City Council Pre Session Transportation Discussion

February 20, 2018

YOU BELONG IN LONGMONT COLORADO

CITY OF LONGMONT COLORADO

What Transportation Modes did you use Today??

Purpose

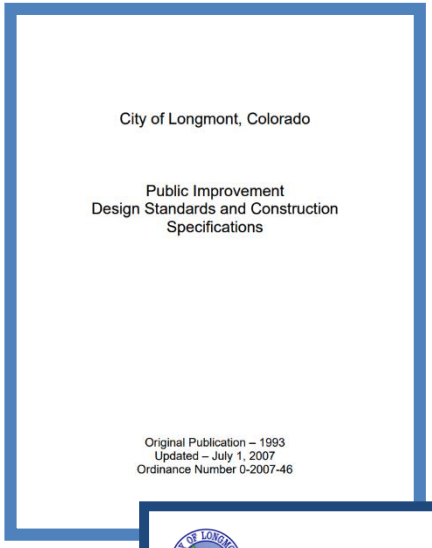
Develop a better understanding of transportation issues today and in the future, including how we address them

Agenda

- Introductions
- Staff Presentation
- Questions from Council

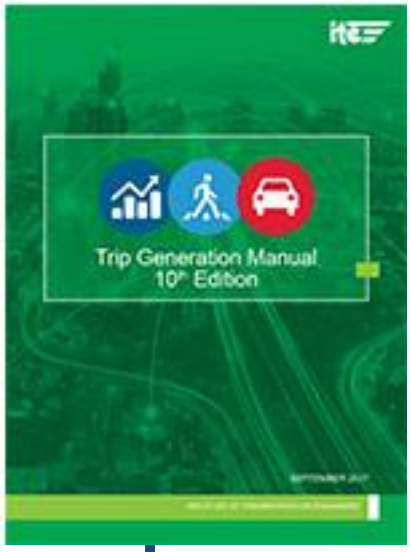
Traffic Impact Studies

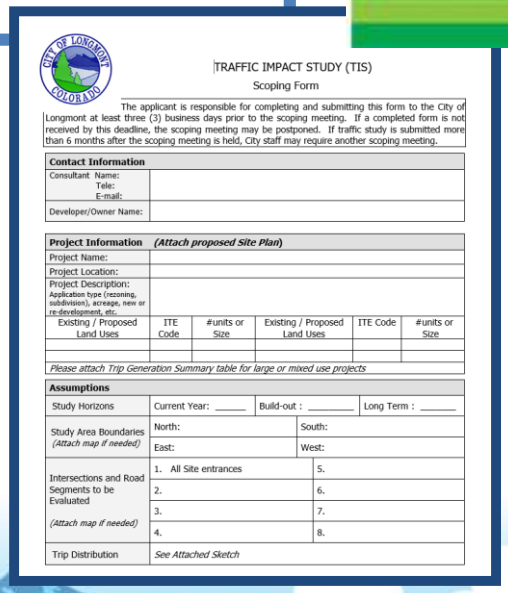
- Pre Application
  - National-based standards (ITE)
- Scope of study
- Design Standards
- Submittal & Review through DRC


City of Longmont, Colorado

Public Improvement
Design Standards and Construction
Specifications

Original Publication – 1993
Updated – July 1, 2007
Ordinance Number 0-2007-46




TRAFFIC IMPACT STUDY (TIS)
Scoping Form

The applicant is responsible for completing and submitting this form to the City of Longmont at least three (3) business days prior to the scoping meeting. If a completed form is not received by this deadline, the scoping meeting may be postponed. If traffic study is submitted more than 6 months after the scoping meeting is held, City staff may require another scoping meeting.

Contact Information	
Consultant Name: Tele: E-mail:	
Developer/Owner Name:	

Project Information (Attach proposed Site Plan)					
Project Name:					
Project Location:					
Project Description: Application type (rezoning, subdivision), acreage, new or re-development, etc.					
Existing / Proposed Land Uses	ITE Code	#units or Size	Existing / Proposed Land Uses	ITE Code	#units or Size

Please attach Trip Generation Summary table for large or mixed use projects

Assumptions			
Study Horizons	Current Year: _____	Build-out : _____	Long Term : _____
Study Area Boundaries (Attach map if needed)	North:	South:	
	East:	West:	
Intersections and Road Segments to be Evaluated (Attach map if needed)	1. All Site entrances	5.	
	2.	6.	
	3.	7.	
	4.	8.	
Trip Distribution	*See Attached Sketch*		

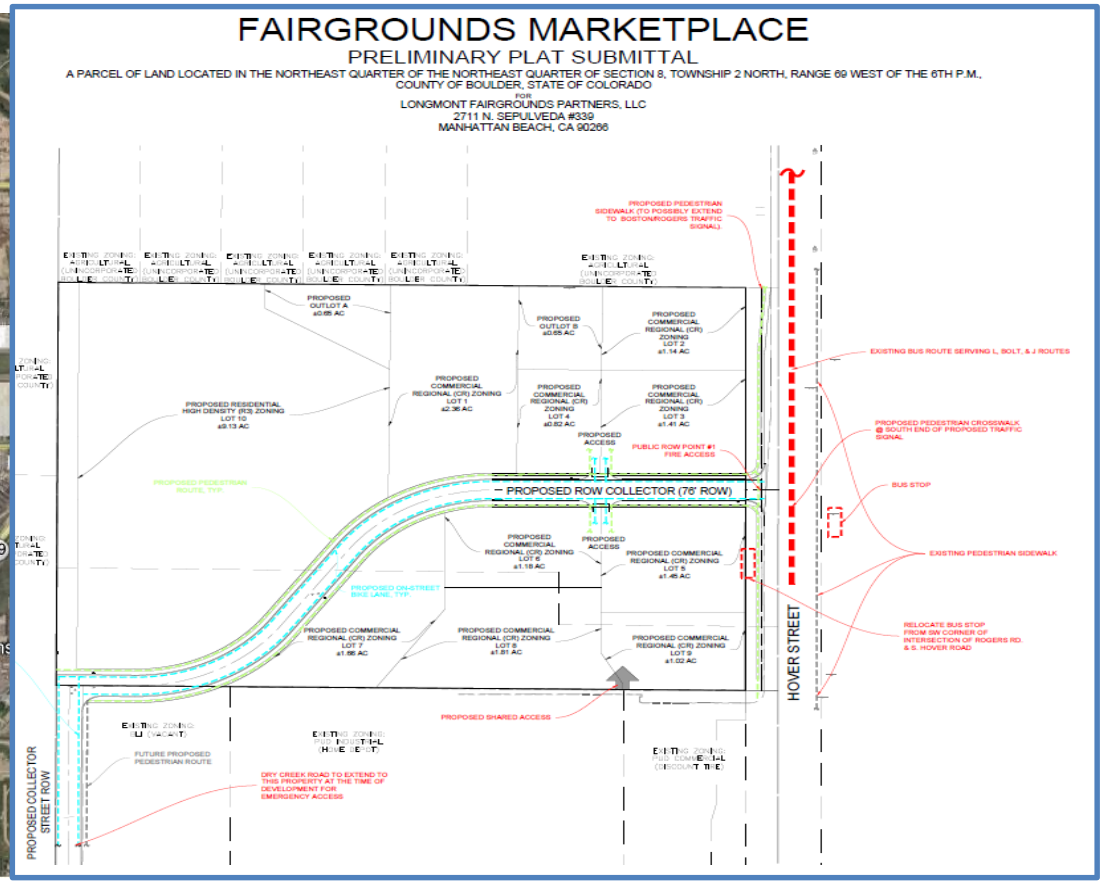
Outcomes of Traffic Studies

- Identify site specific needs
  - Turn lanes
  - Access locations
  - Local road network

- Identify short and long term impacts
  - short term includes site specific
  - Long term included planned projects

Example


Rogers Rd
Boston Ave
Fairgrounds
Affolter St
Nelson Rd
Korte Pl
Ceran Ave
Bent Way
119
Industrial Cir
Trade Centre Ave
Twin Peaks Mall
Sunset Pl
Hover Rd


FAIRGROUNDS MARKETPLACE
PRELIMINARY PLAT SUBMITTAL
A PARCEL OF LAND LOCATED IN THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF BOULDER, STATE OF COLORADO
FOR
LONGMONT FAIRGROUNDS PARTNERS, LLC
2711 N. SEPULVEDA #339
MANHATTAN BEACH, CA 90266
PROPOSED ROW COLLECTOR (76' ROW)
HOVER STREET
PROPOSED COLLECTOR STREET ROW
PROPOSED SHARED ACCESS
EXISTING BUS ROUTE SERVING L, BOLT, & J ROUTES
PROPOSED PEDESTRIAN CROSSWALK @ SOUTH END OF PROPOSED TRAFFIC SIGNAL
BUS STOP
EXISTING PEDESTRIAN SIDEWALK
RELOCATE BUS STOP FROM SW CORNER OF INTERSECTION OF ROGERS RD. & S. HOVER ROAD
PROPOSED ON-STREET BIKE LANE, TYP.
PROPOSED PEDESTRIAN ROUTE, TYP.
PUBLIC ROW POINT #1 FIRE ACCESS
DRY CREEK ROAD TO EXTEND TO THIS PROPERTY AT THE TIME OF DEVELOPMENT FOR EMERGENCY ACCESS
FUTURE PROPOSED PEDESTRIAN ROUTE

Traffic Benchmark

- Found in Longmont Municipal Code 15.05.150
- Shall not fall below LOS D or exceed V/C 1.0
- Overall intersection or movement greater than 5%
- Requirement may be modified or waived if mitigated to maximum extent feasible
- Waiver if impacts are minimal & insignificant

Magnitude of Impacts

	2015 PM condition at Nelson & Hover	Nelson & Hover with Fairgrounds	Net increase on PM peak Hour Volume
Total entering vehicles	5,205	5,463	5%
Overall Intersection LOS	D	D	

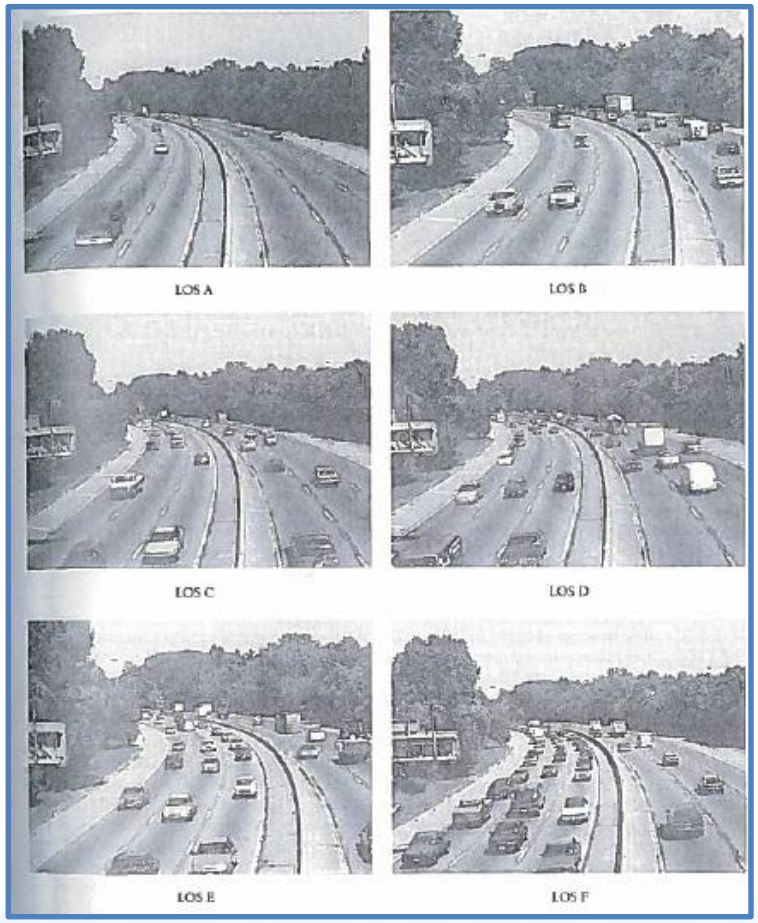
Benchmark History at Nelson & Hover

Average P.M. Peak Hour Level of Service and v/c Ratio for Hover/Nelson Intersection						
	2003	2004	2007	2013	2014	2015
Entering Volume (vehicles per hour)	5,365	5,495	5,290	4,635	5,110	5,205
Overall Level of Service (LOS)	D	D	C	D	E	D
EB Left Turn % of Traffic	8%	9%	8%	9%	9%	9%
EB Left Turn LOS	F	F	E	F	F	E
EB Left Turn v/c	1.1	1.2	0.9	1.0	1.1	1.0
Intersection Crash Rate (unweighted)	2.1	2.0	2.0	1.7	1.6	1.8

- Level of Service -- A through F rating based on delay

Peak Hour LOS at Nelson/Hover & Graphic Representation of LOS

Peak Hour	LOS
AM (7:00 - 8:00)	C
PM (5:00 - 6:00)	E



Impacts to Level of Service

- Geometry - capacity
- Volumes
- Signal spacing
- Signal timing
- Signal density
- Other factors – pedestrians, lane utilization

Safety

- Evaluate all crashes annually
- Produce annual high crash report
- How is report used

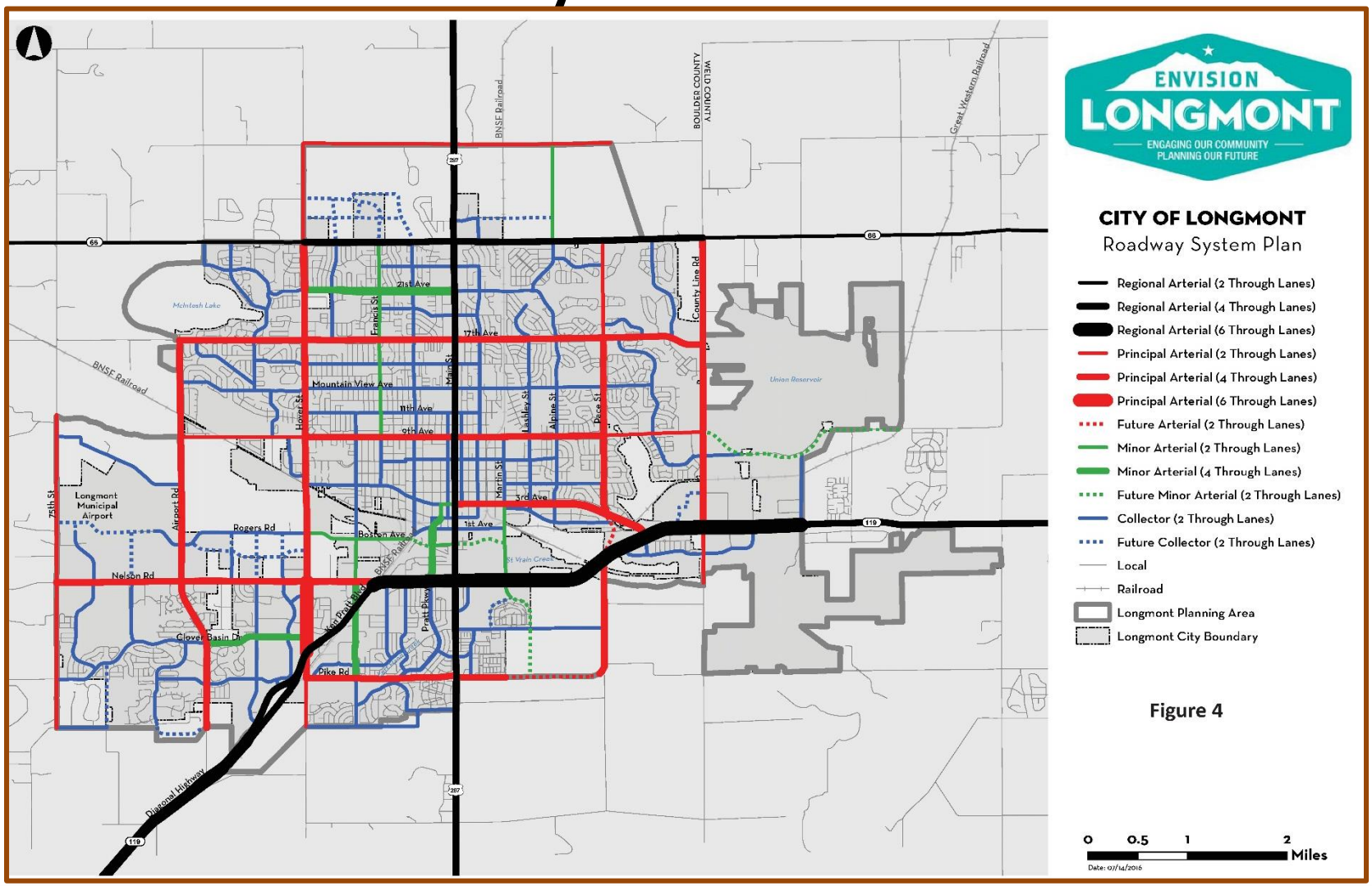
Colorado Cities								
City	Population	Fatal Crashes, 2012 - 2016						Fatal Crash Rate (Crashes per 100,000 Population)
		2012	2013	2014	2015	2016	Avg.	
Lakewood	149,643	9	6	13	15	13	11.2	7.5
Greeley	98,596	7	5	8	5	7	6.4	6.5
Pueblo	108,423	11	6	8	4	5	6.8	6.3
Arvada	113,574	3	4	4	6	10	5.4	4.8
Thornton	130,307	5	4	4	3	11	5.4	4.1
Longmont	90,237	2	2	4	5	2	3.0	3.3
Fort Collins	158,300	3	3	5	4	8	4.6	2.9
Boulder	105,112	3	0	0	1	6	2.0	1.9
Total Colo Cities	954,192	43	30	46	43	56	43.6	4.6

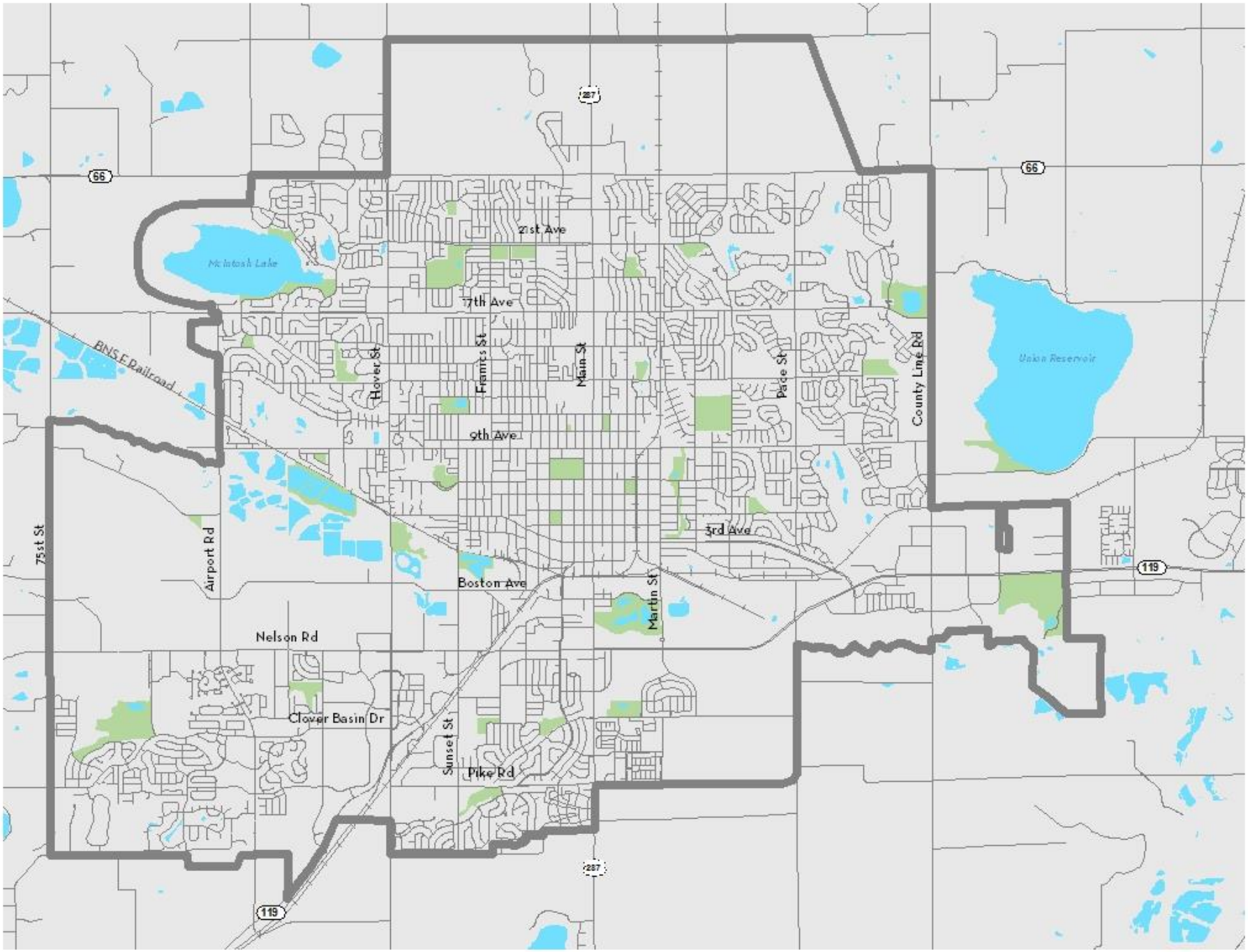
Safety – Comparison to National Peer Cities

Peer Cities								
City	Population	Fatal Crashes, 2011 - 2015						Fatal Crash Rate (Crashes per 100,000 Population)
		2011	2012	2013	2014	2015	Avg.	
Boca Raton, FL	91,332	3	12	12	10	12	9.8	10.7
Springfield, MO	165,378	10	19	13	14	21	15.4	9.4
Broken Arrow, OK	104,726	9	11	7	3	8	7.6	7.3
Norman, OK	118,040	5	8	8	7	9	7.4	6.3
San Angelo, TX	98,975	3	4	6	7	8	5.6	5.7
Coral Springs, FL	127,952	5	5	10	7	8	7.0	5.5
Richardson, TX	108,617	2	5	3	7	8	5.0	4.6
Longmont, CO	90,237	4	2	2	4	5	3.4	3.8
Bellevue, WA	136,426	4	5	4	3	6	4.4	3.2
Overland Park, KS	184,525	6	8	4	3	7	5.6	3.0
Olathe, KS	133,062	1	4	8	2	5	4.0	3.0
Cedar Rapids, IA	129,195	2	7	2	5	1	3.4	2.6
Fort Collins	158,300	4	3	3	5	4	3.8	2.4
Naperville, IL	146,128	1	2	1	3	0	1.4	1.0
Total Peer Cities	1,792,893	59	95	83	80	102	83.8	4.7
Note: 2015 is most current national data available								

Crash data for other communities outside Colorado (peer cities) was obtained from the National Highway Traffic Safety Administration's Fatal Accident Reporting System which contains data through 2015. Colorado crash data is from CDOT. Population estimates are for 2016 and are from the U.S. Census

Roadway Classifications

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17th Ave
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Hover St
Frames St
Main St
Pace St
County Line Rd
Union Reservoir
9th Ave
75st St
Airport Rd
3rd Ave
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Boston Ave
Martin St
Nelson Rd
Clover Basin Dr
Sunset St
Pike Rd
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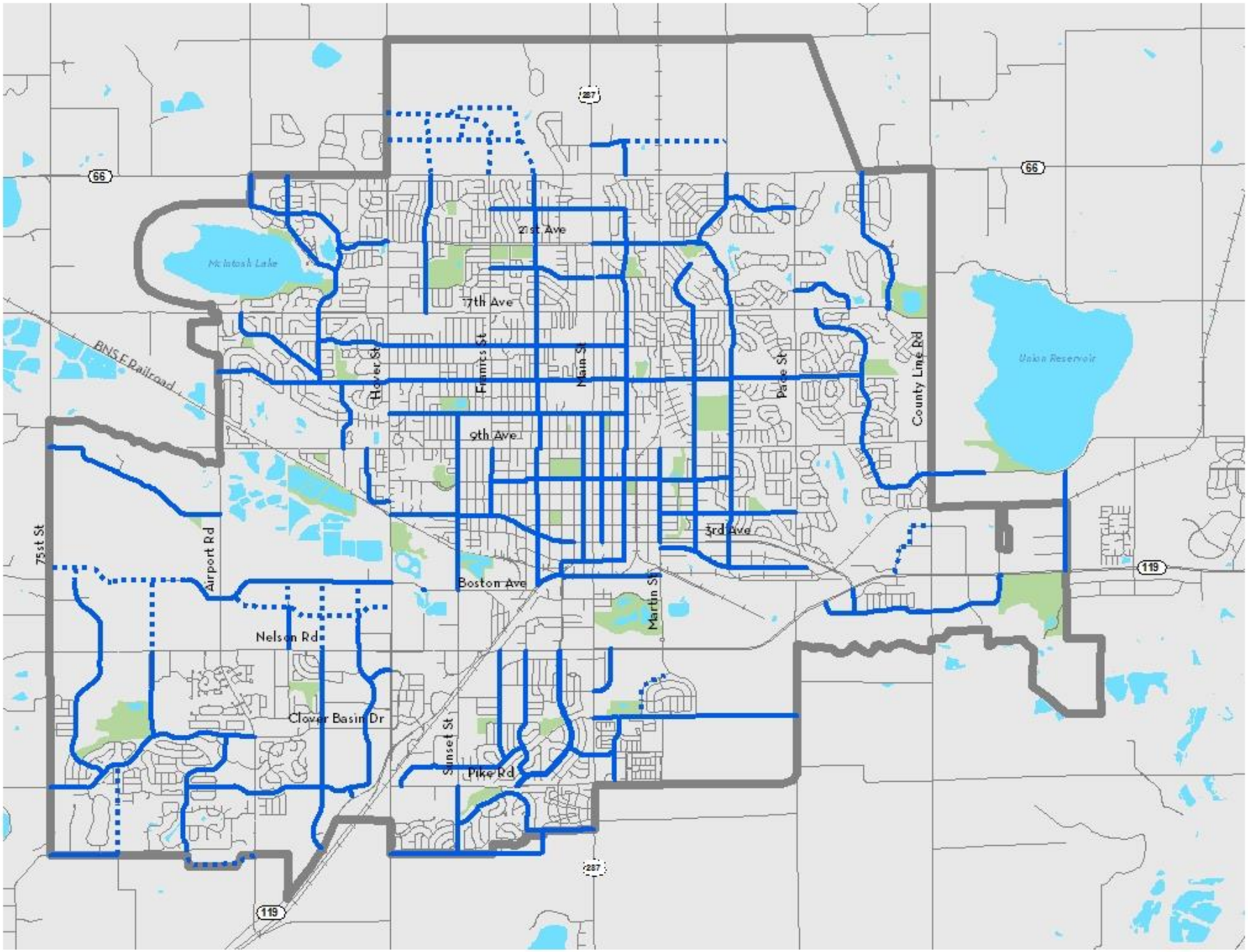
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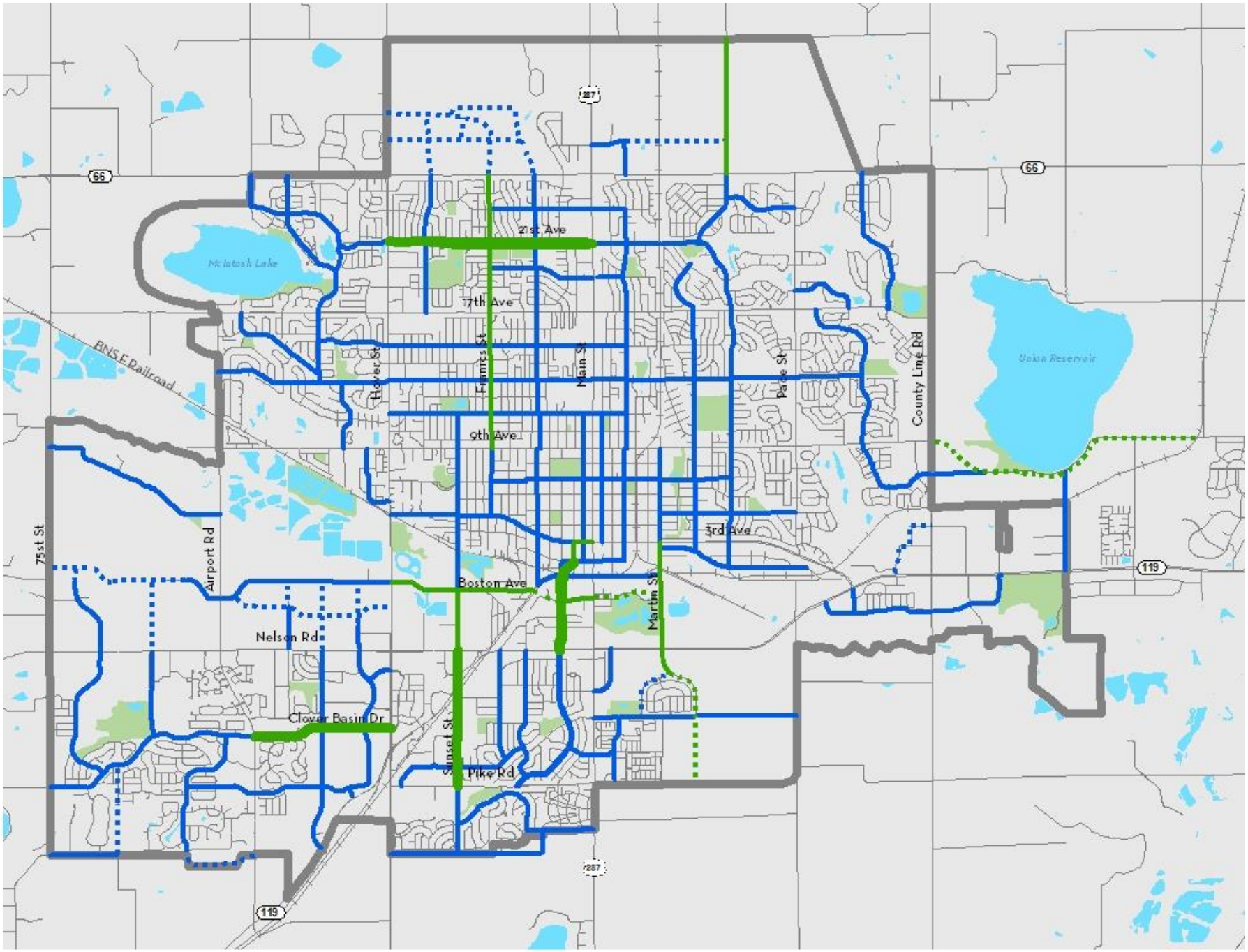
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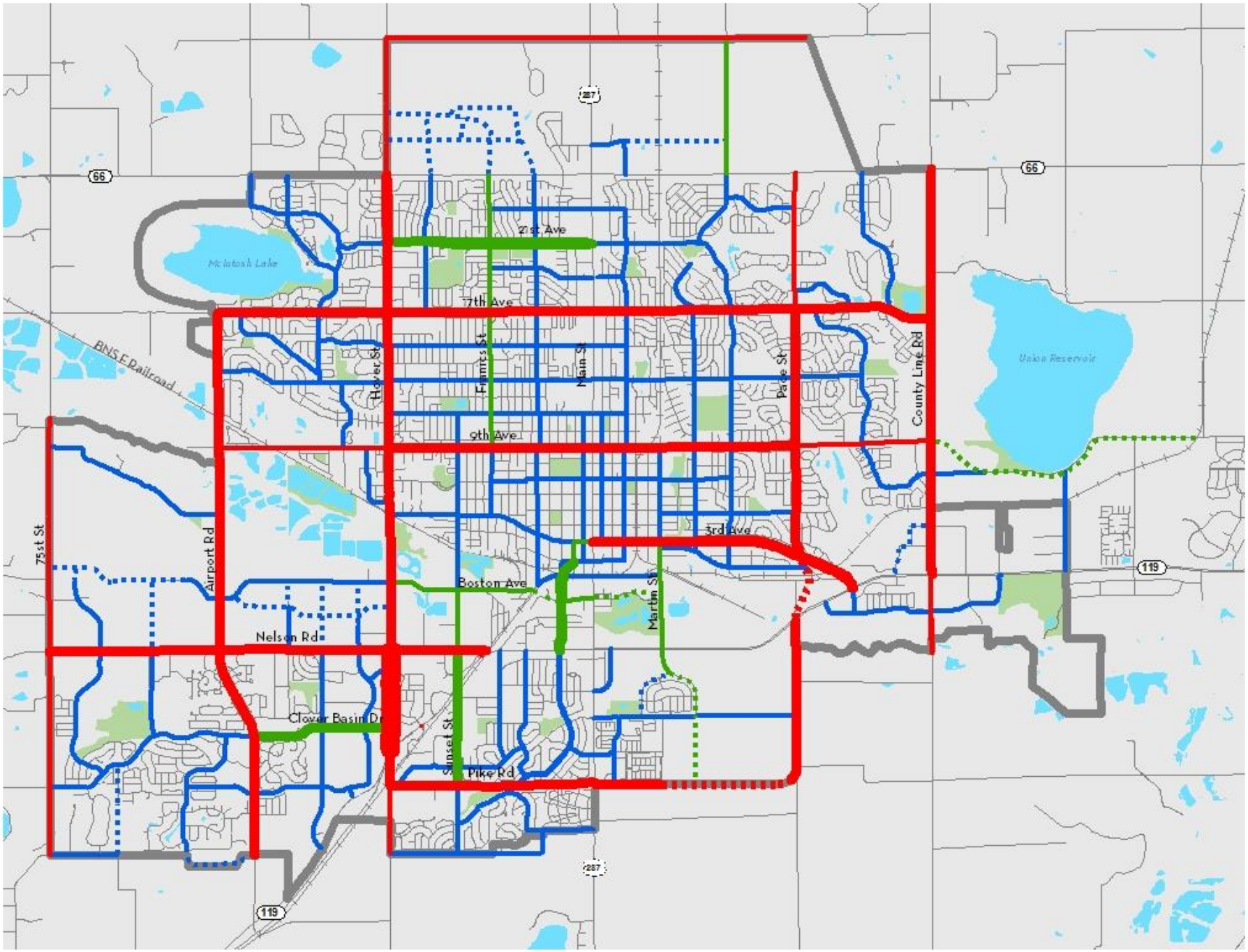
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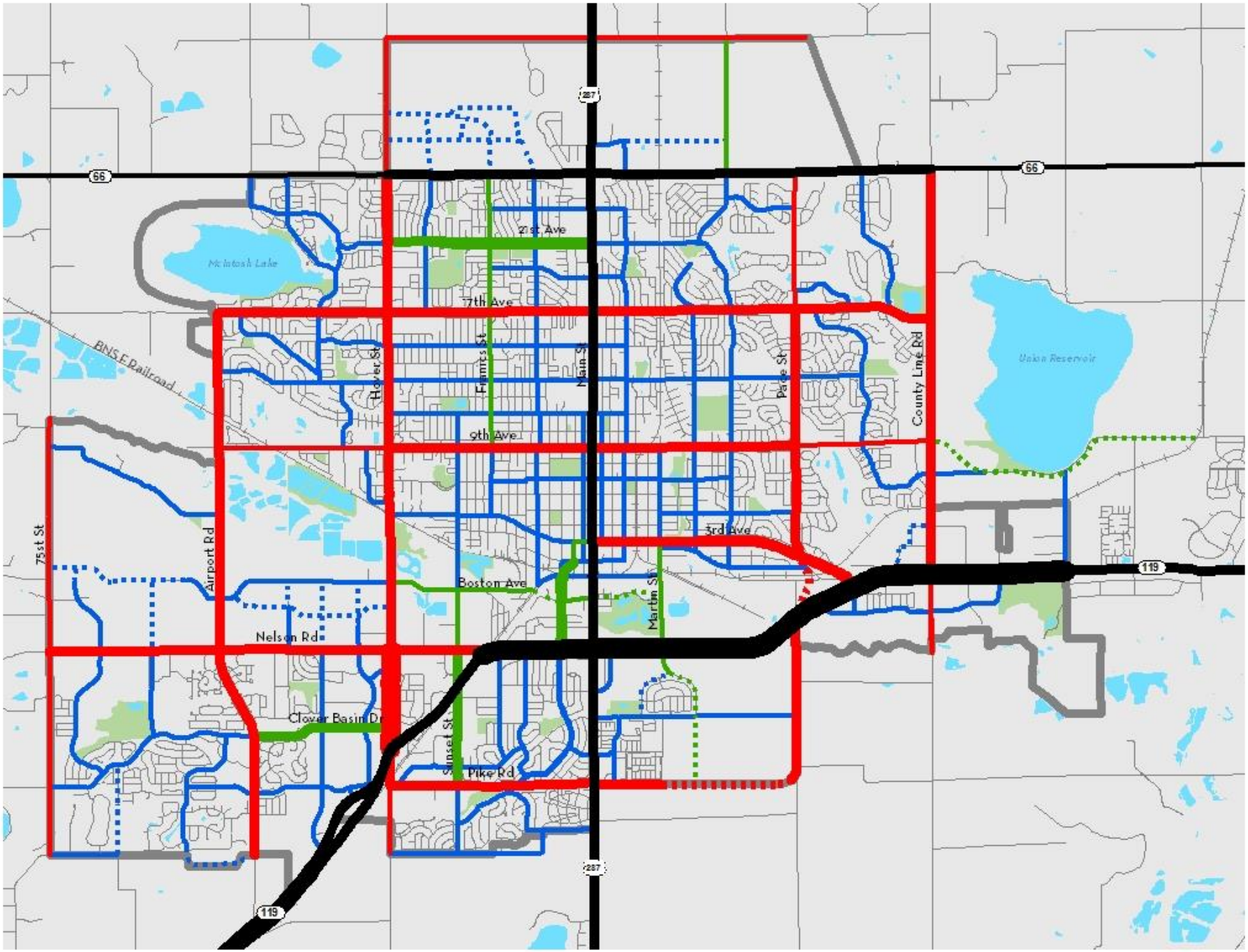
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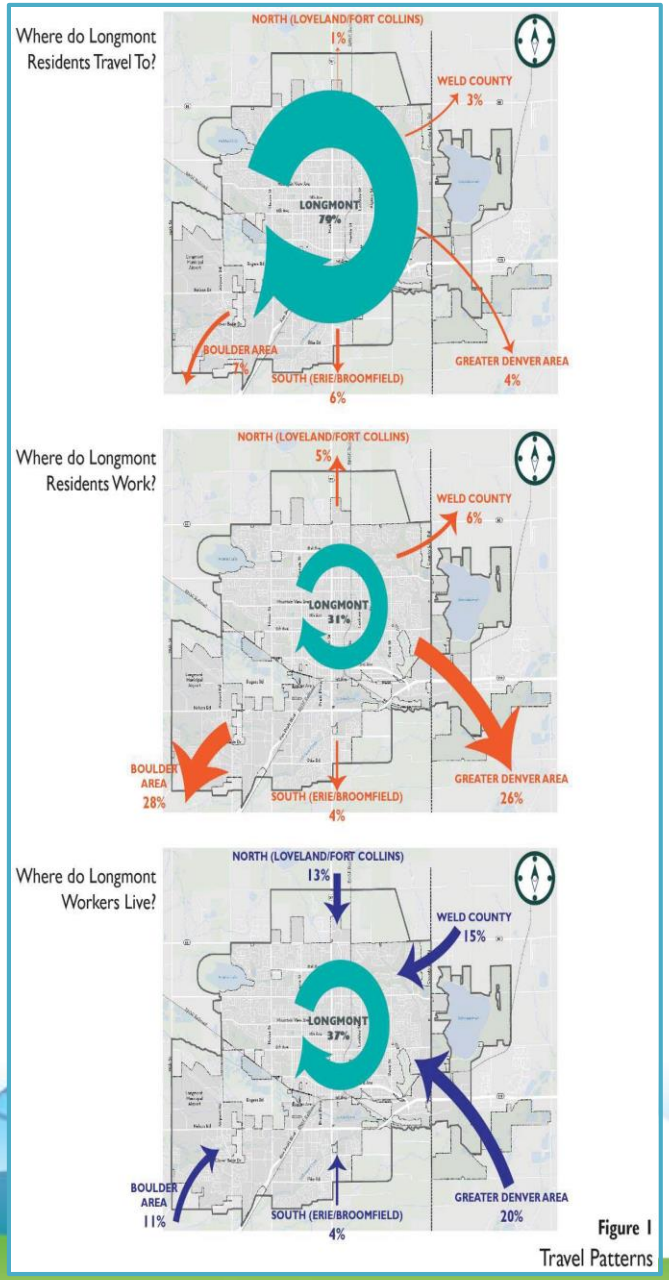
Regional Influence

Almost 80% of our daily trips are within Longmont

Only about 1/3 of our residents work here—most head south for work

Most workers from outside the City come from the north and east



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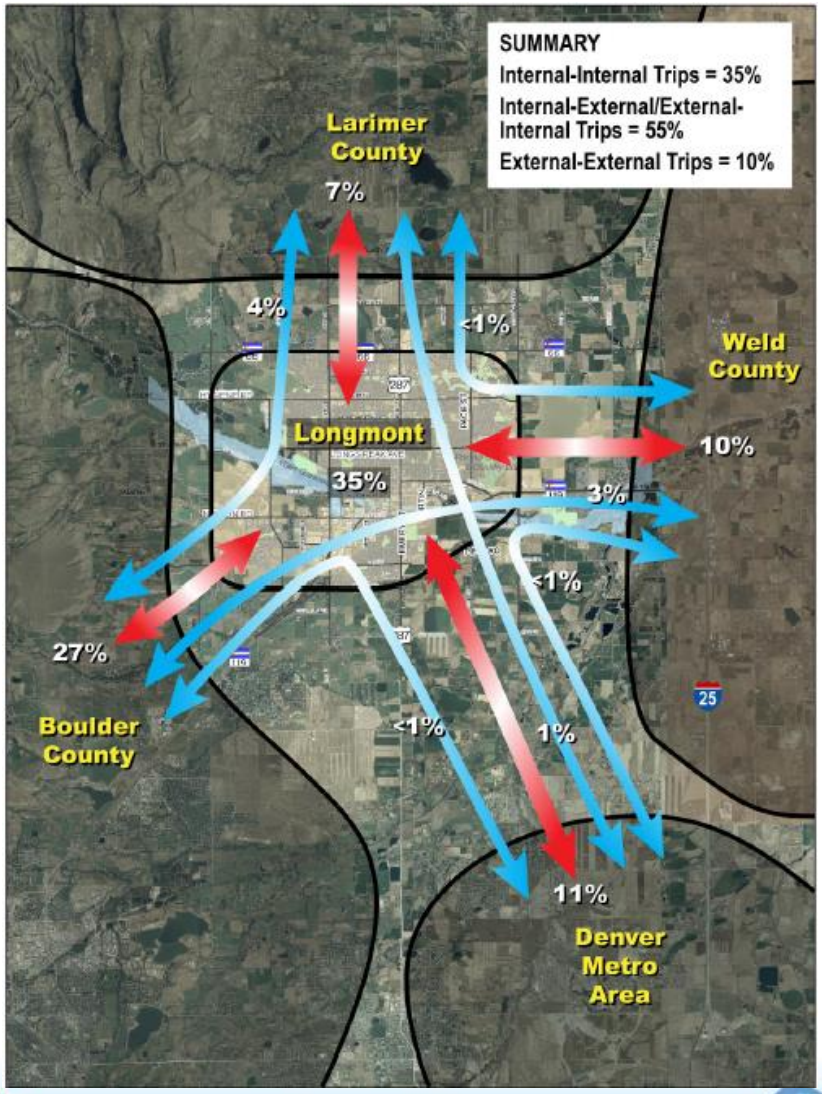
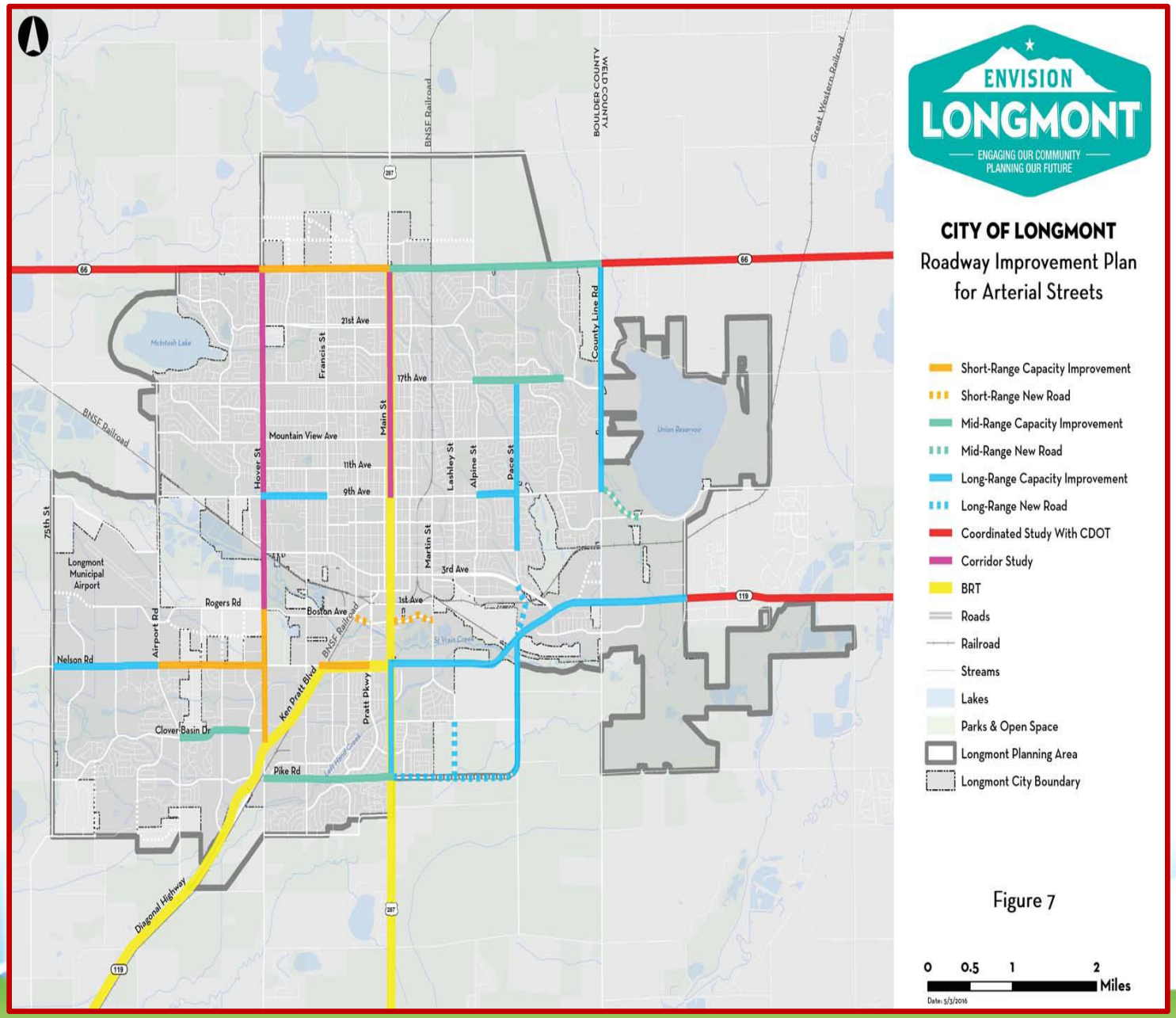
CITY OF LONGMONT COLORADO

Regional Influence



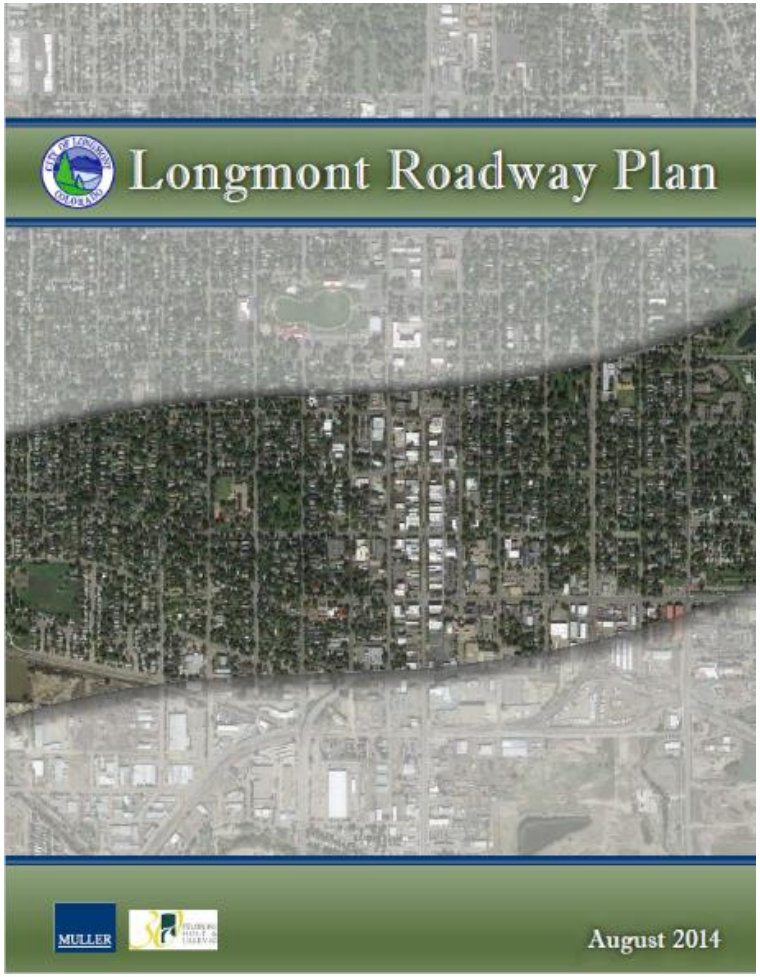
Only 10% of all trips do <u>not</u> stop in Longmont

City Planning Documents



Longmont Roadway Plan

- Technical analysis of City's street system
- Identification of future roadway needs
- Adopted by Council 2014
- Uses – Planning, CIP, TCIF
- Used in Envision Longmont



Longmont Roadway Plan

Table 3-1: Recommended First Priority Corridor Projects

Corridor	Limits	Improvement	Cost Estimate
Ken Pratt Boulevard	Nelson Road to Pratt Parkway	Widen from 4 lanes to 6 lanes	$3.5 Million
Hover Street	SH 119 to Boston Avenue	Widen from 4 lanes to 6 lanes	$1.4 Million*
Nelson Road	Grandview Meadows Drive to Dry Creek Drive	Widen from 2 lanes to 4 lanes	$5.9 Million

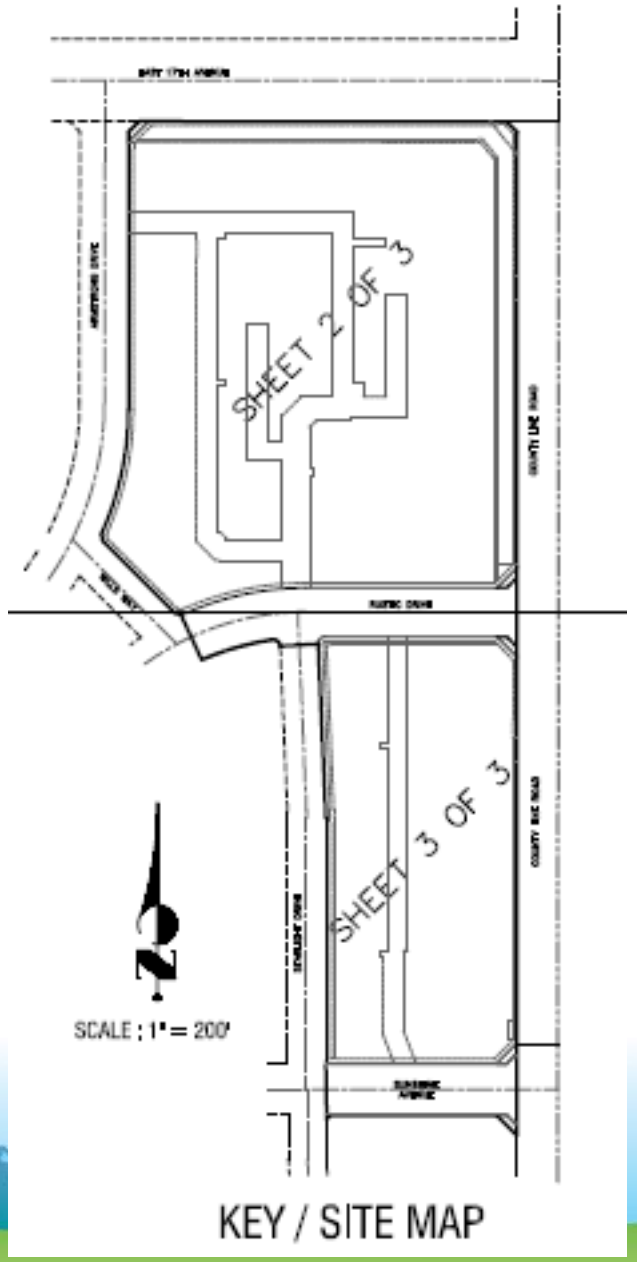
* Cost does not include 3rd northbound lane to be added by Mall redevelopment

Table 3-2: Recommended First Priority Intersection Projects

Intersection	Improvement	Cost Estimate (2014)
SH 119 (Diagonal Highway) / Hover Street	EB, NB and SB Dual Left Turn Lanes 3rd NB through lane	$6.9 Million
SH 66 (Ute Highway) / Pace Street	WB and NB Dual Left Turn Lanes	$3.0 Million
SH 119 (Ken Pratt Boulevard) / Zlaten Drive	WB Dual Left Turn Lane and Right Turn Lane EB and WB 3rd Through Lane	$2.4 Million
SH 119 / County Line Road	EB and WB 3rd Through Lane	$3.9 Million
Hover Street / Nelson Road	SB Dual Left Turn Lane NB and SB 3rd Through Lane	$6.9 Million

Funding Transportation Infrastructure - Development

- Development Responsibility
  - All Right of Way
  - Local Streets and sidewalks – 100%
  - Collector Streets and sidewalks – 100%
  - Site specific improvements



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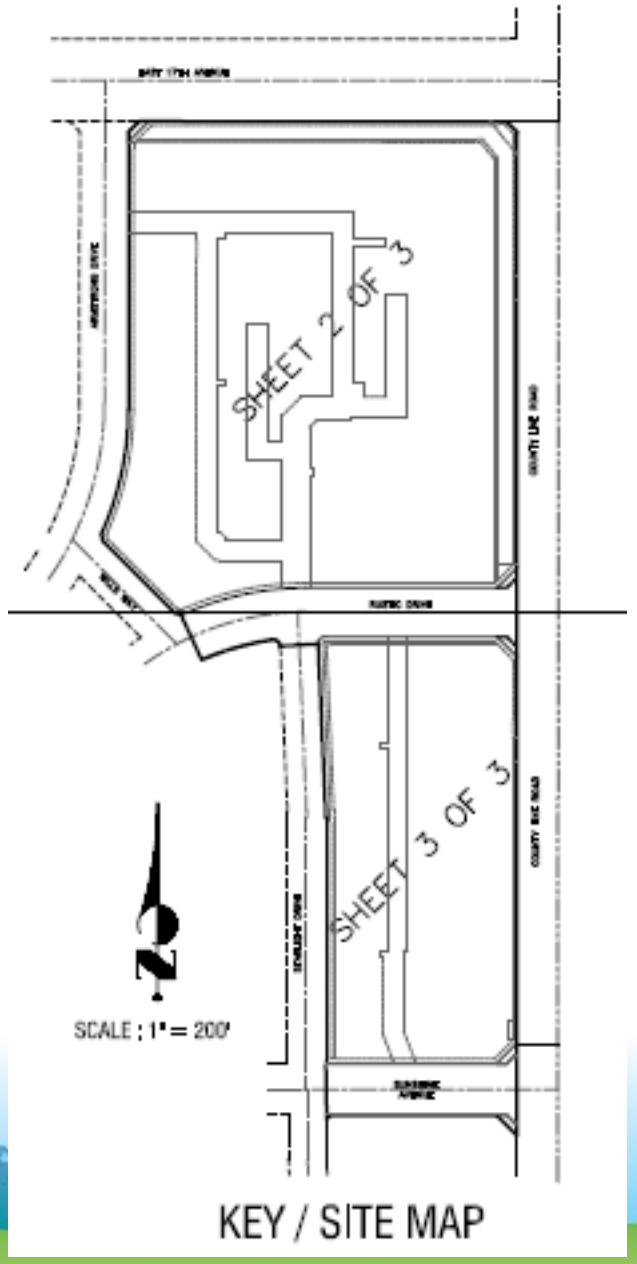
Funding Transportation Infrastructure - Development

- Developer Responsibility
  - Arterial Streets and sidewalks
    - Collector Share - $119.23 per ft
    - 8’ arterial sidewalk and landscaping – 100%
    - Arterial Oversizing - TCIF



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Funding Transportation Infrastructure - Development

- Community Investment Fee for Arterial Streets - TCIF

Residential Development

Size of Dwelling Unit	FEE
800 or less	$989.69
801 to 1,600	$1,434.41
1,601 to 2,400	$1,694.14
2,401 to 3,200	$1,877.98
3,201 to 4,000	$2,020.14
4,000 or more	$2,137.75

Non - Residential Development

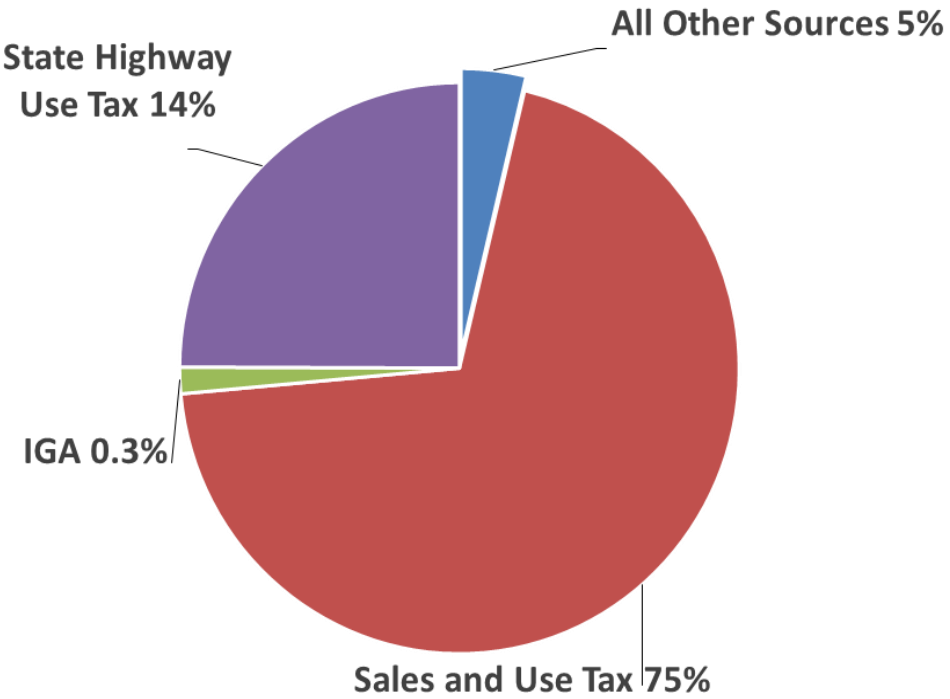
Type of Unit	Fee per square foot
Commercial	$2.75
Office and Other Services	$1.19
Industrial	$0.37
Institutional	$1.09

Funding Transportation Infrastructure – City Regional

- Regional Component
  - CDOT - State Funding
  - DRCOG -Federal Funding

- KP Blvd and Main Intersection
- KP Blvd/SH 119 Extension – Main to 3rd
- Hover and 119 Underpasses

Funding Transportation Infrastructure - City



Street Improvement Fund

- ¾ Cent Street Fund Sales and Use Tax
  - 1986 – 6 renewals
  - Maintenance – 39%
  - Rehabilitation – 31%
  - Capital – 21%
  - TSM – 9%

Changes – "Street" to "Transportation"

Dropped specific percentages for Code

10 Year Extension in 2014

Questions and Answers

- Did we accomplish in answering questions you had?
- Anything else you want to know or want additional reporting on?