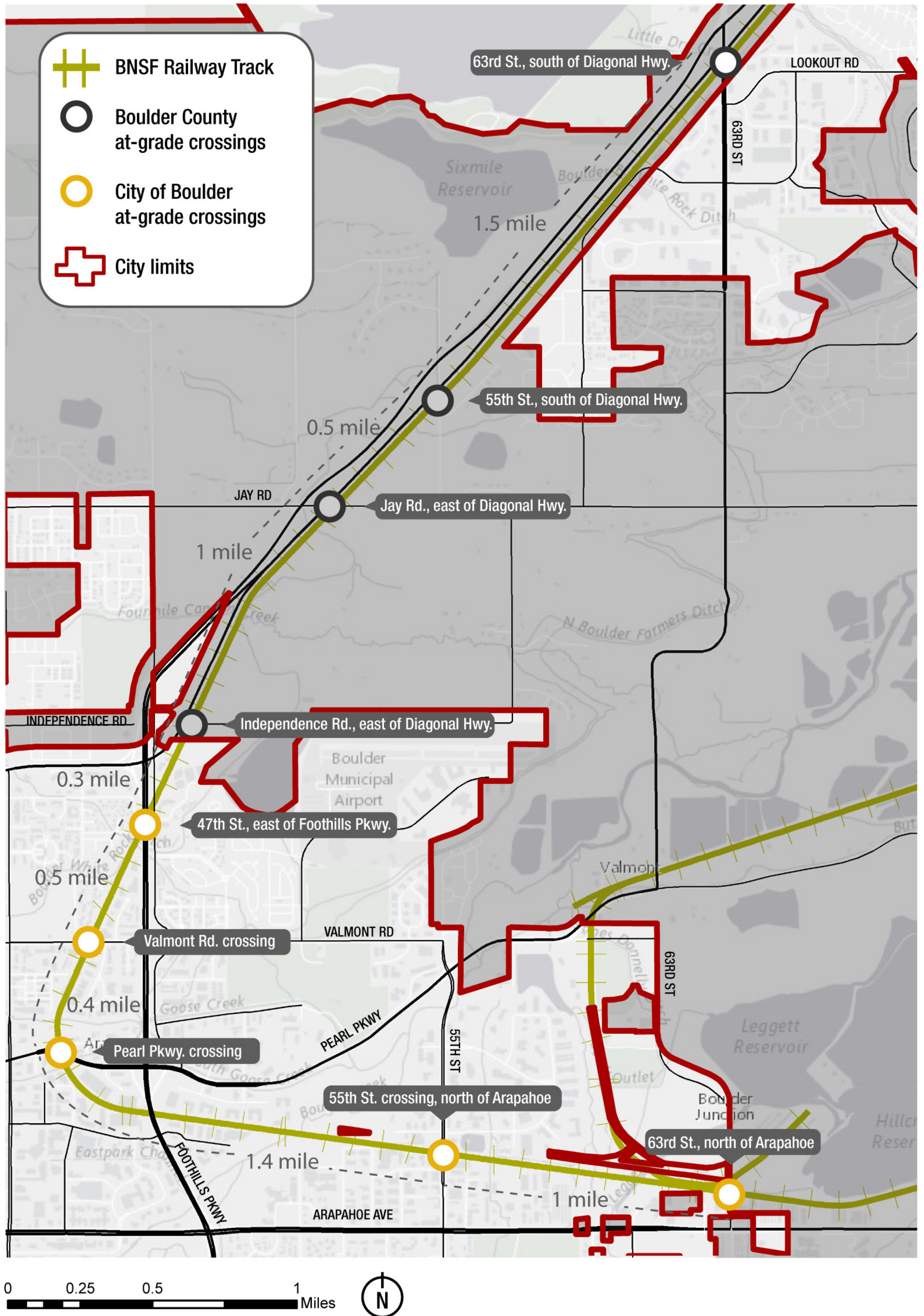
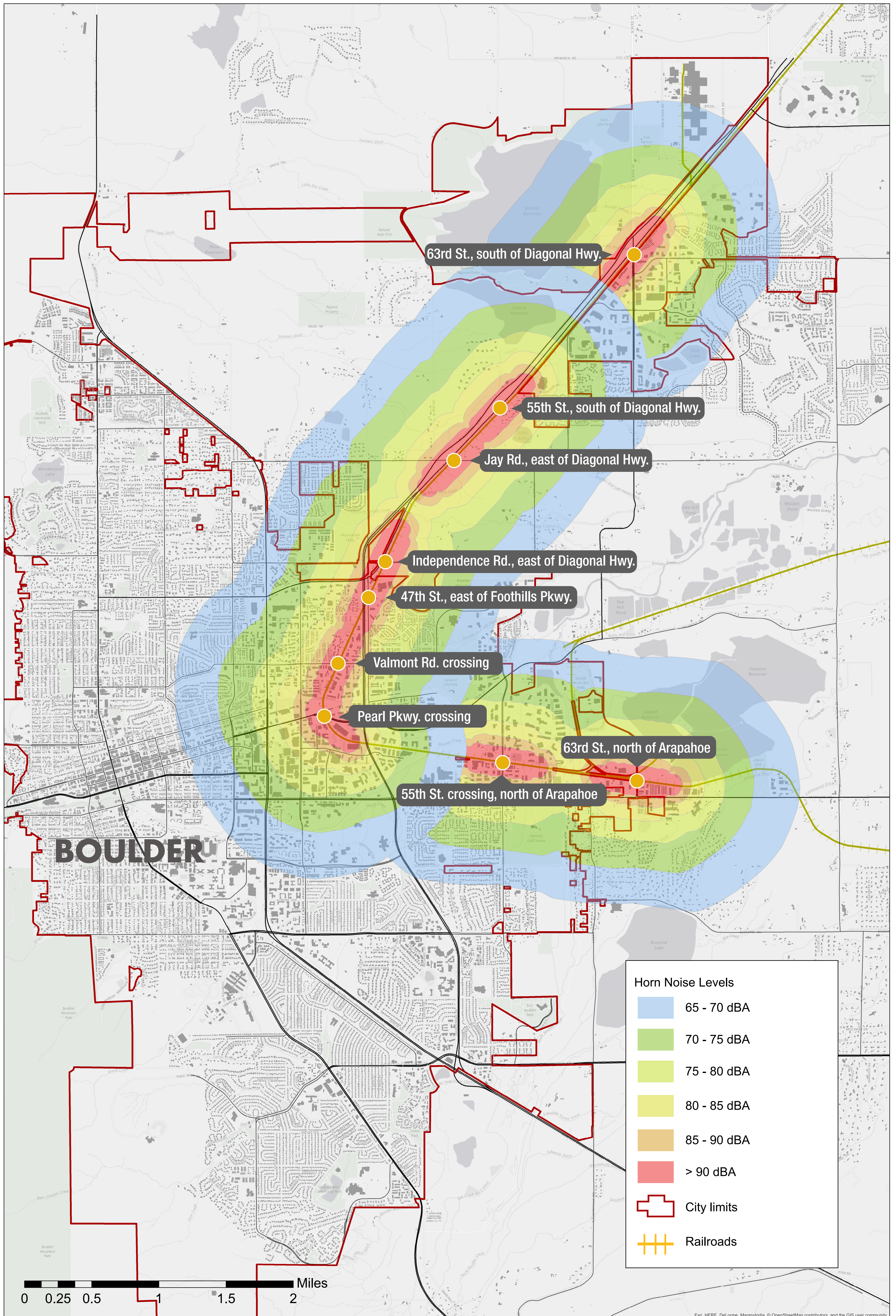


CITY OF BOULDER RAILROAD CROSSING LOCATIONS



TRAIN HORN SOUND CLOUD ANALYSIS



0 0.25 0.5 1 1.5 2 Miles

CITY OF BOULDER RAILROAD CROSSINGS INFORMATION OVERVIEW

Crossing	Agency	Cost Estimates <small>Conceptual construction cost + contingency</small>	Recommended Treatment Type	# of Residents Affected by Sound	# of Jobs Affected by Sound	Implementability
N. 63RD ST	City of Boulder/ Boulder County	\$440,000 - \$575,000	4 Quad-Gates	5,800 ^{*****}	9,000 ^{*****}	
N. 55TH ST	Boulder County	\$160,000 - \$440,000*	TBD ^{***}	1,500 ^{****}	N/A	
JAY RD	Boulder County	\$240,000 - \$500,000*	TBD ^{***}	2,100 ^{****}	N/A	
INDEPENDENCE RD	Boulder County	\$160,000 - \$520,000*	TBD ^{***}	4,378 ^{****}	N/A	
47TH ST	City of Boulder	\$75,000 - \$100,000	Raised Median Extension	13,800 ^{*****}	13,200 ^{*****}	
VALMONT RD	City of Boulder	\$216,000 ^{**}	Raised Median Extension	16,200 ^{*****}	23,300 ^{*****}	
PEARL PKWY	City of Boulder	\$175,000 - \$230,000	4 Quad-Gates	23,200 ^{*****}	28,000 ^{*****}	
S. 55TH ST	City of Boulder	\$220,000 - \$300,000	Raised Median Extension	3,700 ^{*****}	17,000 ^{*****}	
S. 63RD ST	City of Boulder	\$150,000 - \$200,000	Raised Median Extension	1,500 ^{*****}	8,400 ^{*****}	

Notes:

- * Draft cost estimates and crossing types under review by Boulder County.
- ** Cost estimate for quiet zone is anticipated to be covered in the Valmont Road corridor improvements and require no additional improvements or anticipated cost.
- *** Crossing improvements under review by Boulder County.
- **** Boulder County source. These figures represent total residential properties and not actual number of people (Boulder County analysis method differs slightly from that of City of Boulder).
- ***** # of residents are City of Boulder and Boulder County residents inside the sound cloud analysis. Residents are likely to be double counted in this figure where there is overlapping of sound clouds.
- ***** # of jobs are jobs located in the City of Boulder and Boulder County. Jobs are likely to be double counted in this figure where there is overlapping of sound clouds.

IMPLEMENTATION SCENARIO BASED ON # OF RESIDENTS IN SOUND CLOUD ANALYSIS

GROUP 1

	# of Residents	# of Jobs
INDEPENDENCE RD	4,378**	N/A
47TH ST		
VALMONT RD	27,000	33,000
PEARL PKWY		

GROUP 2

	# of Residents	# of Jobs
N. 63RD ST	5,800	9,000
N. 55TH ST	1,500**	N/A
JAY RD	2,100**	N/A

GROUP 3

	# of Residents	# of Jobs
S. 55TH ST*		
	5,200	25,400
S. 63RD ST*		

* Crossing improvements at these location are more complex due to adjacent private crossings and will require extensive coordination with BNSF, PUC, and FRA, likely increasing risks, costs, and timelines required to get QZs approved and constructed

** Boulder County source. These figures represent total residential properties and not actual number of people (Boulder County analysis method differs slightly from that of City of Boulder)

IMPLEMENTATION SCENARIO BASED ON COST ESTIMATES

GROUP 1

	Boulder County	City of Boulder
INDEPENDENCE RD	TBD	
47TH ST		\$75,000 - \$100,000
VALMONT RD		N/A
PEARL PKWY		\$175,000 - \$230,000
TOTAL GROUP COST ESTIMATE		\$250,000 - \$330,000

GROUP 2

	Boulder County	City of Boulder
S. 55TH ST*		\$220,000 - \$300,000
S. 63RD ST*		\$150,000 - \$200,000
TOTAL GROUP COST ESTIMATE		\$370,000 - \$500,000

GROUP 3

	Boulder County	City of Boulder
N. 63RD ST	TBD	\$440,000 - \$575,000
N. 55TH ST	TBD	
JAY RD	TBD	
TOTAL GROUP COST ESTIMATE		\$440,000 - \$575,000

* Crossing improvements at these location are more complex due to adjacent private crossings and will require extensive coordination with BNSF, PUC, and FRA, likely increasing risks, costs, and timelines required to get QZs approved and constructed

Total cost estimate for all
City of Boulder railroad crossings

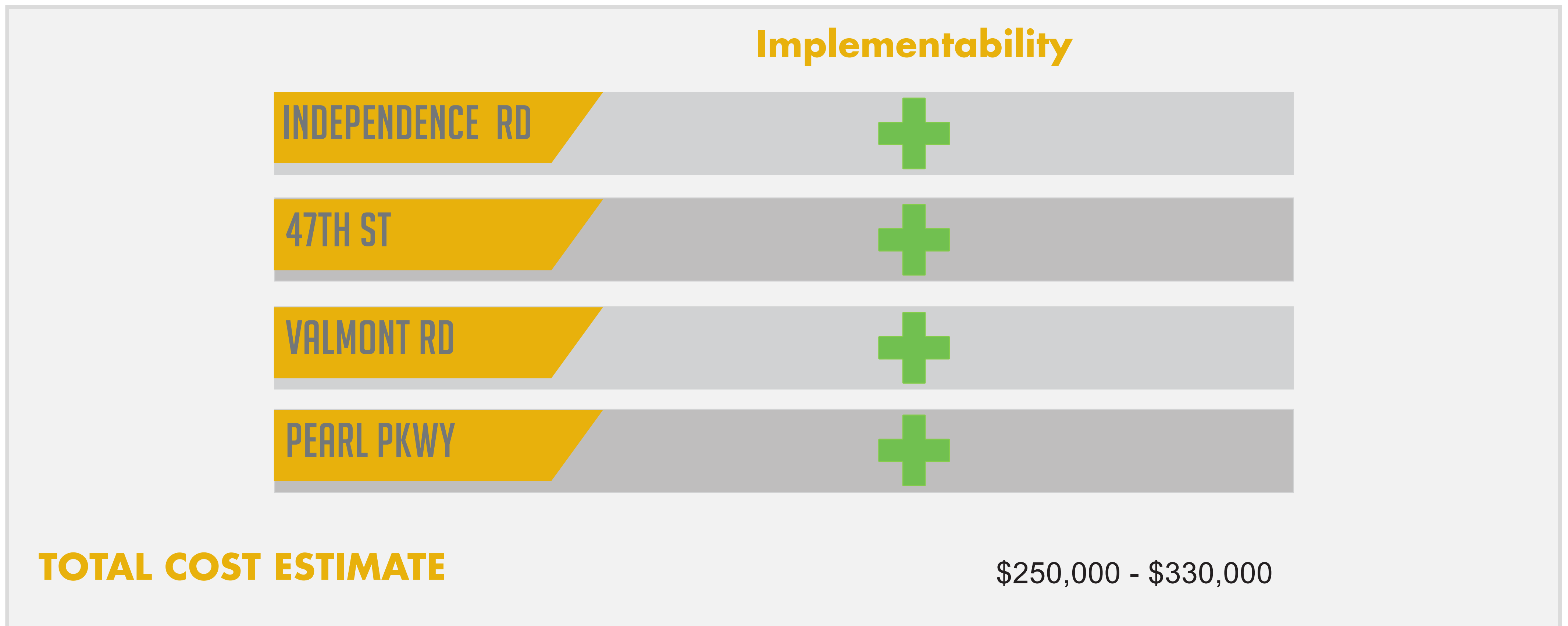
\$1,100,000 - \$1,400,000+

Current City of Boulder available
grant funding

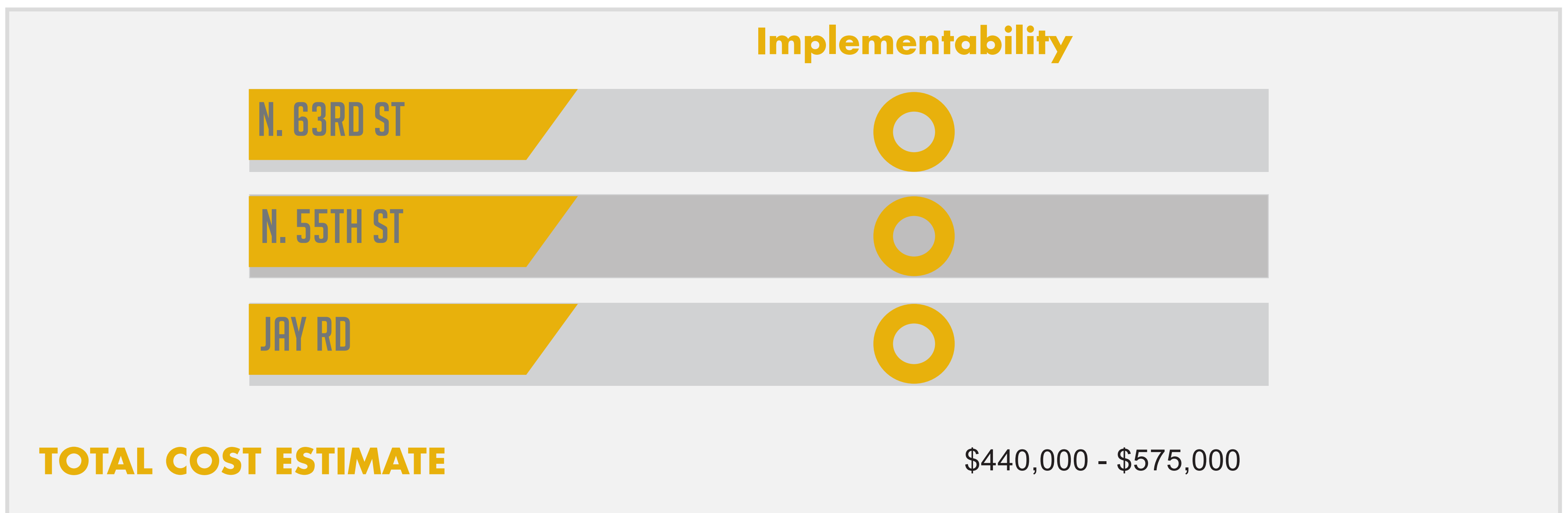
\$1,320,000

IMPLEMENTATION SCENARIO BASED ON IMPLEMENTABILITY

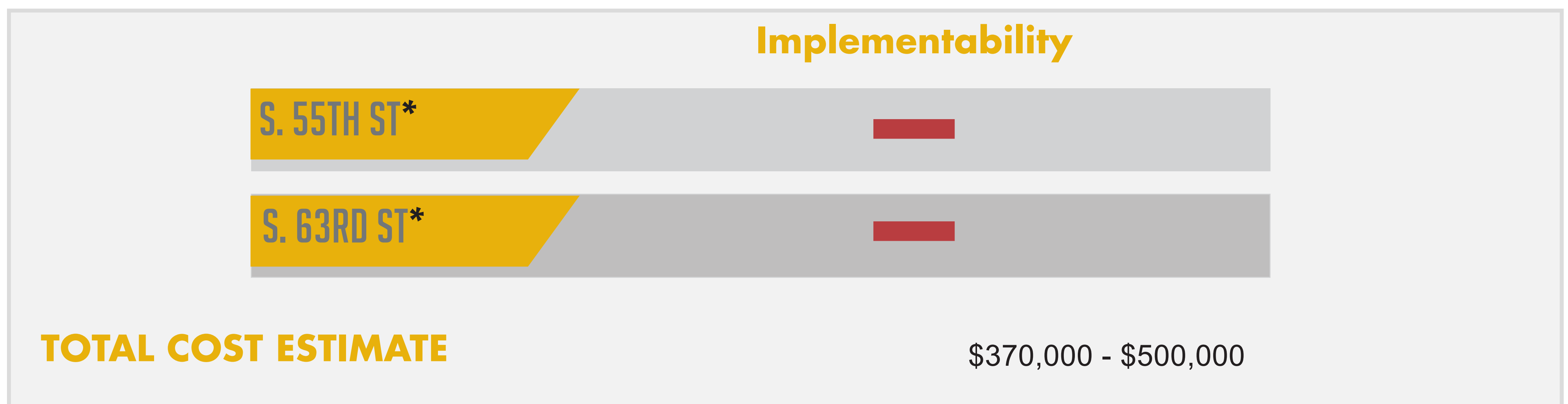
GROUP 1



GROUP 2

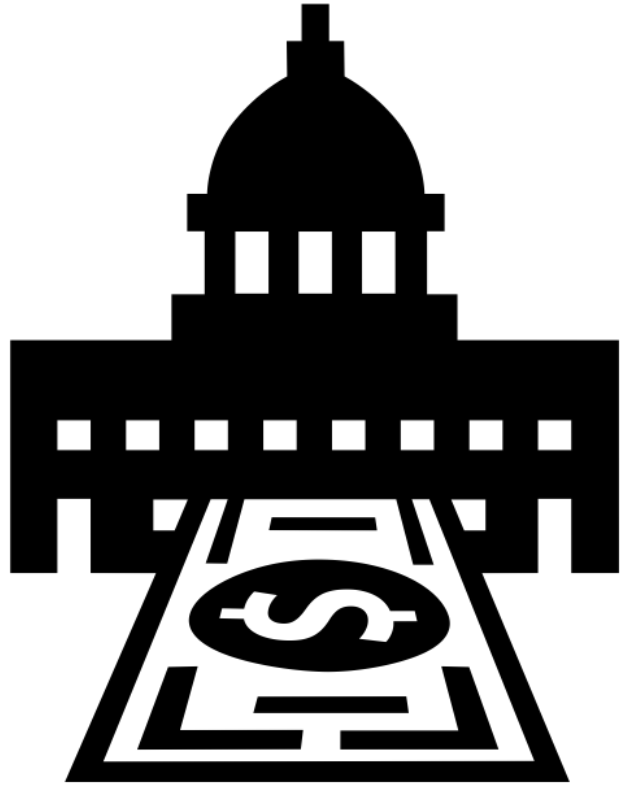


GROUP 3



* Crossing improvements at these location are more complex due to adjacent private crossings and will require extensive coordination with BNSF, PUC, and FRA, likely increasing risks, costs, and timelines required to get QZs approved and constructed

POTENTIAL OPTIONS FOR FUNDING REMAINING QUIET ZONES

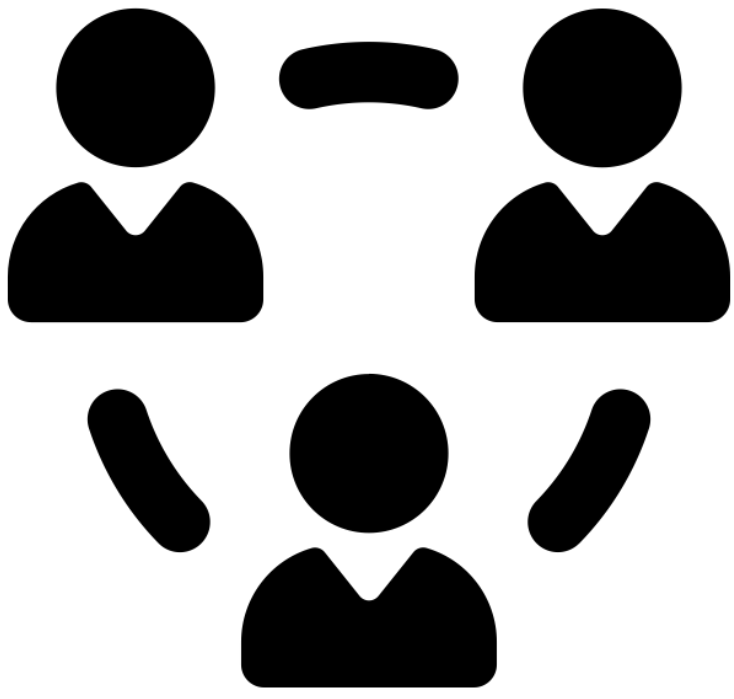


ADDITIONAL PUBLIC FUNDS

(city, county, future grants)



PUBLIC/PRIVATE PARTNERSHIPS



SPECIAL IMPROVEMENT DISTRICT

(based on sound cloud areas)



CROWD SOURCING/FUND RAISING CAMPAIGN