CITY OF NORMAN, OKLAHOMA

CITY COUNCIL COMMUNITY PLANNING AND TRANSPORTATION COMMITTEE AGENDA

Municipal Building Conference Room
201 West Gray

Monday, August 26, 2013

5:30 P.M.

1. **CART RIDERSHIP REPORT INCLUDING SAFERIDE AND EXTENDED SERVICE FOR THE MONTHS OF JUNE AND JULY, 2013.**

2. **UPDATE ON SIDEWALK MASTER PLAN.**

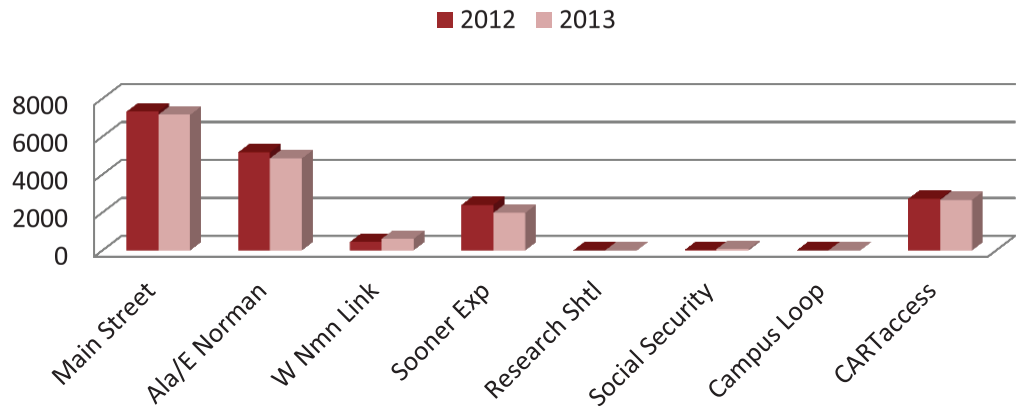
3. **DISCUSSION REGARDING A RAILROAD QUIET ZONE FOR NORMAN.**

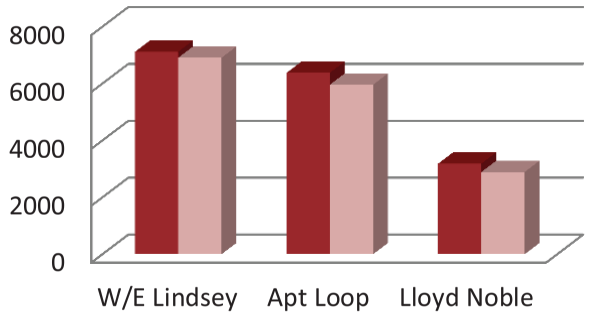
4. **MISCELLANEOUS DISCUSSION.**

ITEM 1

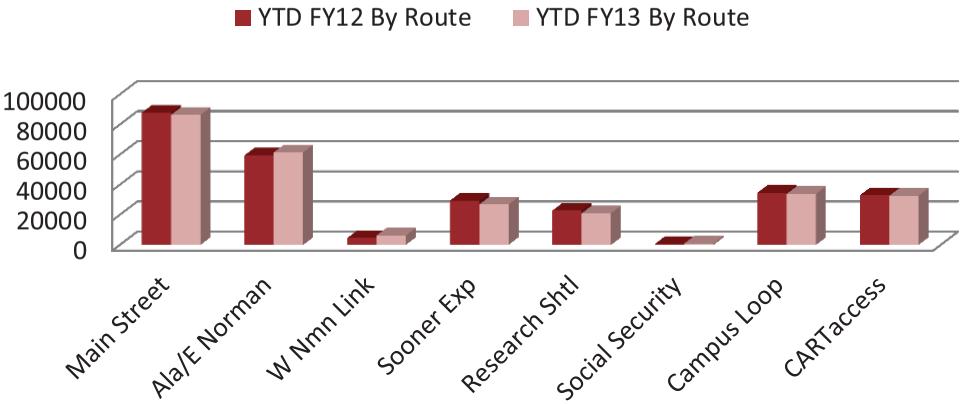
CART RIDERSHIP REPORT

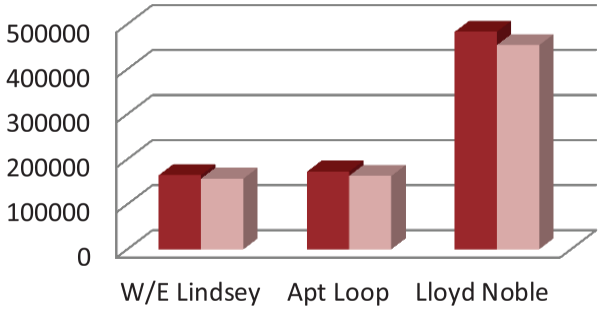
June Ridership by Route





Year-to-Date Ridership by Route

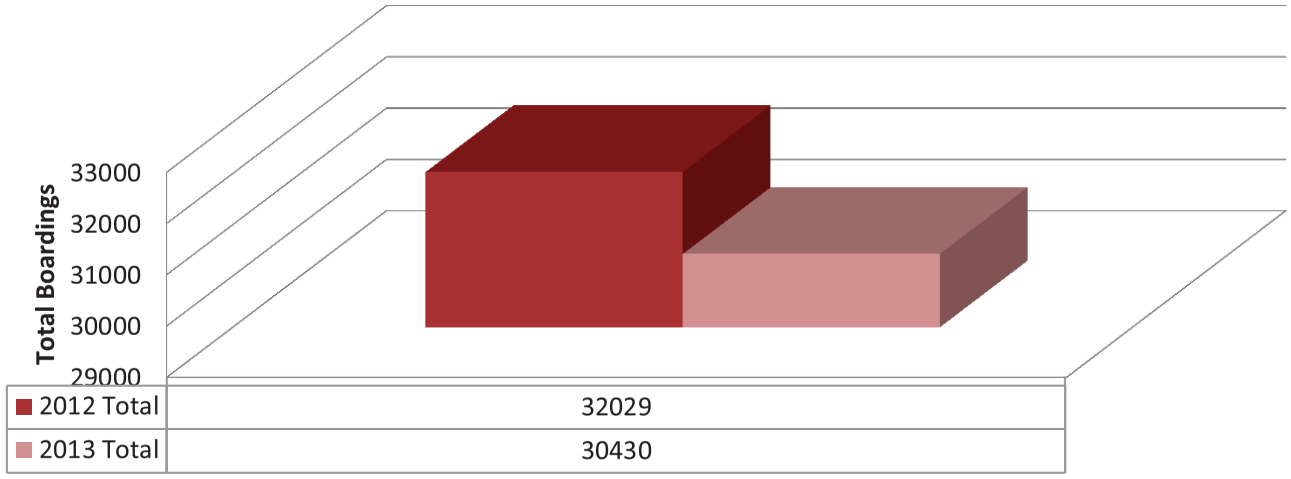




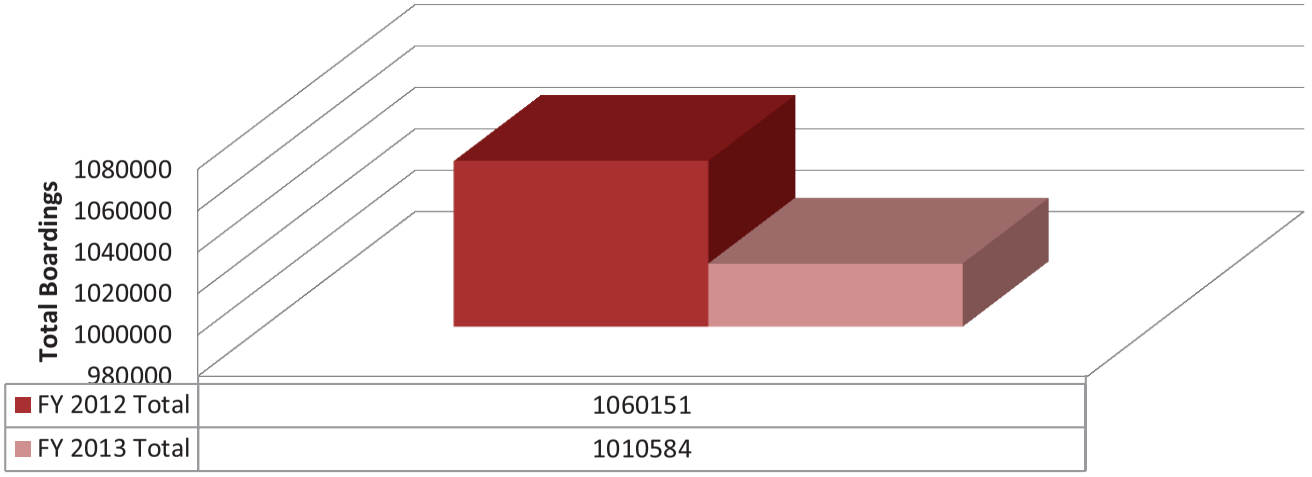
	Jun-12	Jun-13	% Change
Main Street	7307	7147	-2%
Ala/E Norman	5170	4849	-6%
W Nmn Link	444	614	38%
Sooner Exp	2398	1980	-17%
Research Shtl	0	0	0%
Social Security	36	83	131%
Campus Loop	0	0	0%
CARTaccess	2719	2663	-2%
W/E Lindsey	7115	6907	-3%
Apt Loop	6375	5958	-7%
Lloyd Noble	3184	2892	-9%

	YTD FY12	YTD FY13	% Change
Main Street	87900	86455	-2%
Ala/E Norman	59555	61495	3%
W Nmn Link	4570	6273	37%
Sooner Exp	29401	26853	-9%
Research Shtl	22868	21043	-8%
Social Security	703	929	32%
Campus Loop	34750	33978	-2%
CARTaccess	33064	32677	-1%
W/E Lindsey	164983	157103	-5%
Apt Loop	172312	162980	-5%
Lloyd Noble	483109	453475	-6%

June Fixed-Route Total Ridership

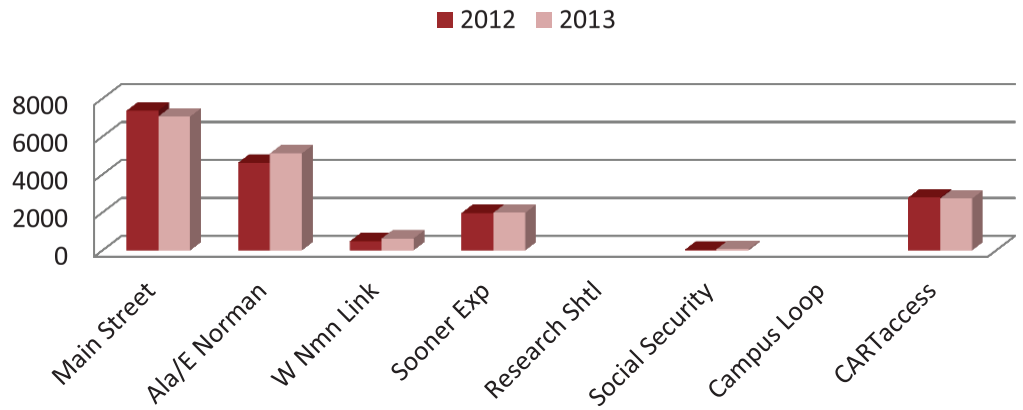


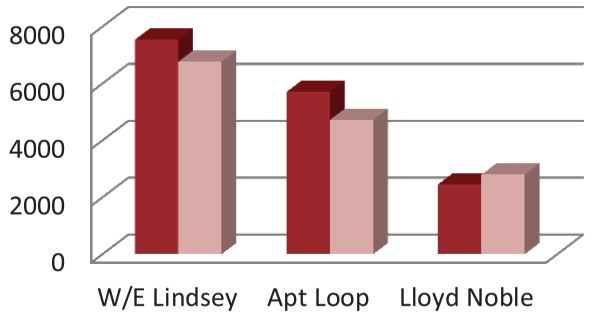
Year-to-Date Fixed-Route Total Ridership



	Jun-12	Jun-13	% Change		YTD FY12	YTD FY13	% Change
Monthly Total	32029	30430	-5%	Annual Total	1060151	1010584	-5%
Days of Service	26	25	-4%		299	296	-1%

July Ridership by Route





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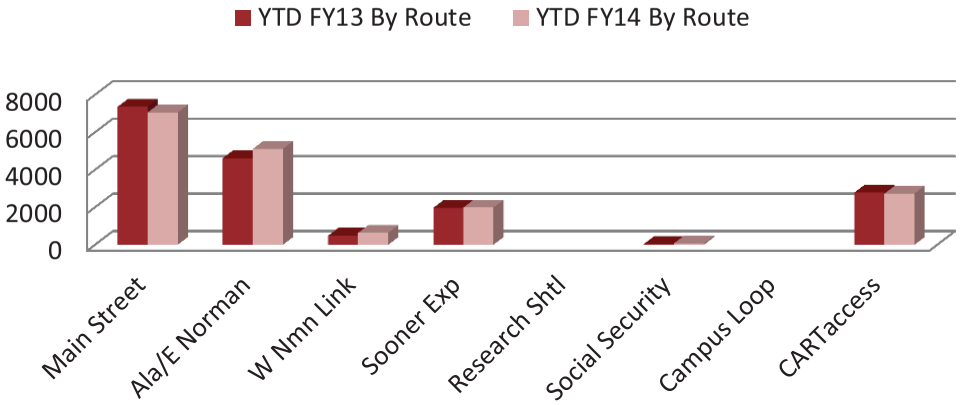

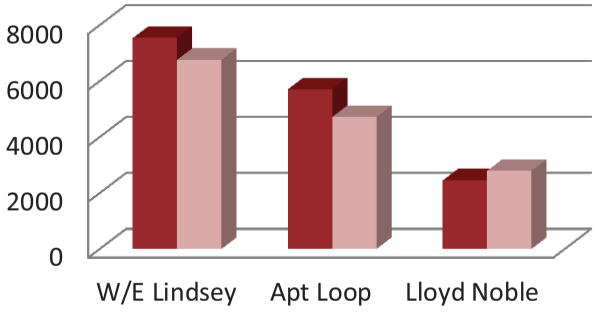

	Jul-12	Jul-13	% Change
Main Street	7358	7056	-4%
Ala/E Norman	4624	5116	11%
W Nmn Link	485	636	31%
Sooner Exp	1972	1986	1%
Research Shtl			
Social Security	43	75	74%
Campus Loop			
CARTaccess	2790	2733	-2%
W/E Lindsey	7540	6763	-10%
Apt Loop	5707	4717	-17%
Lloyd Noble	2457	2796	14%

	YTD FY13	YTD FY14	% Change
Main Street	7358	7056	-4%
Ala/E Norman	4624	5116	11%
W Nmn Link	485	636	31%
Sooner Exp	1972	1986	1%
Research Shtl			
Social Security	43	75	74%
Campus Loop			
CARTaccess	2790	2733	-2%
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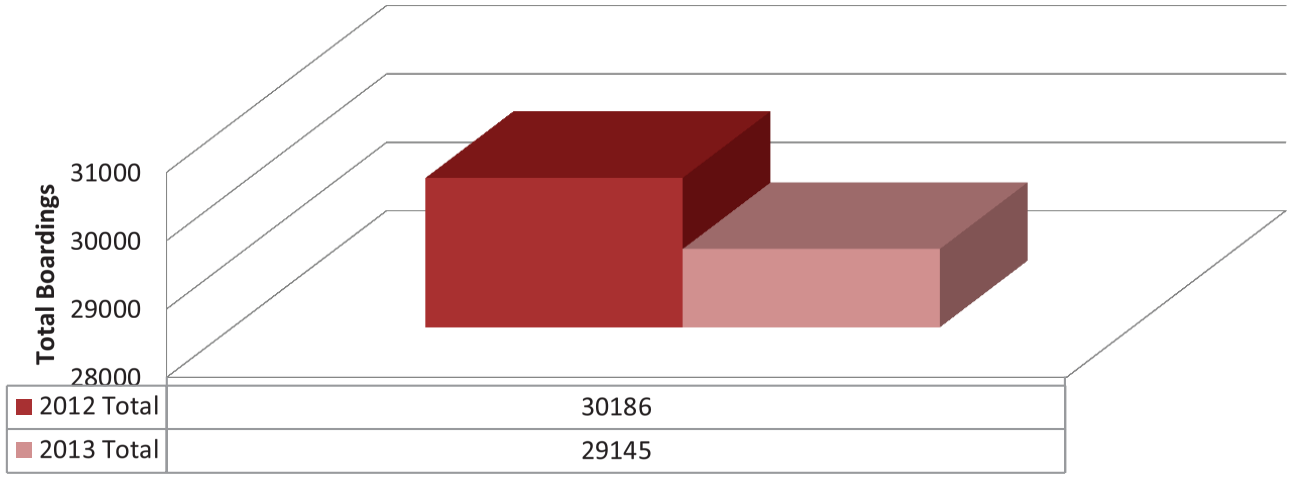
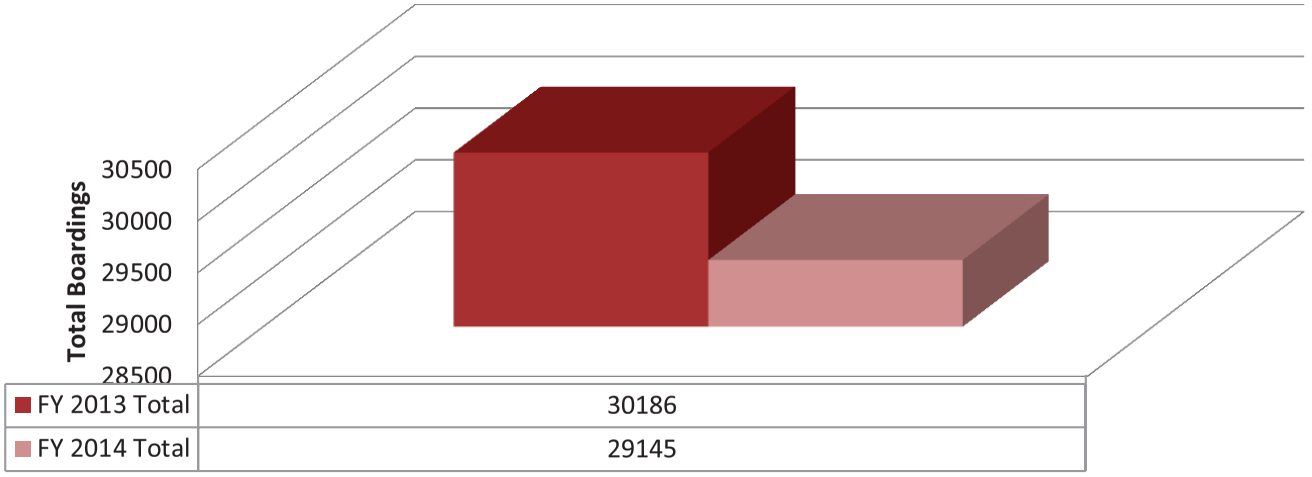
July Fixed-Route Total Ridership



Year-to-Date Fixed-Route Total Ridership



	Jul-12	Jul-13	% Change		YTD FY13	YTD FY14	% Change
Monthly Total	30186	29145	-3%	Annual Total	30186	29145	-3%

ITEM 2

SIDEWALK MASTER PLAN UPDATE

Sidewalk Master Plan

City Council
Community Planning and Transportation Committee

Presented by
Scott Sturtz, City Engineer
Jack Burdett, Engineering Assistant

August 26, 2013

Background

- September 1966 - City Ordinance requiring sidewalks with platting and new construction
- 1990 – ADA first initiated
- 1997 - Norman establishes four sidewalk funding programs

Current Capital C.I.P. FYE 2014 Sidewalk Projects

- ***Sidewalk Program for Schools and Arterials*** ***$70,000***
  - ***Berry Road – Rebecca Lane to Vine Street (Monroe Elementary)***
- ***Sidewalk Accessibility Project*** ***$35,000***
  - ***Morren Drive, 24th Ave. S.W./Brooks, Lindsey/Biloxi Drives***
- ***Citywide Sidewalk Project*** ***$65,000***
  - ***citywide 50/50 repair***
- ***Downtown Area Sidewalk Project*** ***$50,000***
- ***ODOT Funded Projects*** ***$400,000***
  - ***Boyd Street: Classen Blvd. to Barkley Ave.***
  - ***McGee Drive: Hwy 9 to Cherry Stone***

Total: $620,000

Capital Projects that include Sidewalk

- ***Lindsey Street Widening - Berry Road to 24th Ave. S.W.***
- ***Cedar Lane Road – 12th Ave. SE to ½ Mile east of 24th Ave. SE***
- ***West Main Street Bridge***
- ***24th Ave. East – Lindsey St. to Robinson St.***
- ***36th Ave. NW – Tecumseh Road to Indian Hills Roads***
- ***Alameda Street – Ridge Lake Blvd. to 48th Ave. SE***
- ***12th Ave. SE – HWY 9 to Cedar Lane Road***
- ***Boyd Street – Classen Blvd. to Barkley Street***
- ***Safe Routes to Schools – Lincoln School Area***
- ***Road Maintenance Projects***
- ***Drainage Improvement Projects***
- ***Intersection Improvement Projects***

Sidewalk Master Plan History

- No data base for sidewalk issues
- No long-range plan for resolving sidewalk issues.
- Three major areas
  - ADA Accessible Ramps
  - Sidewalk Repairs
  - Sidewalk Gaps

Ramp Inventory Map

ADA Ramp Inventory

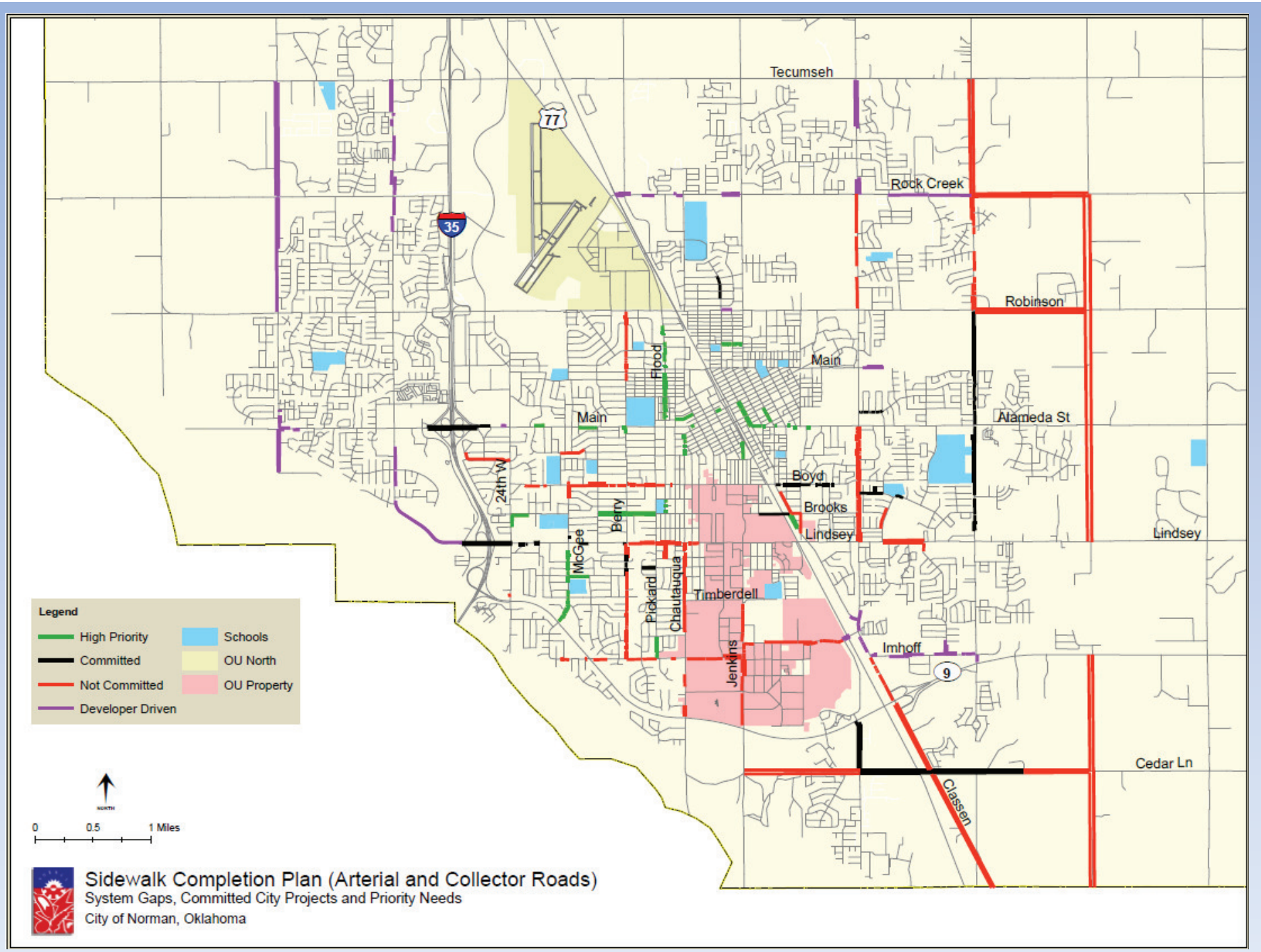
- 9000 Total required ramp locations
- 6800 (76%) Completed
- 800 (9%) Existing ramps that do not meet current ADA requirements
- 1400 (15%) locations do not have ramps

Sidewalk Repair

- Responsibility of the adjacent property owner
- City operates a 50% cost share program

Sidewalk Gaps

- Sections of sidewalk not present across one or more properties
- Occur for several reasons

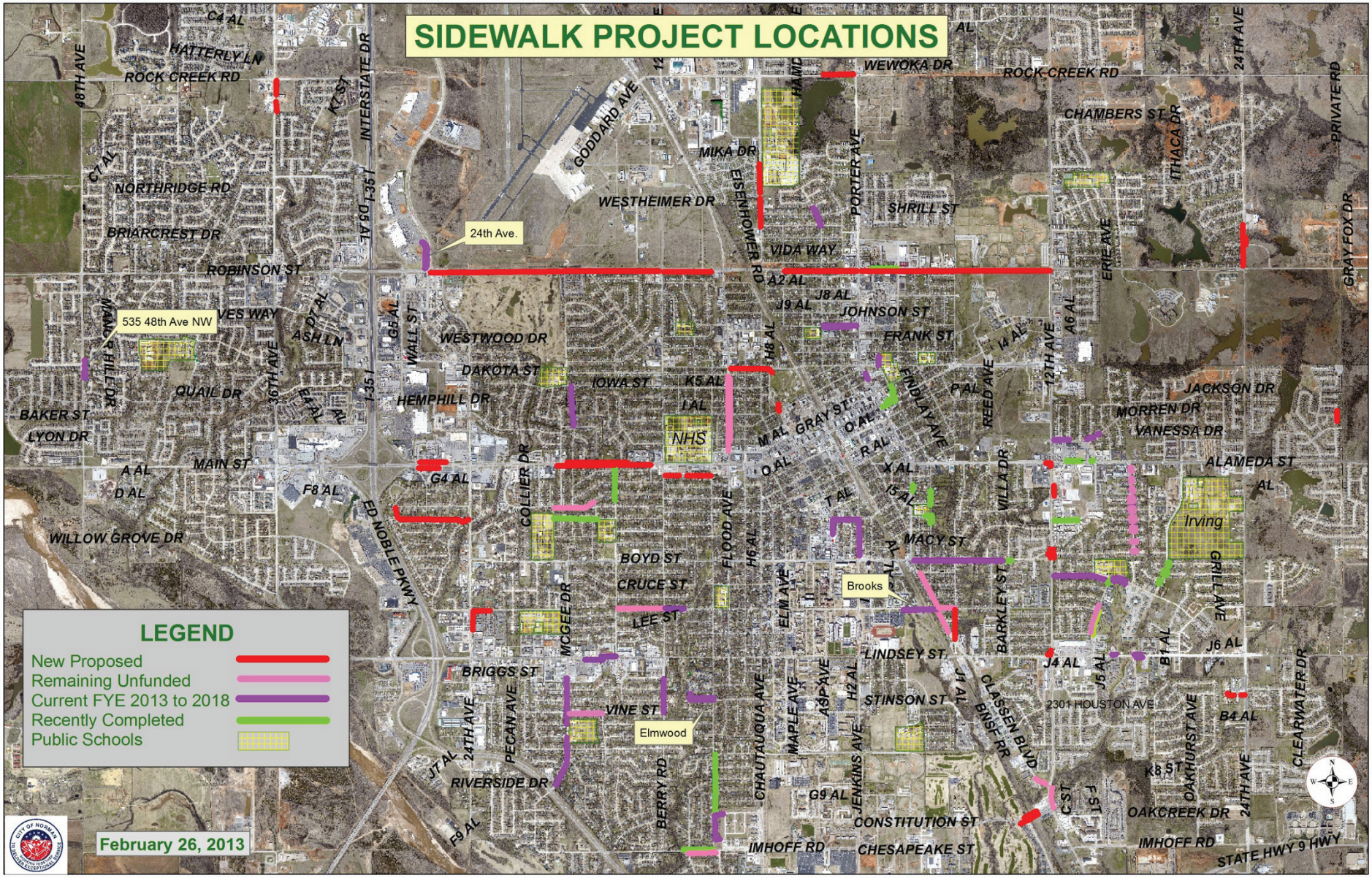

Tecumseh
77
35
Rock Creek
Robinson
Main
Flood
Main
Alameda St
24th W
Boyd
Brooks
Lindsey
Lindsey
Berry
McGee
Pickard
Chautauqua
Timberdell
Jenkins
Imhoff
9
Cedar Ln
Classen
Legend
High Priority
Committed
Not Committed
Developer Driven
Schools
OU North
OU Property
0
0.5
1 Miles
Sidewalk Completion Plan (Arterial and Collector Roads)
System Gaps, Committed City Projects and Priority Needs
City of Norman, Oklahoma

Ranking of projects

Proposed rating/ranking factors for prioritization of sidewalk projects

- Distance to the Attractor destination.
- The presence of multiple Attractors
- What is the condition of the site from new to hazardous?
- Whether there is another ADA compliant route available to the Attractor?
- What type of road adjacent to the route from local to arterial?
- What type of street crossings occur from local to Arterial?
- Whether there a CART bus stop location involved?
- Whether the location is a possible development infill?
- Whether this route is specifically an ADA improvement request?
- Has there been an accident at this location?
- Citizen input to the request
- The age of the request

Each factor has a weight that is compiled to a “Total Weight”.



Proposed Project Locations from Requests

Sidewalk Project Request List

	LOCATION	DESCRIPTION	Total Weight	Cost Estimate	Cost Range	ODOT Class State Funding	Project Notes
1	Robinson Ave.	South Side from 24th Ave. west to 12th Ave East	202.00	$200,000	D		New request-Arterial Accessibility/Repair
2	12th Ave East	Pedestrian Intersection improvements @ Lindsey, Boyd, Alameda, east side sidewalk repair	154.00	$25,000	C	HW-77	New Request - Accessibility
3	Main Street	Repairs on both sides of street from Berry to 26th Ave.	122.00	$200,000	D		New Request
4	24th Ave NE	Gap North of Robinson	114.00	$142,000	D		Greenbelt Committee Request-2013
5	Robinson Ave.	SE corner at Berry Rd.	101.00	$20,000	B		New Request
6	McGee Dr.	Cherry Stone to Highway 9 - New Sidewalk	99.40	$200,000	D	89W	Proposed ODOT Funding
7	Classen Blvd.	12th Ave. SE to 350 feet west, south side	99.00	$95,000	C	48U	Pending Request
8	Constitution St.	Oak Tree Ave. to 100 feet east of railroad tracks, both sides	97.00	$65,000	C	41W	Greenbelt Committee Request-2013
9	Stubbeman Ave.	Robinson to Rock Creek, west side	90.38	$275,000	D	41U	New Request
10	Oklahoma	Boyd to Brooks (west side)	89.00	$226,000	D		Greenbelt Committee Request-2013
11	Acres Street	south side from Park Ave. to University Blvd. (ROW issues)	77.00	$85,000	C		New Request
12	Classen Blvd.	Brooks to Enid, both sides	77.00	$105,000	D	48U	Pending Request
13	Vine	Hollywood to McGee Sidewalk- New sidewalk	74.50	$55,000	C		Pending Request
14	Ridge Bluff Ct	East side, entire length over utility backfill	74.00	$30,000	C		New Request-Repair
15	Classen Ave.	Constitution St. to 400 feet north of Classen Blvd., east side	69.00	$165,000	D	HW-77	Pending Request
16	Flood Ave.	East and west side - Dakota to Gray Sidewalk	66.00	$155,000	D	37U	not funded
17	Glen Oaks Ct	Glen Oaks Court and Glen Oaks Drive Curb Cuts	58.00	$40,000	C		New Request-ADA Accessibility
18	12th Ave. SE	Constitution to 800' North Sidewalk	57.60	$63,000	C		Pending Request
19	Andrews Park	NW and SW corner Access (flood plain permit)	57.00	$25,000	C		New Request
20	Boyd Street	Classen Ave. to Morren Drive	54.58	$200,000	D	63U	ODOT Funding
21	Melrose	South side from Garrison to Rosedale Sidewalk	50.45	$86,000	C		Pending Request
22	Garver Ave.	Pickard to Homeland Parking Lot (North Side)	49.00	$85,000	C		Proposed CIP
23	Brentwood Drive	24th Ave SE to Osborne Drive (north side)	44.45	$240,000	D		Proposed CIP
24	36th Ave NW	Gaps South of Rock Creek Rd (development infill)	30.11	$49,000	C		Greenbelt Committee Request-2013
25	Imhoff Rd.	Walnut to Pickard, south side	26.00	$50,000	C	92W	not funded
26	Rock Creek Rd.	900 feet west of Porter Ave., north side (development infill)	20.52	$40,000	C	72U	New Request

Current ranking of requests for projects. Some fit the criteria in current sidewalk programs or eligible for State funding.

Total Program Costs

- ADA Ramps
  - $2,200,000 total cost
  - Current CIP funding $35,000/year
  - At current funding it would take over 60 years to complete all locations
- Sidewalk Repair
  - Complaint Driven so total cost and time to complete is unknown
  - Current CIP funding $65,000/year
- Sidewalk Gaps
  - $3,000,000 Total current estimate
  - Current CIP funding $70,000
  - ODOT funding $250,000/year (if approved)
  - Current projects would take 10 years to complete

Funding Sources

- Capital Funds
- Grants
- Bonds
- Neighborhood Cost Sharing
- Public / Private Partnerships

Council Options

- Option 1
  - Leave program unchanged
- Option 2
  - Increase CIP funding in one of more areas
- Option 3
  - Other Council direction

Questions and Answers

ITEM 3

RAILROAD QUIET ZONE

Railroad Quiet Zones

City Council Planning and Transportation Committee

City of Norman

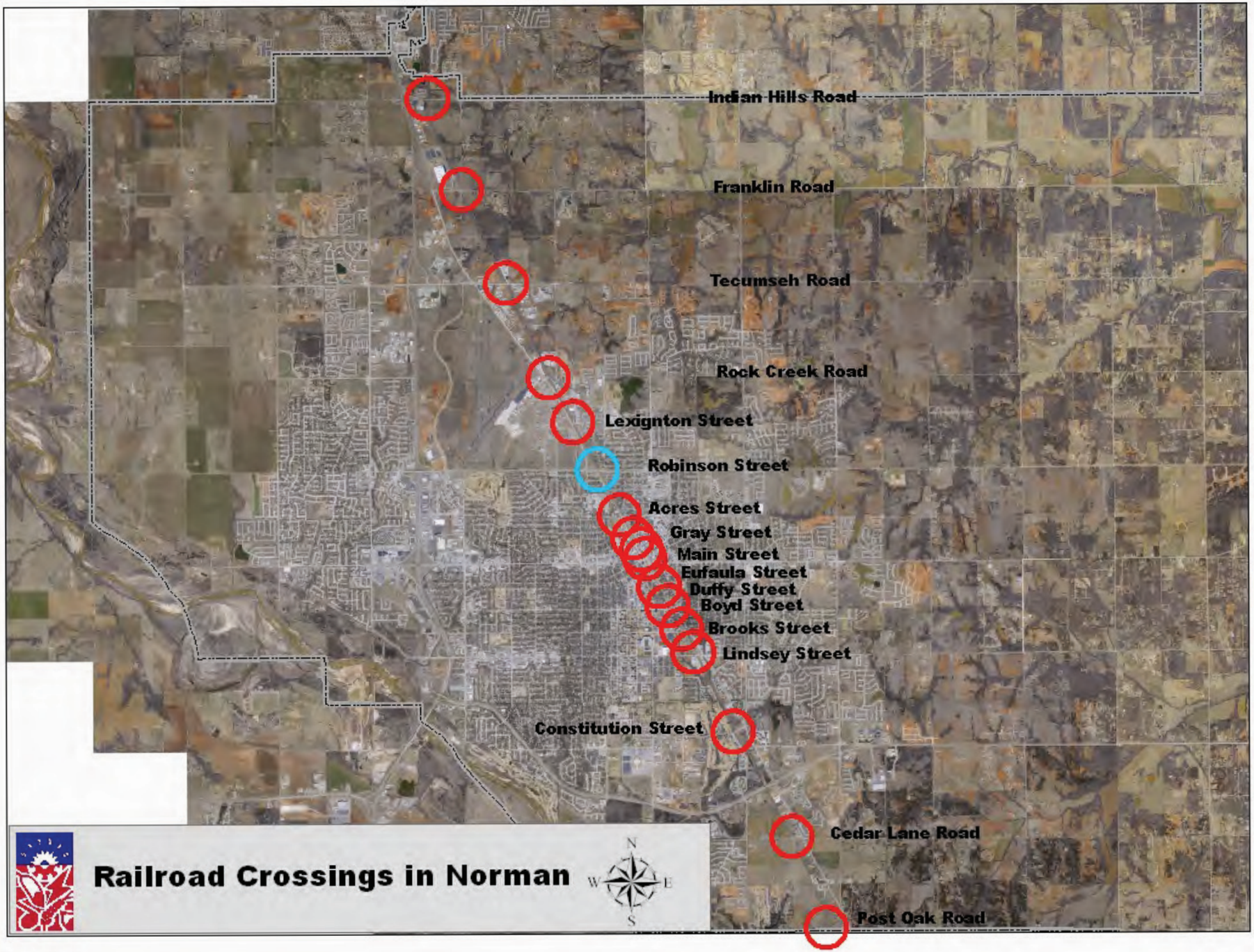
August 26, 2013

What are Railroad Quiet Zones?

R/R Crossings at which trains are prohibited from sounding their horns in order to decrease noise levels for nearby residential communities. Train horns can be silenced only when other safety measures are used to compensate for the absence of horns.

Norman's Railroad Crossings

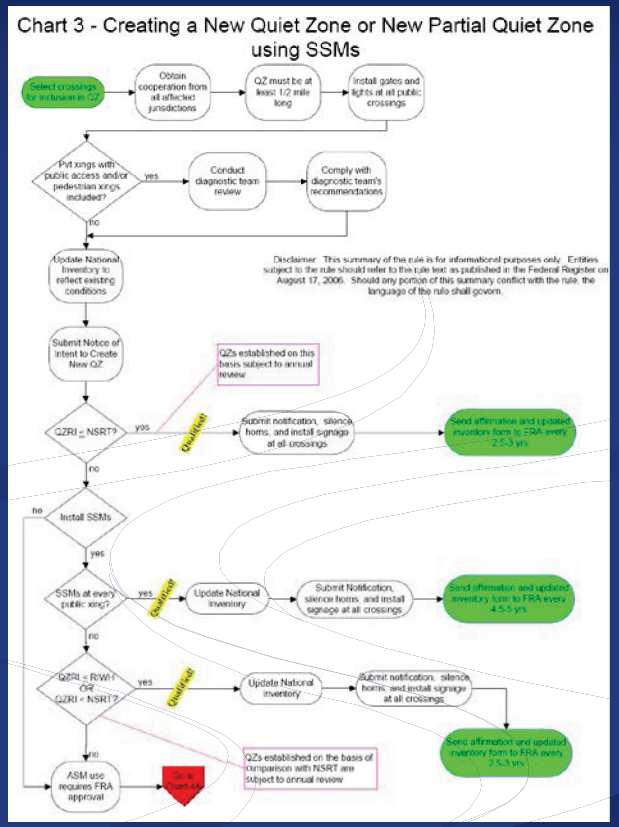
- 17 at-grade crossings
- Major expenditure of funds to modernize crossing controls and surfaces fifteen years ago (~ $2 Million)
- Gated protection and active devices at every crossing
- New constant warning circuitry


Indian Hills Road
Franklin Road
Tecumseh Road
Rock Creek Road
Lexington Street
Robinson Street
Acres Street
Gray Street
Main Street
Eufaula Street
Duffy Street
Boyd Street
Brooks Street
Lindsey Street
Constitution Street
Cedar Lane Road
Post Oak Road
Railroad Crossings in Norman
N
W
E
S

Robinson Street
Acres Street
Gray Street
Main Street
Eufaula Street
Duffy Street
Boyd Street
Brooks Street
Lindsey Street
Constitution Street
Cedar Lane Road
Post Oak Road
Quite Zone Target Area
N
W
E
S

Process to Create Quiet Zone

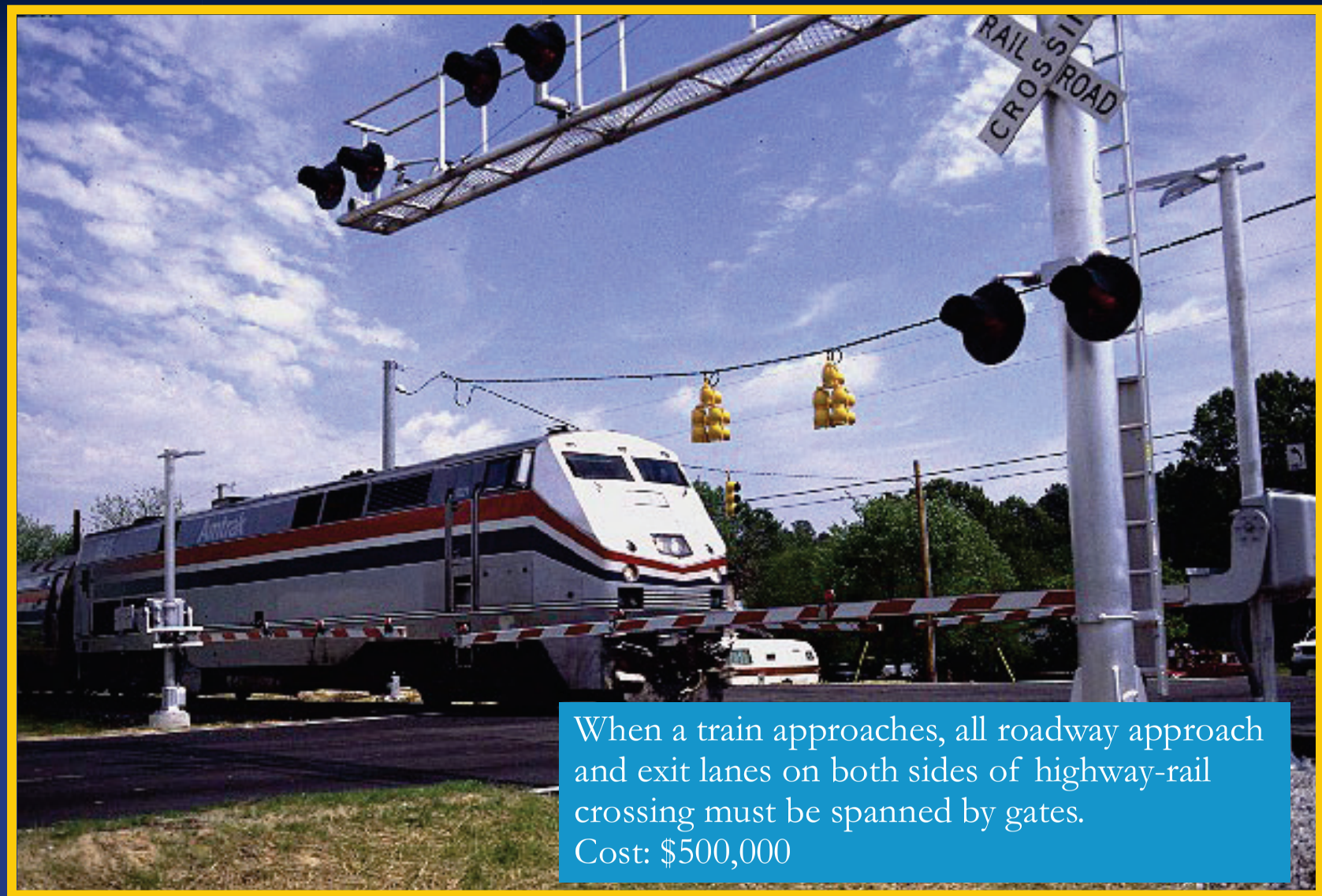
- Application through the FRA by Public Authority
- Each highway-rail grade crossing within Quiet Zone equipped with approved Supplemental Safety Measure or Wayside Horn
- Quiet Zone Risk Index (QZRI) less than Nationwide Significant Risk Threshold (NSRT) or the Risk Index With Horns (RIWH)
- Minimum length of quiet zone – ½ Mile



Quiet Zone Supplemental Safety Measures Alternatives

- Four-Quadrant Gate Systems
- One Way Street with Gates
- Gates with Medians or Channelization Devices
- Wayside Horns
- Permanent Closures

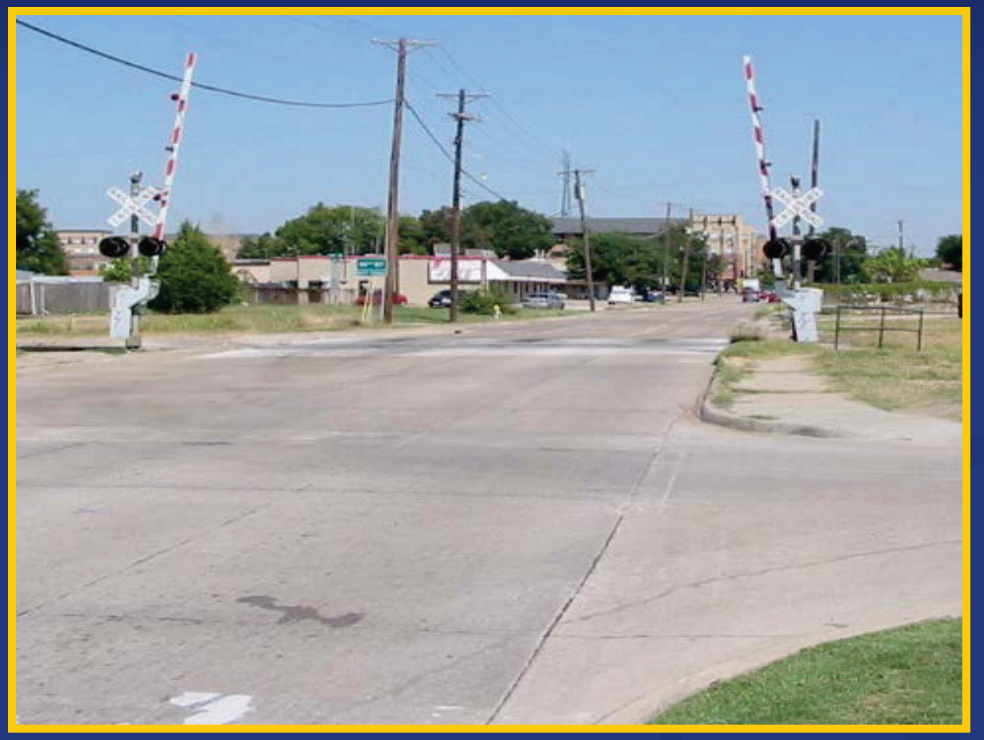
Four-Quadrant Gate



When a train approaches, all roadway approach and exit lanes on both sides of highway-rail crossing must be spanned by gates.
Cost: $500,000

One-Way Street with Gate

- Gates installed such that all approaching highway lanes to the public highway-rail grade crossing are completely blocked.
- Crossing must be equipped with Constant Warning Circuitry, Power Out Indicator, gates and flashing lights.



Medians or Channelization Devices

Must extend at least 100 feet from the gate arm, or if an intersection, at least 60 feet from gate arm and have a mountable medium

Cost: $45,000, $500 annual maintenance costs

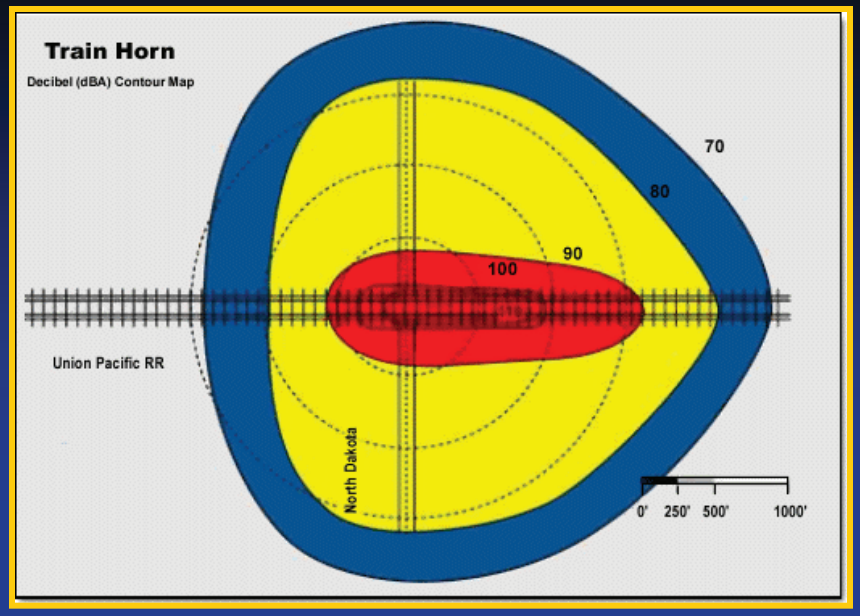
Already have at Duffy Street, Constitution Street (Partially) and planned for Cedar Lane Road

Wayside Horn

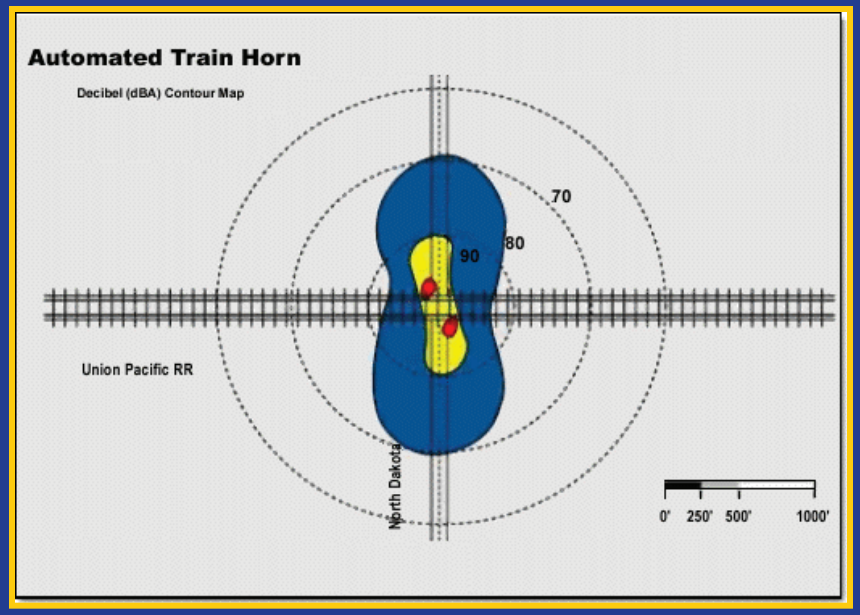
- A stationary horn system activated by the railroad-highway grade warning system, mounted at the crossing, rather than the locomotive, to deliver an audible warning to motorists and pedestrians.
- Simplest way to reduce train horn noise when a corridor is not eligible for a Quiet Zone.
- Sounds like a train horn – digitally recorded from actual locomotive
- Cycles through train whistle pattern until train reaches crossing.
- Cost: $100,000 plus $500-$1,000 annual maintenance fees.

Impact of Wayside Horn Reduces Noise

Sound Level (dBA)	Train Horn Area (acres)	Wayside Horn Area (acres)	Percent Reduction
>70	265	37	86%
>80	171	5	97%
>90	31	<1	98%



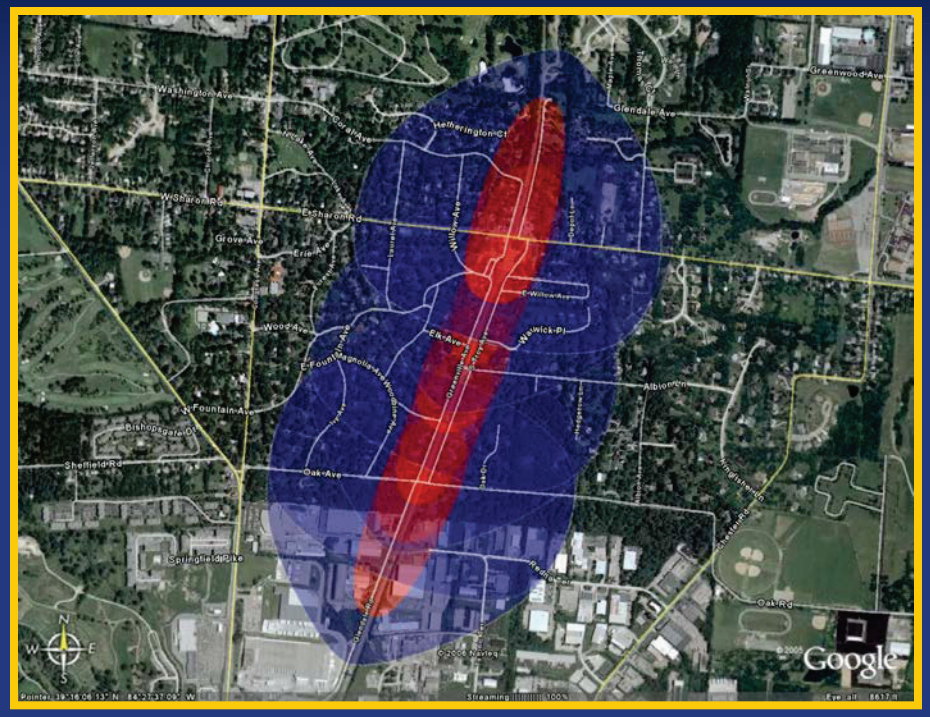
80 decibel contour footprint impact of locomotive horn.



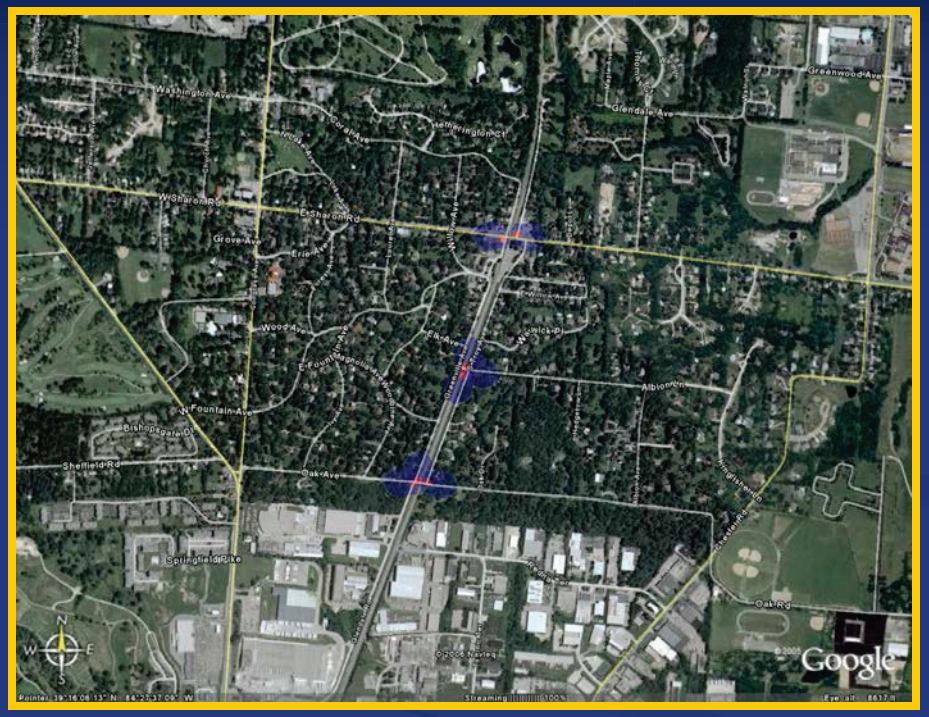
80 decibel contour footprint impact of wayside horn.

Railroad Train Indicator

Horn Sound Contour



Train Horn Sound Contour



Wayside Horn Sound Contour

Why should Norman consider doing this?

- Quality of life issues
- Economic impact on area
- Train Horns every 45 minutes, 24/7 year around
- Increasing train traffic

Who are the key players?

- City of Norman
- BNSF Railway Company
- Amtrak
- Oklahoma Department of Transportation
- Federal Railroad Administration

What are the requirements?

- Railroad - agreement
- FRA – Quiet Order Application
- State DOT - coordination
- Application process
- Time frame – 18 months

What are the costs?

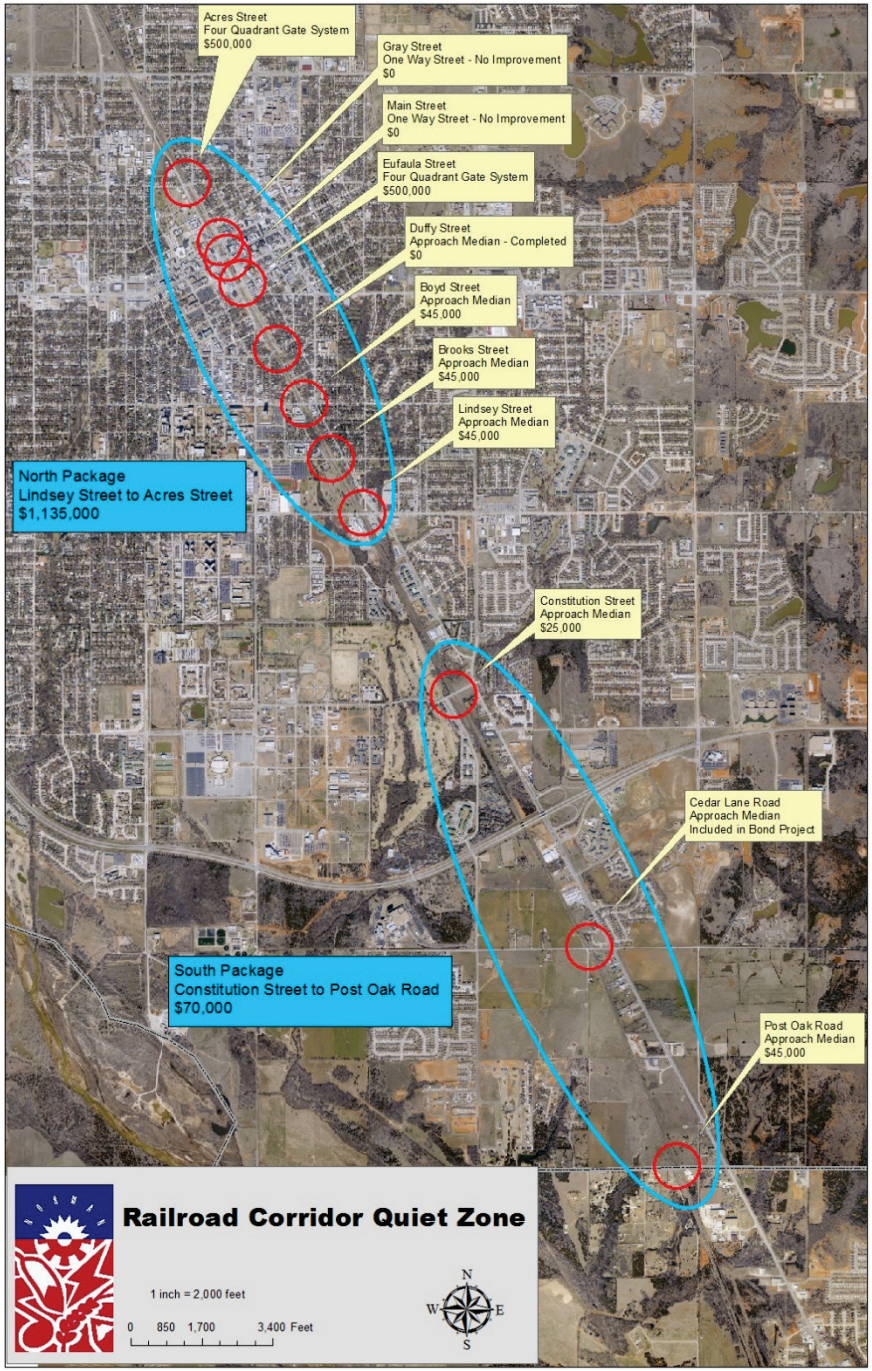
- Signal and crossing costs
- Street modification
- Utility impact
- Landscaping
- Long term maintenance costs

Who will pay for this?

- City of Norman

Supplemental Safety Measures and Cost

Crossing Location	Supplemental Safety Measure	Cost
Acres Street	Four Quadrant Gate System	$500,000
Gray Street	One-Way Street with Warning Lights and Gates (Existing)	$0
Main Street	One-Way Street with Warning Lights and Gates (Existing)	$0
Eufaula Street	Four Quadrant Gate System	$500,000
Duffy Street	Median with Warning Lights and Gates (Completed)	$0
Boyd Street	Median with Warning Lights and Gates	$45,000
Brooks Street	Median with Warning Lights and Gates	$45,000
Lindsey Street	Median with Warning Lights and Gates	$45,000
Constitution Street	Median with Warning Lights and Gates (Partial Median Completed)	$25,000
Cedar Lane Road	Median with Warning Lights and Gates (Included in Bond Project)	$0
Post Oak Road	Median with Warning Lights and Gates	$45,000
TOTAL COST		**$1,205,000**



Potential Phasing

- Two Phases
  - North Package (from Lindsey Street to Acres Street - $1,135,000)
  - South Package (from Post Oak Road to Constitution Street - $70,000)

Special Consideration

- Pedestrians
  - Legacy Trail - Pedestrian Safety
  - Trespassing problem
  - Multiple pedestrian fatalities over the last ten years
  - Requirement for Fence?
- Boyd Street Crossing
  - New development (driveways too close to crossing)
  - Potential Four Quadrant Gate System (additional $455,000 potentially)

What part does the public play in this?

- Public involvement plan
- Public meetings
- Newsletters, Newspapers, web site, etc.
- Public groups
- Develop support

What are the risks and liabilities?

- Changed conditions
- Traffic
- Pedestrians
- Unknown increase in liability

What is Next?

- Funding Commitment by City
- Meet with FRA to discuss eligibility
- Conduct diagnostic team inspection with BNSF and FRA to confirm appropriateness of proposed supplemental safety measures
- Begin process with FRA for Quiet Zone
- 18-24 month long process

QUESTIONS?