NOTICE OF MEETING OF THE CARSON AREA METROPOLITAN PLANNING ORGANIZATION (CAMPO)

Day: Wednesday
Date: July 13, 2016
Time: Beginning at 4:30 pm
Location: Community Center, Sierra Room, 851 East William Street, Carson City, Nevada

AGENDA

AGENDA NOTES: The Carson Area Metropolitan Planning Organization (CAMPO) is pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the meeting. If special arrangements for the meeting are necessary, please notify Carson Area Metropolitan Planning Organization staff in writing at 3505 Butti Way, Carson City, Nevada, 89701, or Comments@CarsonAreaMPO.com, or call Patrick Pittenger at (775) 887-2355 as soon as possible (requests are required prior to 12:00 p.m. on July 11, 2016).

For more information or for copies of the supporting material regarding any of the items listed on the agenda, please contact Patrick Pittenger, Transportation Manager, at (775) 887-2355. Additionally, the agenda with all supporting material is posted on the CAMPO website at www.carson.org/agendas, or is available upon request at 3505 Butti Way, Carson City, Nevada, 89701.

AGENDA MANAGEMENT NOTICE: The Chair may take items on the agenda out of order; combine two or more agenda items for consideration; and/or remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

DISCLOSURES: Any member of the CAMPO Board may inform the Chair of his or her intent to make a disclosure of a conflict of interest on any item appearing on the agenda or on any matter relating to the CAMPO's official business. Such disclosures may also be made at such time the specific agenda item is introduced.

1. ROLL CALL AND DETERMINATION OF A QUORUM

2. PUBLIC COMMENT:

Members of the public who wish to address the CAMPO Board may approach the podium and speak on any matter relevant to or within the authority of CAMPO. Comments are limited to three minutes per person per topic. If your item requires extended discussion, please request the Chair to calendar the matter for a future CAMPO meeting. No action may be taken upon a matter raised under this item of the agenda until the matter itself has been specifically included on an Agenda as an item upon which action may be taken.

3. APPROVAL OF MINUTES:

3.A **(For Possible Action)** June 8, 2016 Draft Minutes

4. PUBLIC MEETING ITEM(S):

4.A (For Possible Action) To accept the proposed FY17 Nevada Department of Transportation (NDOT) work program.

Staff Summary: NDOT staff will present their FY17 Work Program as it relates to CAMPO and will be available to answer any potential questions.

4.B (For Possible Action) To approve the proposed Disadvantaged Business Enterprise (DBE) goal and goal-setting methodology for Federal Fiscal Years 2017-19 (October 1, 2016 – September 30, 2019); and direct staff to submit the goal to the Federal Transit Administration (FTA) for review and approval by the August 1, 2016 deadline.

Staff Summary: In compliance with 49 C.F.R. 26, staff has developed a DBE goal for the next three-year Federal Fiscal Year term. The methodology used, which included consultation with regional stakeholders and a refining of the base figure, resulted in a proposed goal of 0.13% for the period October 1, 2016 – September 30, 2019. Comments received during the consultation process supported this proposed goal.

4.C (Information only) Transportation Alternative Program (TAP) Call for Projects for FY16-FY18.

Staff Summary: To provide information about the Call for Projects for NDOT'S Transportation Alternative Program. Grant applications are due to NDOT July 8, 2016.

4.D (For Possible Action) To approve Contract 1617-027, for a South Carson Street Complete Streets Study, to Kimley-Horn for a not to exceed amount of $75,000, to be funded from the CAMPO/Unified Planning Work Program (UPWP) Account in the CAMPO Fund. This is a professional services contract and therefore not suitable for public bidding pursuant to NRS 332.115 (1) (b).

Staff Summary: As part of CAMPO's Unified Planning Work Program, staff is responsible for completing a South Carson Street Corridor Study, due to the significant changes in traffic patterns and volumes anticipated with the opening of the Carson City freeway extension. Associated costs are reimbursable at a rate of 95%.

4.E (Information only) Informational presentation on the draft 2040 Regional Transportation Plan (RTP).

Staff Summary: The Regional Transportation Plan is a long-term planning document, intended to analyze the regional transportation network and to identify current and future needs to maintain a safe, efficient, and sustainable transportation system. The Carson Area Metropolitan Planning Organization (CAMPO), who represents Carson City, northern Douglas County, and western Lyon County, has developed this plan.

5. INTERNAL COMMUNICATIONS AND ADMINISTRATIVE MATTERS (Non-Action Items):

5.A Future Agenda Items

6. BOARD COMMENTS (Information only):

Status reports and comments from the members of the CAMPO Board.

7. PUBLIC COMMENT:

Members of the public who wish to address the CAMPO Board may approach the podium and speak on any matter relevant to or within the authority of CAMPO. Comments are limited to three minutes per person per topic. If your item requires extended discussion, please request the Chair to calendar the matter for a future CAMPO meeting. No action may be taken upon a matter raised under this item of the agenda until the matter itself has been specifically included on an Agenda as an item upon which action may be taken.

8. ADJOURNMENT: For Possible Action

The next meeting is tentatively scheduled for 4:30 p.m., Wednesday, August 10, 2016, at the Sierra Room - Community Center, 851 East William Street.

This agenda has been posted at the following locations on Thursday, July 7, 2016, before 5:00 p.m.:
City Hall, 201 North Carson Street
Carson City Library, 900 North Roop Street
Community Center, Sierra Room, 851 East William Street
Carson City Public Works, 3505 Butti Way
Carson City Planning Division, 108 E. Proctor Street
Douglas County Executive Offices, 1594 Esmeralda Avenue, Minden
Lyon County Manager's Office, 27 South Main Street, Yerington
Nevada Department of Transportation, 1263 S. Stewart Street, Carson City
City Website: www.carson.org/agendas
State Website: https://notice.nv.gov

A regular meeting of the Carson Area Metropolitan Planning Organization was scheduled for 4:30 p.m. on Wednesday, June 8, 2016, in the Community Center Sierra Room, 851 East William Street, Carson City, Nevada.

PRESENT: Chairperson Ray Fierro
Member Brad Bonkowski
Member Robert Crowell
Member Mark Kimbrough
Member Jack Zenteno
Ex-Officio Member Sondra Rosenberg

STAFF: Patrick Pittenger, Transportation Manager
Dirk Goering, Senior Transportation Planner
Hailey Lang, Transportation Planner
Graham Dollarhide, Transit Coordinator
Dan Yu, Deputy District Attorney
Tamar Warren, Deputy Clerk

NOTE: A recording of these proceedings, the CAMPO's agenda materials, and any written comments or documentation provided to the Clerk, during the meeting, are part of the public record. These materials are available for review, in the Recording Secretaries Division of the Carson City Clerk's Office, during regular business hours.

1. CALL TO ORDER AND DETERMINATION OF A QUORUM (4:32:39) - Chairperson Ray Fierro called the meeting to order at 4:32 p.m. Roll was called; a quorum was present. Vice Chair Erb and Member Smolenski were absent.

2. PUBLIC COMMENT (4:34:54) - Chairperson Fierro entertained public comment. Mr. Pittenger announced that Mr. Goering had been promoted to the position of Senior Transportation Planner, and introduced Transportation Planner Hailey Lang. Chairperson Fierro entertained additional public comment; however, none was forthcoming.

3. APPROVAL OF MINUTES - May 11, 2016 (4:36:24) - Chairperson Fierro entertained a motion. **Member Bonkowski moved to approve the minutes, as presented. Member Crowell seconded the motion. Motion carried 5-0.**

4. PUBLIC MEETING ITEMS:

4(A) THE NEVADA DEPARTMENT OF TRANSPORTATION SAFETY ENGINEERING STAFF WILL PROVIDE A BRIEF PRESENTATION REGARDING UPCOMING SAFETY PROJECTS FUNDED WITH STATE AND FEDERAL FUNDS WITHIN THE CAMPO BOUNDARY (4:36:54) - Chairperson Fierro introduced this item. NDOT Chief Traffic Safety Engineer Ken Mammen reviewed the agenda materials in conjunction with displayed slides, and responded to questions of clarification. Chairperson Fierro entertained additional questions or comments and, when none were forthcoming, thanked Mr. Mammen for his presentation.

4(B) POSSIBLE ACTION TO APPROVE CONTRACT NO. 1516-161, FOR ON-CALL TRAVEL DEMAND FORECASTING, TO KIMLEY - HORN FOR A NOT-TO-EXCEED AMOUNT OF $75,000, TO BE FUNDED FROM THE CAMPO / UNIFIED PLANNING WORK PROGRAM ACCOUNT IN THE CAMPO FUND; THIS IS A PROFESSIONAL SERVICES CONTRACT AND, THEREFORE, NOT SUITABLE FOR PUBLIC BIDDING, PURSUANT TO NRS 332.115(1)(b) (4:46:14) - Chairperson Fierro introduced this item, and Mr. Pittenger reviewed the agenda materials. Chairperson Fierro entertained questions or comments and, when none were forthcoming, a motion. **Member Bonkowski moved to approve Contract No. 1516-161, On-Call Travel Demand Forecasting, to Kimley - Horn for a not-to-exceed amount of $75,000, to be funded from the CAMPO / Unified Planning Work Program, for FY 16 - 17 and FY 17 - 18. Member Kimbrough seconded the motion.** Chairperson Fierro entertained public comment and, when none was forthcoming, called for a vote on the pending motion.

RESULT:	**Approved [5 - 0 - 2]**
MOVER:	**Member Brad Bonkowski**
SECOND:	**Member Mark Kimbrough**
AYES:	**Members Bonkowski, Kimbrough, Crowell, Zenteno, Chair Fierro**
NAYS:	**None**
ABSENT:	**Vice Chair Erb, Member Smolenski**
ABSTAIN:	**None**

4(C) POSSIBLE ACTION TO APPROVE AN AMENDMENT TO THE CAMPO FEDERAL FISCAL YEARS 2016 - 19 TRANSPORTATION IMPROVEMENT PROGRAM (4:50:16) - Chairperson Fierro introduced this item. Mr. Goering reviewed the agenda materials, noting staff's recommendation of approval. Mr. Pittenger provided background information on the original freeway agreement and three previous amendments, between the City and NDOT. He anticipates a fourth amendment to be presented to the Board of Supervisors, and advised that two of the items in the Transportation Improvement Program are specifically related to said amendment, which he described. Chairperson Fierro entertained additional questions or comments of the CAMPO members and, when none were forthcoming, a motion. **Member Kimbrough moved to approve the proposed amendment to the CAMPO Federal Fiscal Years 2016 - 19 Transportation Improvement Program. Member Crowell seconded the motion.** Chairperson Fierro entertained public comment and, when none was forthcoming, called for a vote on the pending motion.

RESULT:	**Approved [5 - 0 - 2]**
MOVER:	**Member Mark Kimbrough**
SECOND:	**Member Robert Crowell**
AYES:	**Members Kimbrough, Crowell, Bonkowski, Zenteno, Chair Fierro**
NAYS:	**None**
ABSENT:	**Vice Chair Erb, Member Smolenski**
ABSTAIN:	**None**

4(D) INFORMATION ON THE DEVELOPMENT OF CAMPO'S FEDERAL FISCAL YEAR 2017 - 19 DISADVANTAGED BUSINESS ENTERPRISE GOAL (4:56:12) - Chairperson Fierro introduced this item, and Mr. Dollarhide reviewed the agenda materials. Chairperson Fierro entertained questions or comments; however, none were forthcoming.

5. INTERNAL COMMUNICATIONS AND ADMINISTRATIVE MATTERS; FUTURE AGENDA ITEMS (4:58:13) - Chairperson Fierro introduced this item, and Mr. Pittenger provided an overview of the tentative agenda for the July CAMPO meeting.

6. CAMPO MEMBER COMMENTS (4:59:14) - Chairperson Fierro entertained CAMPO member comments; however, none were forthcoming.

7. PUBLIC COMMENT (4:59:29) - Chairperson Fierro entertained public comment; however, none was forthcoming.

8. ACTION ON ADJOURNMENT (4:59:38) - Member Bonkowski moved to adjourn the meeting at 4:59 p.m.

The Minutes of the June 8, 2016 Carson Area Metropolitan Planning Organization meeting are so approved this _____ day of July, 2016.

_____
RAY FIERRO, Chair

STAFF REPORT

Report To: The Carson Area Metropolitan Planning Organization

Meeting Date: July 13, 2016

Staff Contact: Patrick Pittenger, Transportation Manager

Agenda Title: (For Possible Action) To accept the proposed FY17 Nevada Department of Transportation (NDOT) work program.

Staff Summary: NDOT staff will present their FY17 Work Program as it relates to CAMPO and will be available to answer any potential questions.

Agenda Action: Other/Presentation **Time Requested:** 30 minutes

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Proposed Motion I move to accept the proposed FY17 Nevada Department of Transportation (NDOT) work program.

Background/Issues & Analysis N/A

Applicable Statute, Code, Policy, Rule or Regulation - N/A

Financial Information
Is there a fiscal impact? ☐ Yes ☒ No

If yes, account name/number: N/A

Is it currently budgeted? ☐ Yes ☒ No

Explanation of Fiscal Impact: N/A

Alternatives - N/A

Supporting Material – copy of NDOT presentation and related materials.

2016 Transportation Report
CAMPO



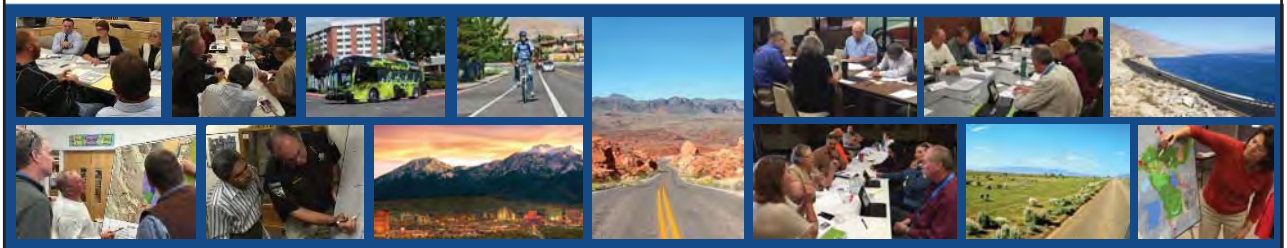







Nevada Department of Transportation
1263 S. Stewart Street
Carson City, NV 89701
www.NevadaDOT.com

Presentation



CAMPO Board Presentation

FY17 Transportation Update

July 13, 2016

Nevada Department of Transportation

Why are we here?

STIP
Statewide Transportation Improvement Program

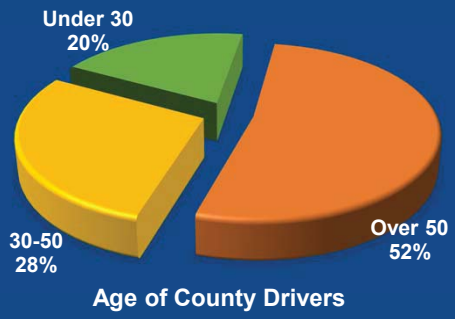
Long Range Plan

Safety — Carson City

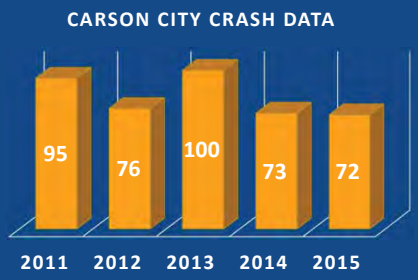
363 Days
with Zero Fatalities

Fatalities

2014	2015	% Change
4	2	-50%



Age of County Drivers



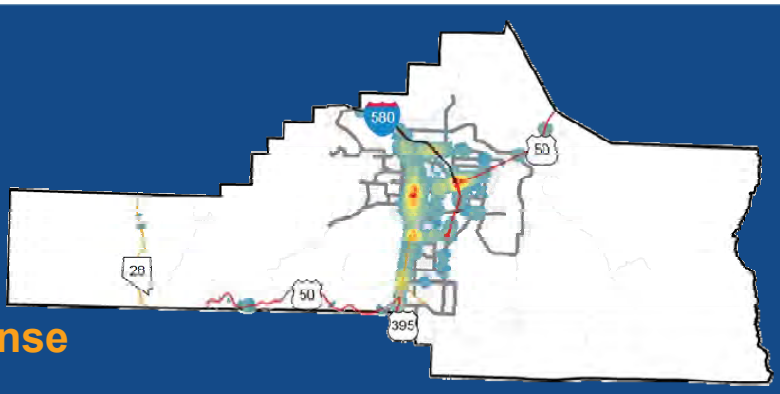
Safety – 4 E's of Traffic Safety — Carson

Engineering

Education

Emergency Response

Enforcement



2014 Crash Density Map

Nevada Department of Transportation

Funding — Carson City

FAST Act – 5 year Transportation Bill

Fuel Revenue Indexing

Nevada Department of Transportation

NDOT Local Government Planning

County Consultation Process

Nevada Department of Transportation

CAMPO Project Ideas

I-580 / US 50 Interchange – Possible redesign of the interchange

College Ave – Traffic control measures

US 50 East / Moundhouse – Increased traffic / possible frontage road / Intersection improvements

US 395 / Douglas – Increase to 3 lanes to Johnson Lane

Dayton – Alternate bridge across the Carson River

I-580 / US 50 - Pedestrian / Bike Improvements / Possible north Carson connector

US 395 - Western frontage road connecting Curry to Costco and Walmart

Intersection lighting list

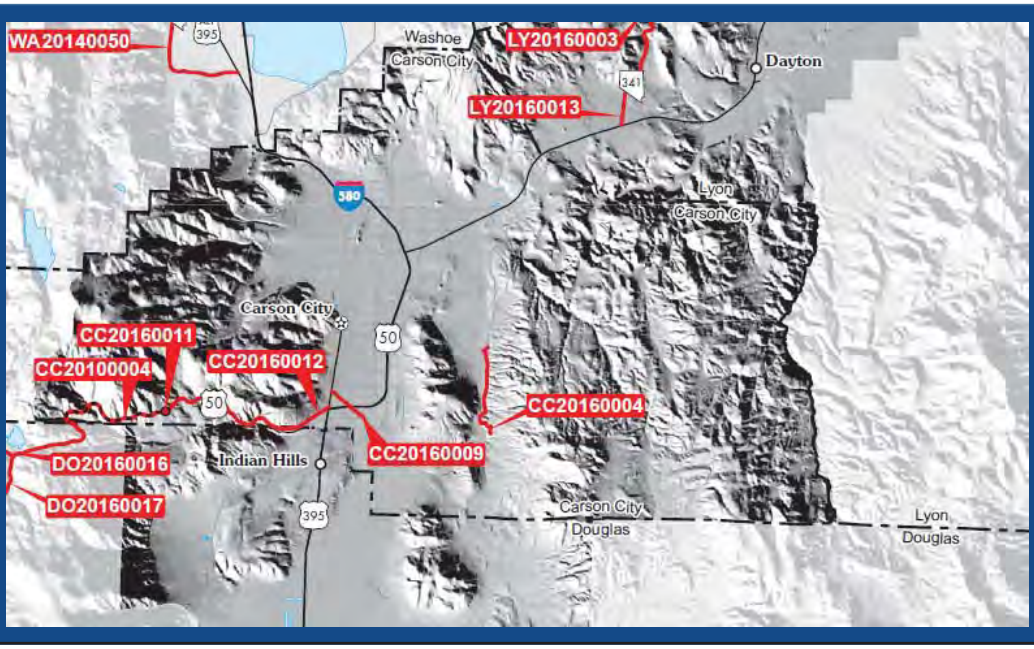
Pedestrian crossing list

4 Year Look - Work Program CAMPO

Funding totals

FY17	**$10,217,462**
FY18 - FY20	**$14,808,880**

FY17 - Work Program CAMPO



FY17 - Work Program CAMPO

US 50 - Drainage Improvements 5.0 mi.
- Install DMS
- Flush Seal Spooner 7.6 mi.

SR 518 – Micro-surface Snyder Ave 1.02 mi.
Sierra Vista Lane – Flap Grant
Stephanie Way / Johnson Lane – Acceleration Lanes
Airport Road – Deceleration and Acceleration Lanes
SR 341 – Chip Seal Silver City 4.9 mi.
SR 342 – Flush Seal Silver City .84 mi.
JAC Transit Service – Two Buses for Carson City JAC fixed route service
JAC Transit Service – Operations of Fixed Route & Paratransit Services
Public Transit Service – Enhanced mobility for Seniors
RTC Intercity Transit – Reno To Carson City

Long Range Discussion

Requests for future consideration

Suggested Motion

Motion to accept the Proposed FY17 NDOT Work Program.

NDOT

Board of Directors

Mark Hutchison
Lt Governor

Brian Sandoval
Governor

Ron Knecht
State Controller

Frank Martin
District 1

Tom Skancke
District 1

Len Savage
District 2

Emil "B.J" Almberg
District 3

Senior Staff

Bill Hoffman
Deputy Director

Rudy Malfabon
Director

Tracy Larkin-Thomason
Deputy Director

Robert Nellis
Deputy Administration

Sondra Rosenberg
Planning

Reid Kaiser
Operations

Sean Sever
Communications

John Terry
Engineering

Mary Martini
District 1

Thor Dyson
District 2

Kevin Lee
District 3

NDOT Mission, Vision, Core Values, and Goals

Mission

Providing a better transportation system for Nevada through our unified and dedicated efforts.

Vision

The nation's leader in delivering transportation solutions, improving Nevada's quality of life.

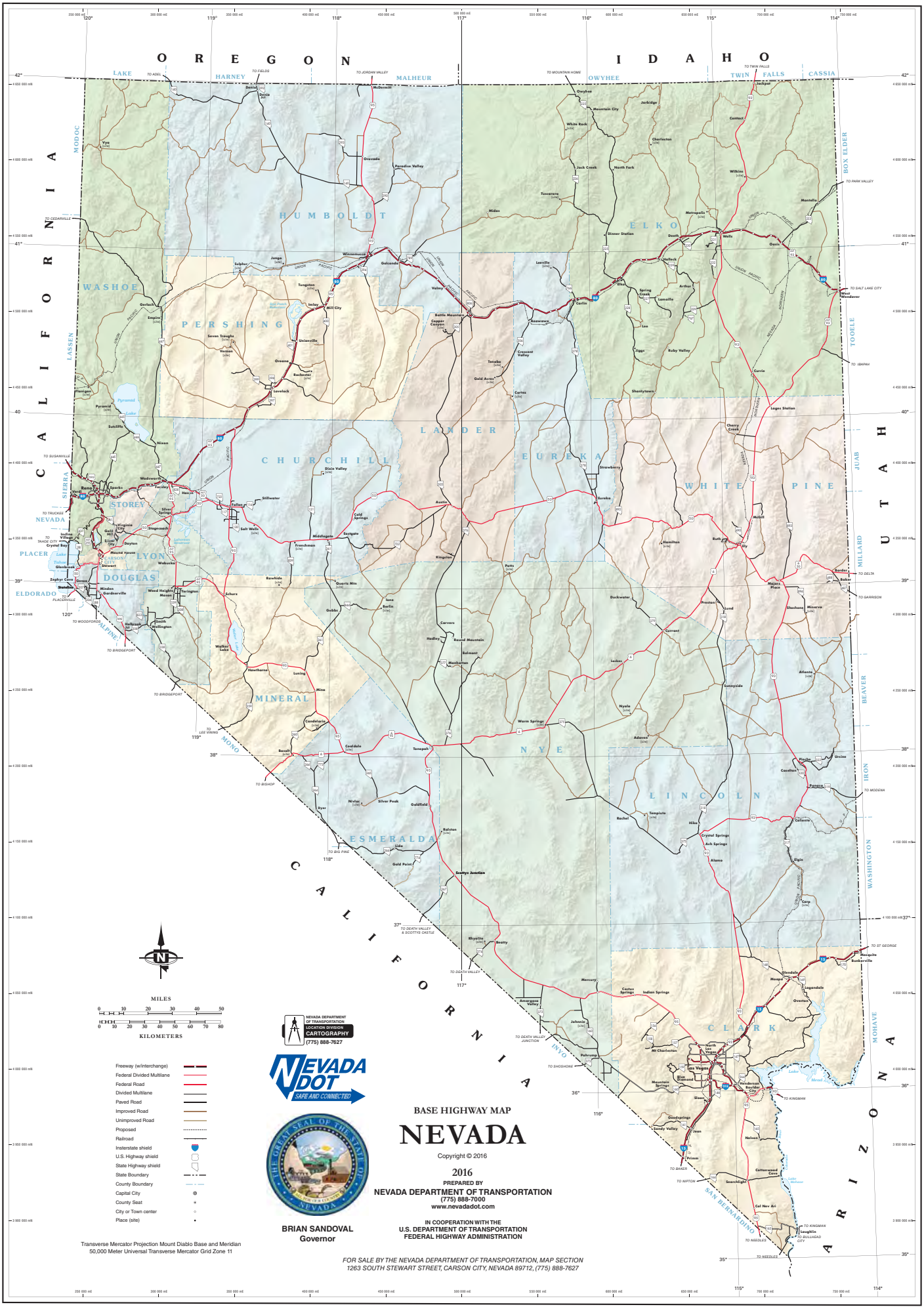
Core Values

- Integrity – Doing the right thing.
- Honesty – Being truthful in your actions and your words.
- Respect – Treating others with dignity.
- Commitment – Putting the needs of the Department first.
- Accountability – Being responsible for your actions.

Goals

As one NDOT, our employees are key to successfully accomplishing our mission.

- Optimize safety.
- Be in touch with and responsive to our customers.
- Innovate.
- Be the employer of choice.
- Deliver timely and beneficial projects and programs.
- Effectively preserve and manage our assets.
- Efficiently operate the transportation system.


O R E G O N
I D A H O
C A L I F O R N I A
N E V A D A
U T A H
A R I Z O N A
LAKE
HARNEY
MALHEUR
OWYHEE
TWIN FALLS
CASSIA
MODOC
BOX ELDER
HUMBOLDT
ELKO
WASHOE
PERSHING
LASSEN
LANDER
CHURCHILL
EUREKA
WHITE PINE
TOOELE
JUAB
SIERRA
STOREY
NEVADA
PLACER
LYON
DOUGLAS
ELDORADO
MILLARD
MINERAL
NYE
BEAVER
IRON
ESMERALDA
LINCOLN
WASHINGTON
CLARK
MOHAVE
INYO
SAN BERNARDINO
MONO
ALPINE
Lake Tahoe
Pyramid Lake
Walker Lake
Mono Lake
Lake Mead
Lake Mohave
MILES
KILOMETERS
Freeway (w/interchange)
Federal Divided Multilane
Federal Road
Divided Multilane
Paved Road
Improved Road
Unimproved Road
Proposed
Railroad
Insterstate shield
U.S. Highway shield
State Highway shield
State Boundary
County Boundary
Capital City
County Seat
City or Town center
Place (site)
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BRIAN SANDOVAL
Governor
BASE HIGHWAY MAP
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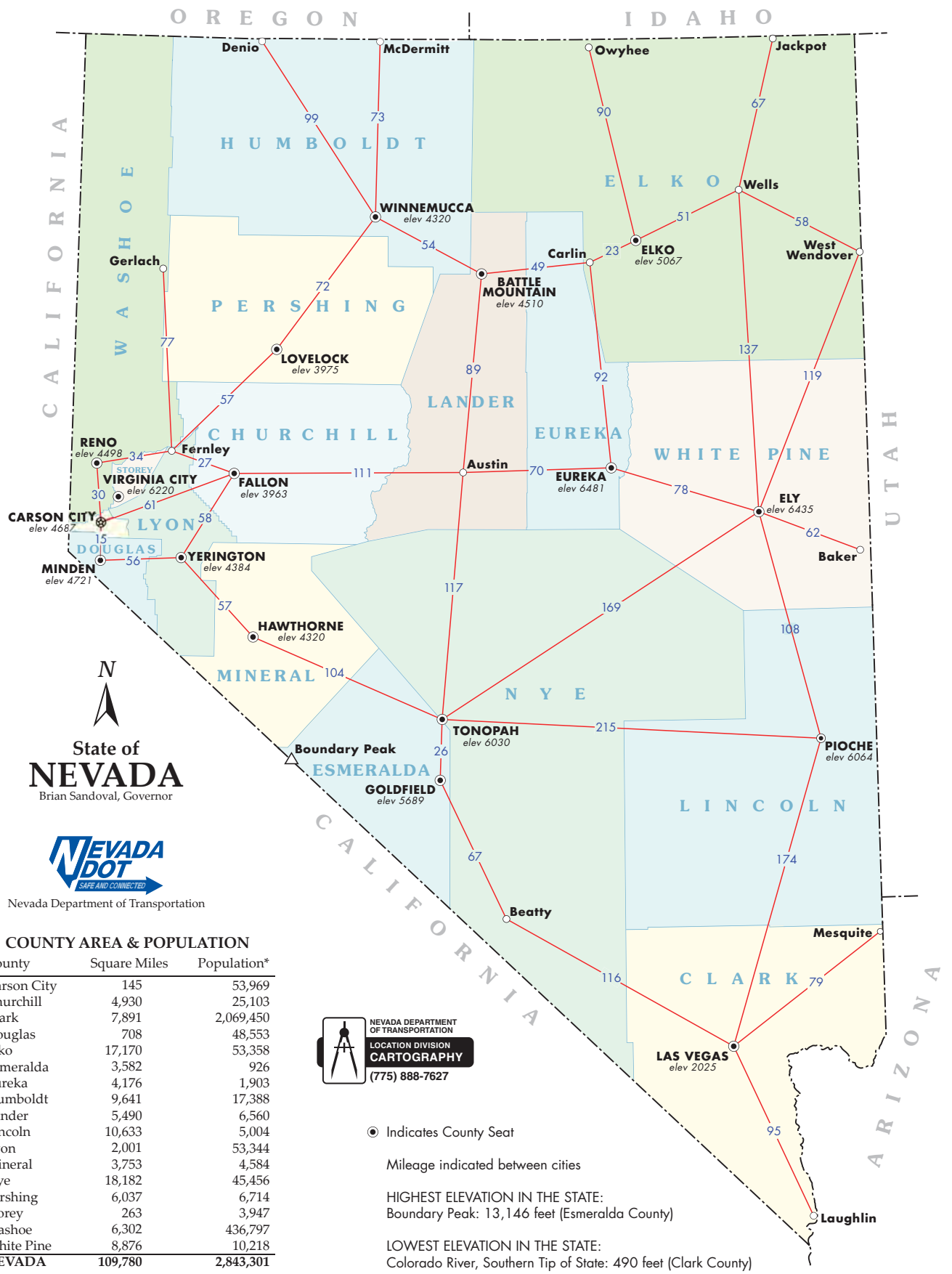
FOR SALE BY THE NEVADA DEPARTMENT OF TRANSPORTATION, MAP SECTION
1263 SOUTH STEWART STREET, CARSON CITY, NEVADA 89712, (775) 888-7627

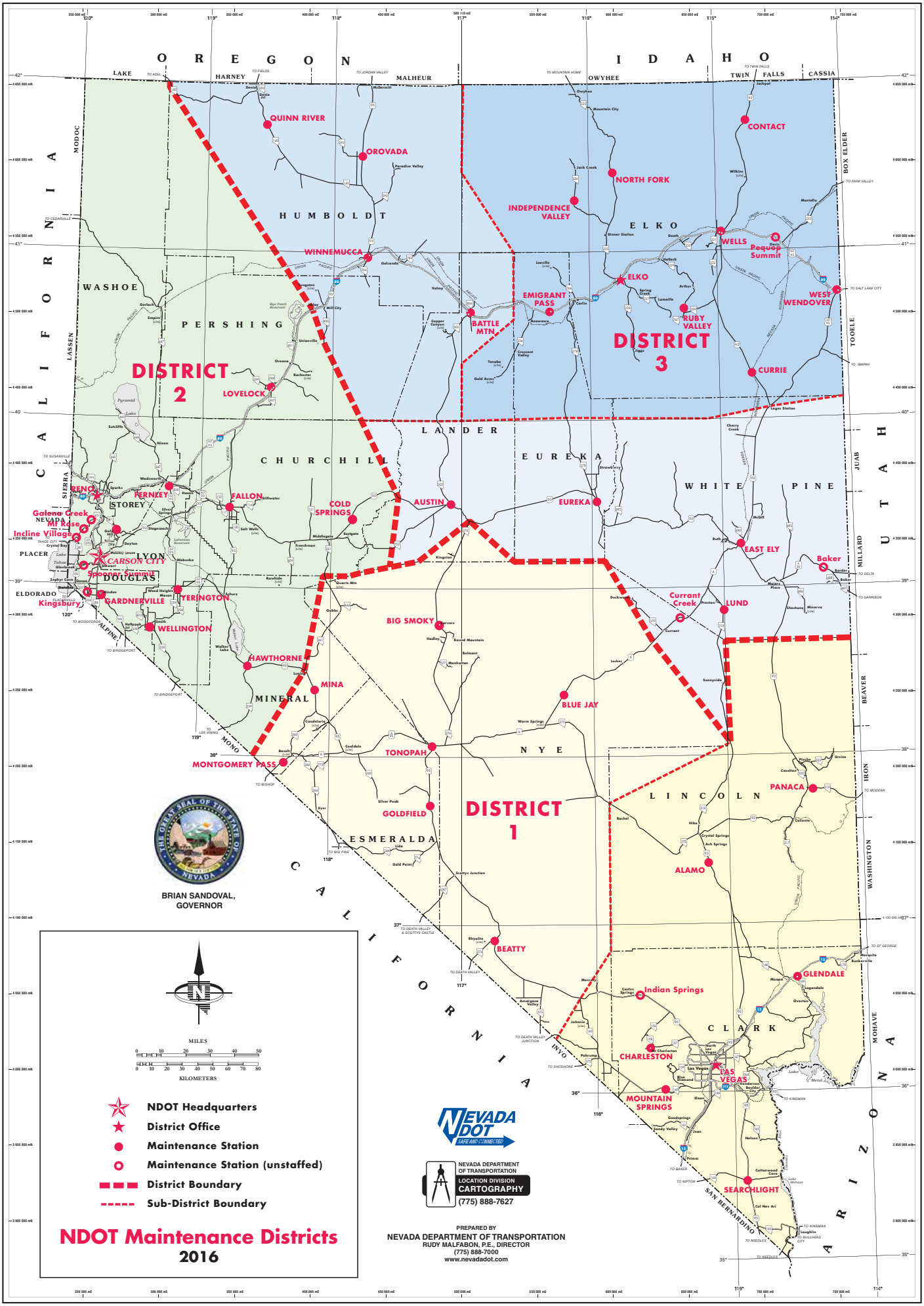
NEVADA STATISTICS



COUNTY AREA & POPULATION

County	Square Miles	Population*
Carson City	145	53,969
Churchill	4,930	25,103
Clark	7,891	2,069,450
Douglas	708	48,553
Elko	17,170	53,358
Esmeralda	3,582	926
Eureka	4,176	1,903
Humboldt	9,641	17,388
Lander	5,490	6,560
Lincoln	10,633	5,004
Lyon	2,001	53,344
Mineral	3,753	4,584
Nye	18,182	45,456
Pershing	6,037	6,714
Storey	263	3,947
Washoe	6,302	436,797
White Pine	8,876	10,218
NEVADA	**109,780**	**2,843,301**

* Nevada State Demographer 2014 Official Population Estimates


OREGON
IDAHO
CALIFORNIA
NEVADA
UTAH
ARIZONA
LAKE
HARNEY
MALHEUR
OWYHEE
TWIN FALLS
CASSIA
MODOC
LASSEN
BOX ELDER
TOOELE
JUAB
MILLARD
BEAVER
IRON
WASHINGTON
MOHAVE
HUMBOLDT
ELKO
WASHOE
PERSHING
CHURCHILL
LANDER
EUREKA
WHITE PINE
STOREY
LYON
DOUGLAS
CARSON CITY
ELDORADO
PLACER
MINERAL
ESMERALDA
NYE
LINCOLN
CLARK
SIERRA
ALPINE
MONO
INYO
SAN BERNARDINO
QUINN RIVER
OROVADA
WINNEMUCCA
LOVELOCK
INDEPENDENCE VALLEY
NORTH FORK
CONTACT
WELLS
Pequop Summit
ELKO
EMIGRANT PASS
BATTLE MTN
RUBY VALLEY
WEST WENDOVER
CURRIE
DISTRICT 2
DISTRICT 3
DISTRICT 1
RENO
Galena Creek
Mt Rose
Incline Village
Spooner Summit
Kingsbury
GARDNERVILLE
FERNLEY
FALLON
COLD SPRINGS
AUSTIN
EUREKA
EAST ELY
Baker
Currant Creek
LUND
YERINGTON
WELLINGTON
HAWTHORNE
MINA
BIG SMOKY
BLUE JAY
TONOPAH
MONTGOMERY PASS
GOLDFIELD
BEATTY
PANACA
ALAMO
GLENDALE
Indian Springs
CHARLESTON
LAS VEGAS
MOUNTAIN SPRINGS
SEARCHLIGHT
BRIAN SANDOVAL,
GOVERNOR
MILES
KILOMETERS
NDOT Headquarters
District Office
Maintenance Station
Maintenance Station (unstaffed)
District Boundary
Sub-District Boundary
NDOT Maintenance Districts
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Safety

6/27/2016

TO: PUBLIC SAFETY, DIRECTOR NDOT, HIGHWAY SAFETY COORDINATOR, NDOT TRAFFIC ENGINEERING, FHWA, LVMPD, RENO PD.

FROM: THE OFFICE OF TRAFFIC SAFETY, FATAL ANALYSIS REPORTING SYSTEM (FARS)

SUBJECT: FATAL CRASHES AND FATALITIES BY COUNTY, PERSON TYPE, DAY, MONTH, YEAR AND PERCENT CHANGE.

CURRENT			SAME DATE LAST YEAR			# CHANGE	
	Crashes	Fatals		Crashes	Fatals	Crashes	Fatals
6/26/2016	1	1	6/26/2015	2	2	-1	-1
MONTH	16	17	MONTH	23	25	-7	-8
YEAR	130	138	YEAR	130	145	0	-7

CRASH AND FATAL COMPARISON BETWEEN 2015 AND 2016, AS OF CURRENT DATE.

COUNTY	2015 Crashes	2016 Crashes	% CHANGE	2015 Fatalites	2016 Fatalities	% Change	2015 Alcohol Crashes	2016 Alcohol Crashes	% Change	2015 Alcohol Fatalities	2016 Alcohol Fatalities	% Change
CARSON	1	5	400.00%	1	5	400.00%	1		-100.00%	1		-100.00%
CHURCHILL	1	3	200.00%	1	3	200.00%			0.00%			0.00%
CLARK	83	96	15.66%	92	103	11.96%	20	12	-40.00%	22	13	-40.91%
DOUGLAS	3	1	-66.67%	3	1	-66.67%	1		-100.00%	1		-100.00%
ELKO	2	3	50.00%	2	3	50.00%		1	100.00%		1	100.00%
ESMERALDA	2		-100.00%	2		-100.00%	1		-100.00%	1		-100.00%
EUREKA	2		-100.00%	2		-100.00%			0.00%			0.00%
HUMBOLDT	1		-100.00%	2		-100.00%			0.00%			0.00%
LANDER	4		-100.00%	4		-100.00%			0.00%			0.00%
LINCOLN	3		-100.00%	3		-100.00%			0.00%			0.00%
LYON	3		-100.00%	4		-100.00%			0.00%			0.00%
MINERAL	1	1	0.00%	2	1	-50.00%			0.00%			0.00%
NYE	6	2	-66.67%	6	2	-66.67%	2		-100.00%	2		-100.00%
PERSHING			0.00%			0.00%			0.00%			0.00%
STOREY	1		-100.00%	1		-100.00%			0.00%			0.00%
WASHOE	16	18	12.50%	19	19	0.00%	10	3	-70.00%	12	4	-66.67%
WHITE PINE	1	1	0.00%	1	1	0.00%			0.00%			0.00%
YTD	130	130	0.00%	145	138	-4.83%	35	16	-54.29%	39	18	-53.85%
TOTAL 15	297	-----	-56.2%	326	-----	-57.7%		-----	#DIV/0!		-----	#DIV/0!

2015 AND 2016 ALCOHOL CRASHES AND FATALITIES ARE BASED ON VERY PRELIMINARY DATA.

COMPARISON OF FATALITIES BY PERSON TYPE BETWEEN 2015 AND 2016, AS OF CURRENT DATE.

COUNTY	2015 Vehicle Occupants	2016 Vehicle Occupants	% Change	2015 Peds	2016 Peds	% Change	2015 Motor-Cyclist	2016 Motor-Cyclist	% Change	2015 Bike	2016 Bike	% Change	2015 Other moped,atv	2016 Other moped,atv
CARSON	1	2	100.00%		3	300.00%			0.00%			0.00%		
CHURCHILL	1	1	0.00%		1	100.00%			0.00%			0.00%		
CLARK	42	47	11.90%	23	24	4.35%	13	26	100.00%	7	1	-85.71%	7	5
DOUGLAS	2	1	-50.00%			0.00%			0.00%			0.00%		
ELKO	2	2	0.00%		1	100.00%			0.00%			0.00%		
ESMERALDA	2	0	-100.00%			0.00%			0.00%			0.00%		
EUREKA	2		-100.00%			0.00%			0.00%			0.00%		
HUMBOLDT	2		-100.00%			0.00%			0.00%			0.00%		
LANDER	3		-100.00%	1		-100.00%			0.00%			0.00%		
LINCOLN	3		-100.00%			0.00%			0.00%			0.00%		
LYON	4		-100.00%			0.00%			0.00%			0.00%		
MINERAL	2	1	-50.00%			0.00%			0.00%			0.00%		
NYE	6	1	-83.33%			0.00%			0.00%			0.00%		
PERSHING			0.00%			0.00%			0.00%			0.00%		
STOREY			0.00%			0.00%	1		-100.00%			0.00%		
WASHOE	12	8	-33.33%	4	6	50.00%	3	4	33.33%		1	100.00%		
WHITE PINE	1	1	0.00%			0.00%			0.00%			0.00%		
YTD	85	64	-24.71%	28	35	25.00%	17	30	76.47%	7	2	-71.43%	7	5
TOTAL 15	186	-----	-65.59%	73	-----	-52.05%	43	-----	-30.23%	10	-----	-80.00%	14	-----

PRELIMINARY DATA REVEALS 72 UNRESTRAINED FATALITIES FOR 2015

2014 Crash Fact Sheet

CARSON CITY

2014 Crash Totals

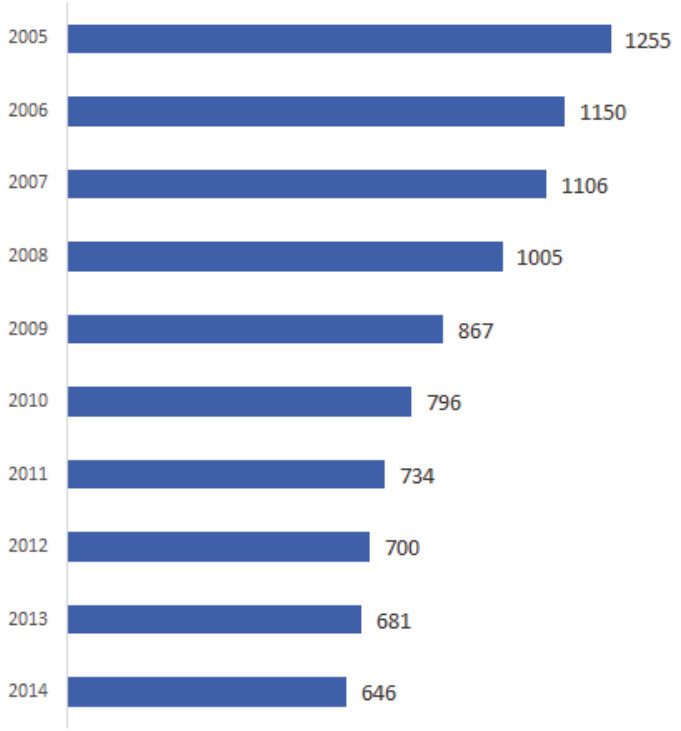
Property Damage Only Crashes	454
Injury Crashes	188
Fatal Crashes	4
Total Crashes	646
Persons Killed	5
Persons Injured	250

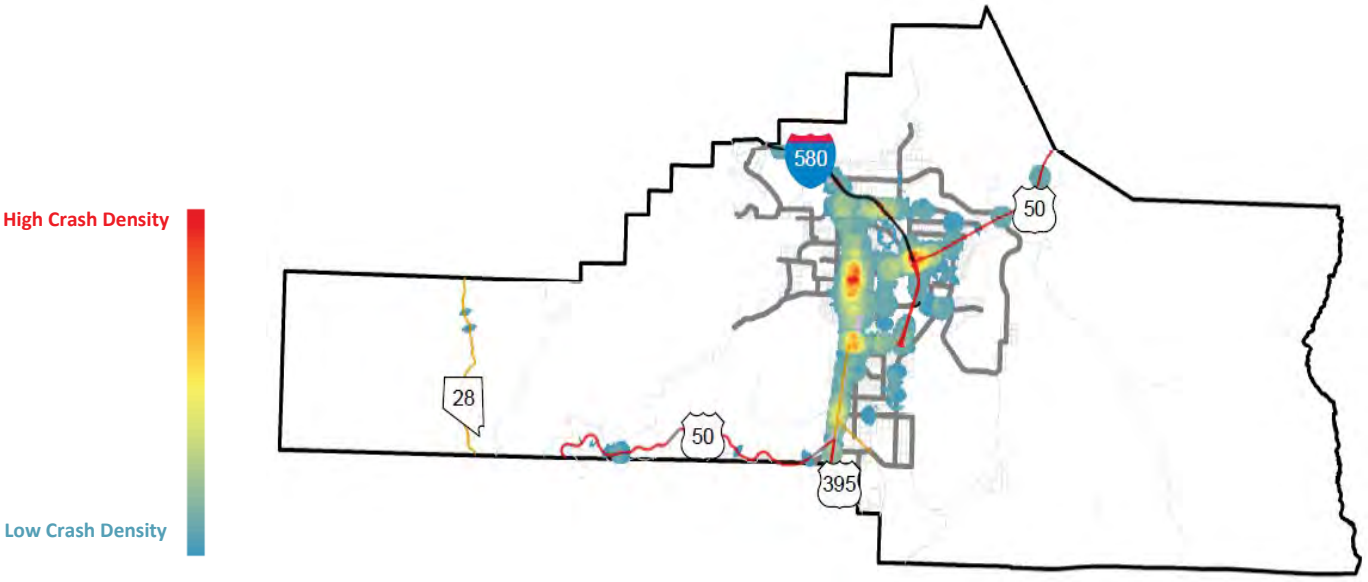
1.7% of Nevada's Total Crashes occurred in Carson City.

1.5% of Nevada's Fatal Crashes occurred in Carson City.

1.1% of Nevada's Injury Crashes occurred in Carson City.

TOTAL CRASHES IN CARSON CITY ANNUALLY





2014 Carson City Crash Density Map

Weather, Time, and Day

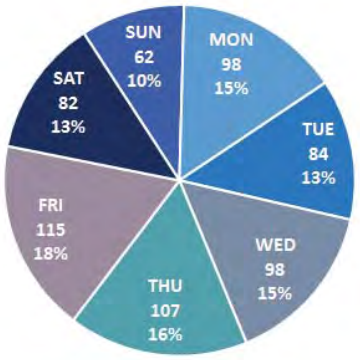
In 2014 the majority of Carson City crashes occurred between the time of 3:00 PM and 6:00 PM.

Thursday and Friday saw the most crashes attributing to 34% of total crashes.

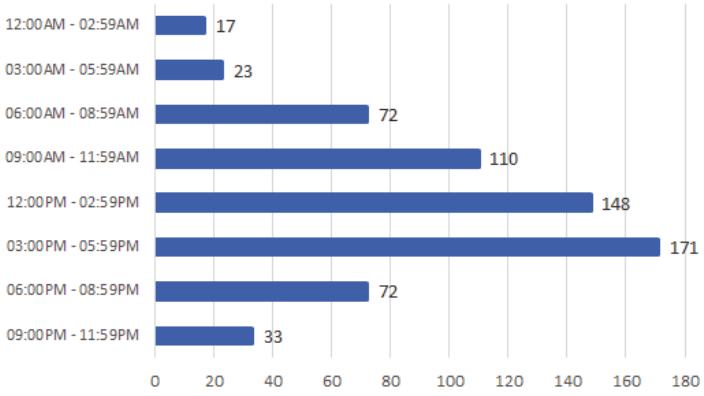
May saw the highest amount of crashes in 2014 with 73, February the least with 34.

On average Carson City experienced a fatal crash once every 91 days.

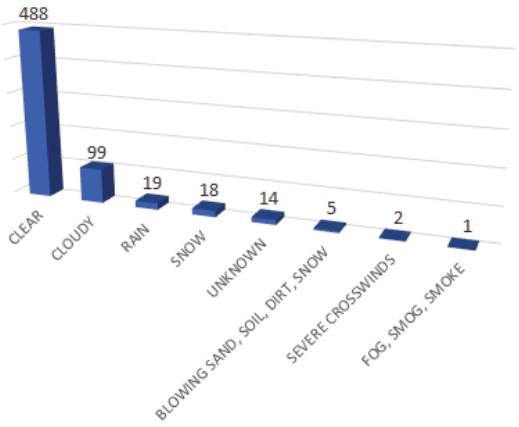
CRASHES BY DAY OF THE WEEK



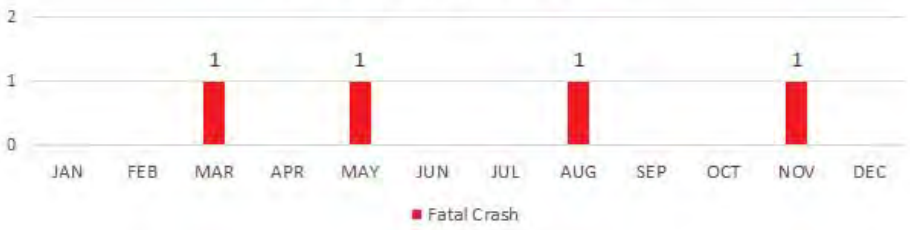
CRASH HOUR RANGE



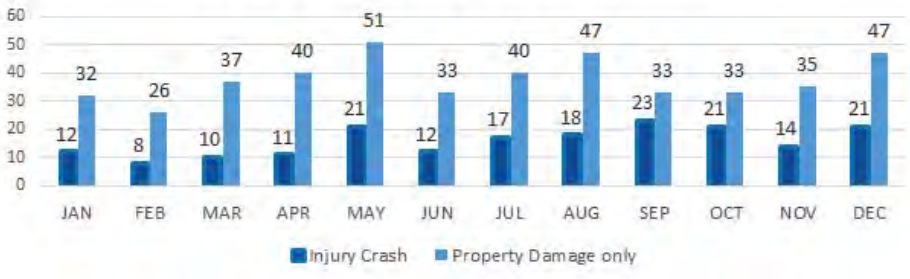
CRASHES BY WEATHER TYPE



FATAL CRASHES BY MONTH



INJURY AND PDO CRASHES BY MONTH

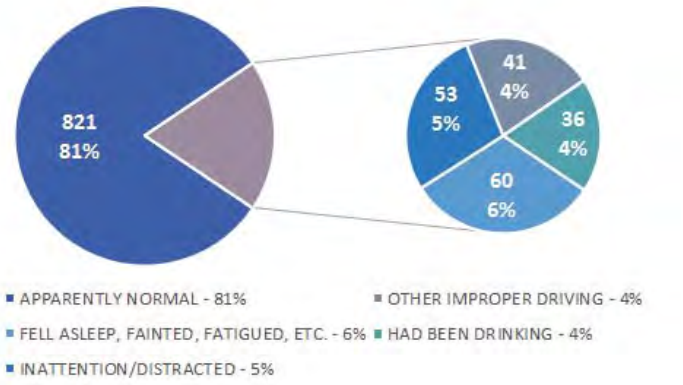


NEVADA DOT SAFE AND CONNECTED

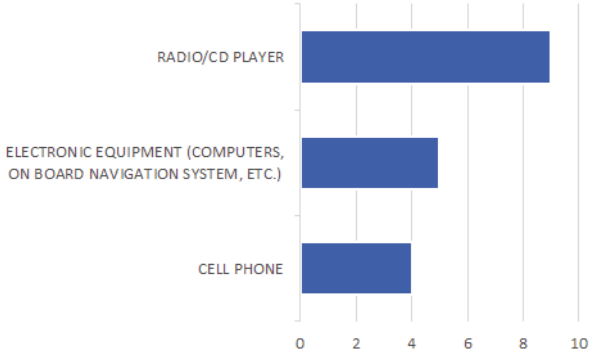
Carson City

Drivers and Vehicles

TOP DRIVER FACTORS



DRIVER DISTRACTIONS

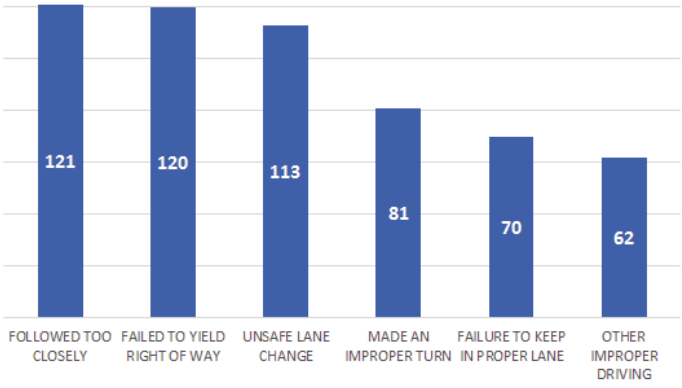


4% of Carson City crashes involved a Motorcycle.

14% of Carson City crashes involved a Lane Departure.

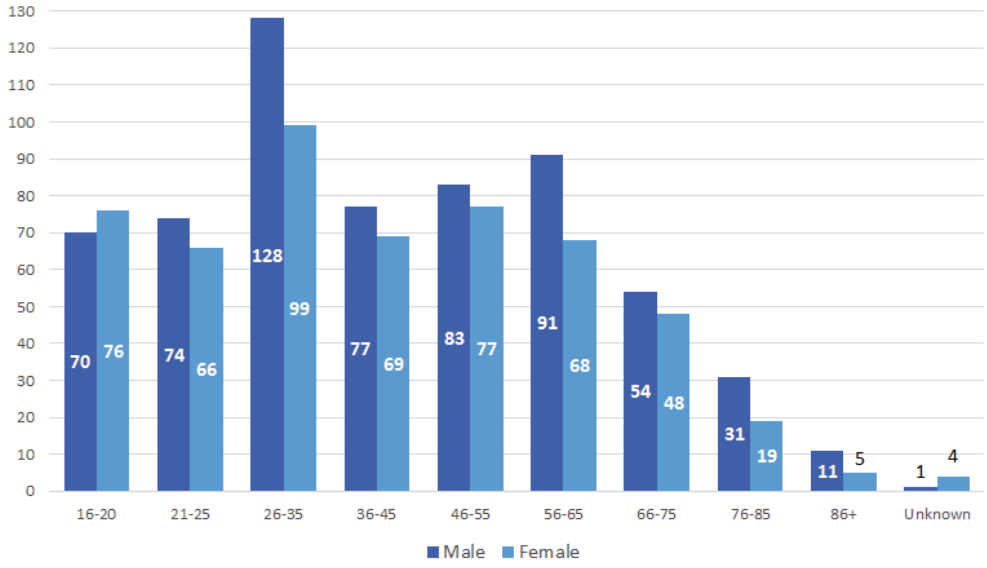
42% of Carson City crashes occurred at an Intersection.

TOP CONTRIBUTING FACTORS



* Multiple Driver and Contributing factors are allowed per unit

DRIVER AGE RANGE

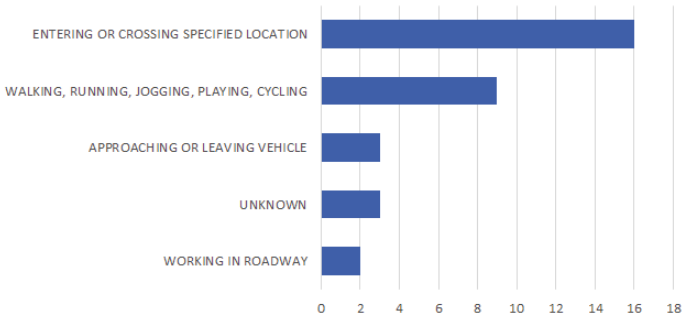


Carson City

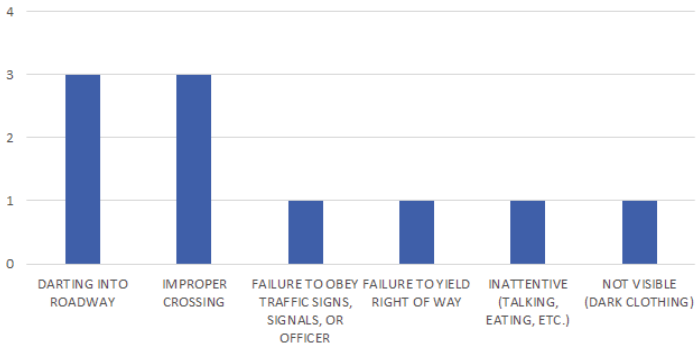
Non-Motorists

In Carson City 33 Non-Motorists were involved in crashes. As a result 1 person died and 21 others were injured.

NON MOTORIST ACTIONS IN CRASHES

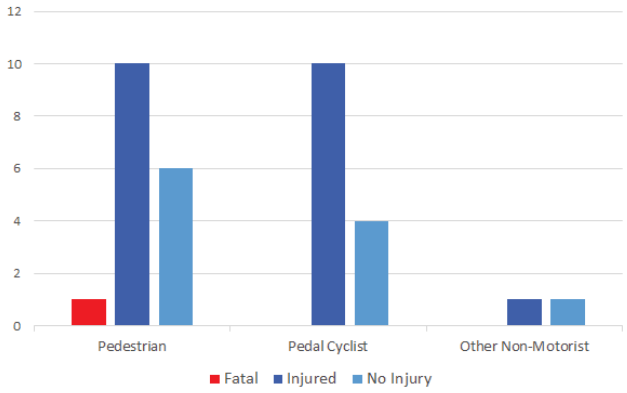


NON MOTORIST ACTIONS IN CRASHES



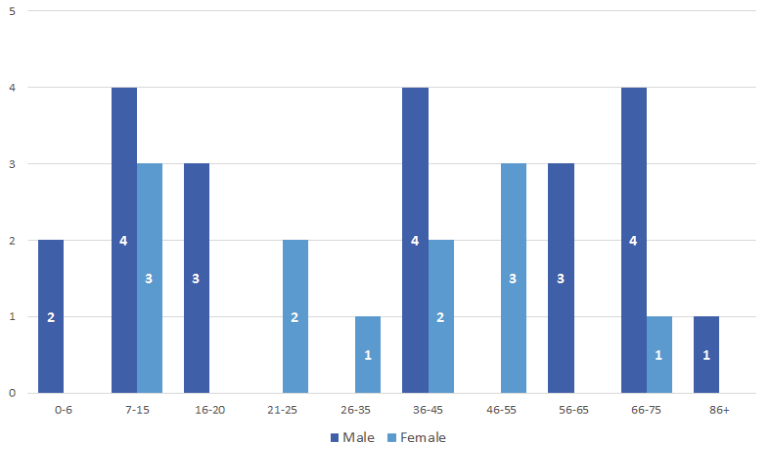
The total number of Non-Motorist fatalities decreased from 2 in 2013 to 1 in 2014.

NON MOTORIST INJURY SEVERITY



Non-Motorist in the 7-15 age range were involved in the most crashes at 7, while the 76-85 age range were least involved at 0.

NON MOTORIST AGE RANGE



NEVADA DOT SAFE AND CONNECTED

Carson City

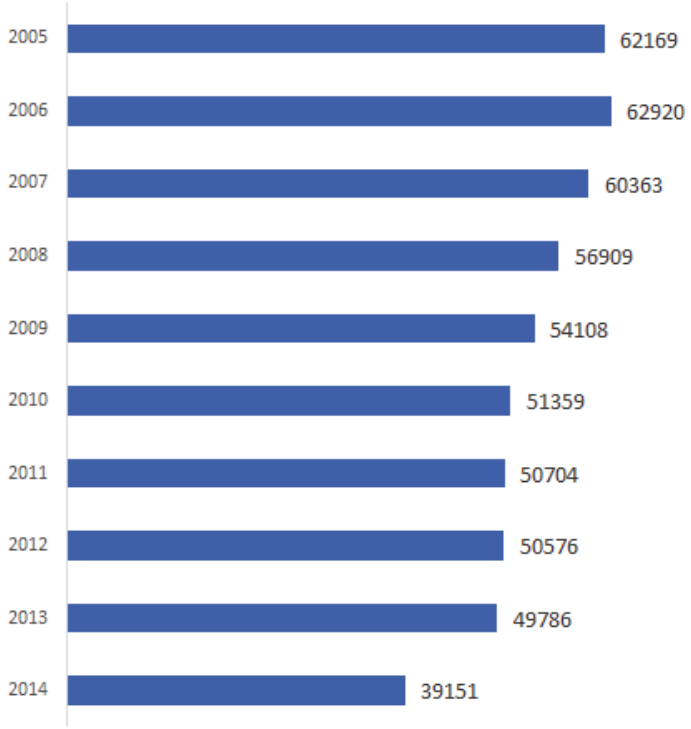
2014 Crash Fact Sheet

STATEWIDE

2014 Crash Totals

Property Damage Only Crashes	21165
Injury Crashes	17718
Fatal Crashes	268
Total Crashes	39151
Persons Killed	291
Persons Injured	27376

TOTAL CRASHES IN STATEWIDE ANNUALLY



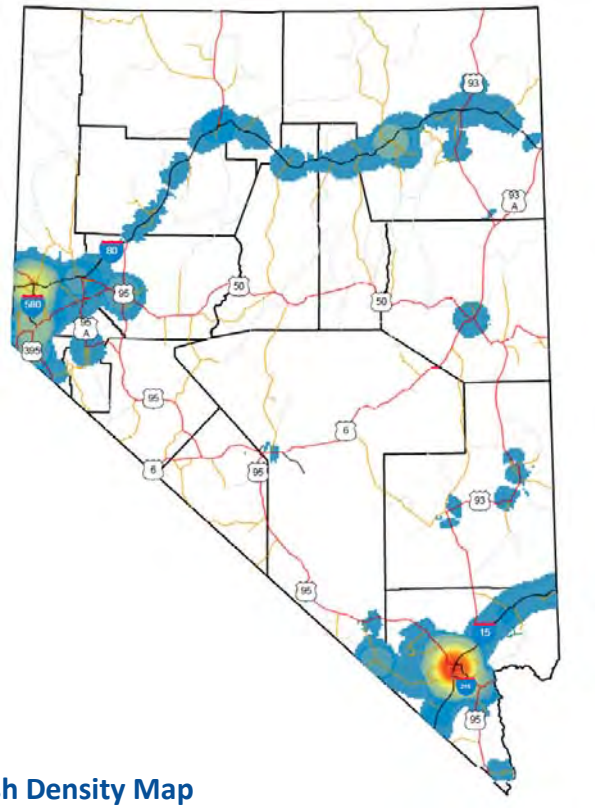
Nevada Department of Transportation Roadway Safety Websites.

http://www.nevadadot.com/

https://www.nevadadot.com/safety/

http://www.zerofatalitiesnv.com/

http://ots.nv.gov/Programs/FARS/



2014 Statewide Crash Density Map

Weather, Time, and Day

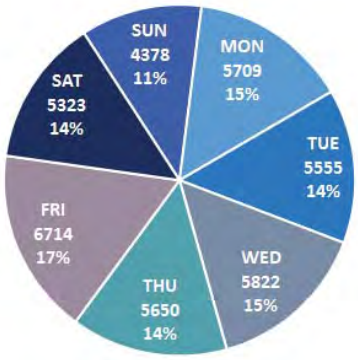
In 2014 the majority of Nevada crashes occurred between the time of 3:00 PM and 6:00 PM.

Wednesday and Friday saw the most crashes attributing to 32% of total crashes.

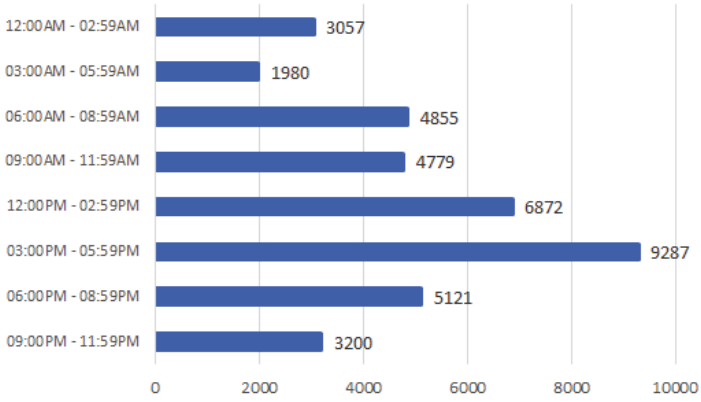
February saw the highest amount of crashes in 2014 with 3,776, July the least with 2,915.

On average Nevada experienced a fatal crash once every 1.4 days.

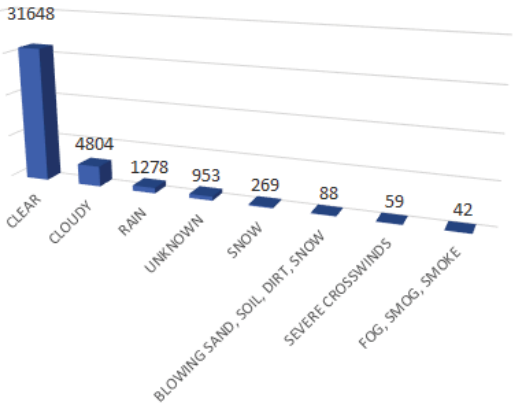
CRASHES BY DAY OF THE WEEK



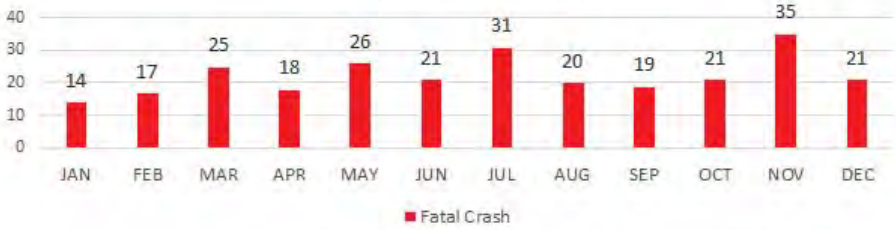
CRASH HOUR RANGE



CRASHES BY WEATHER TYPE



FATAL CRASHES BY MONTH

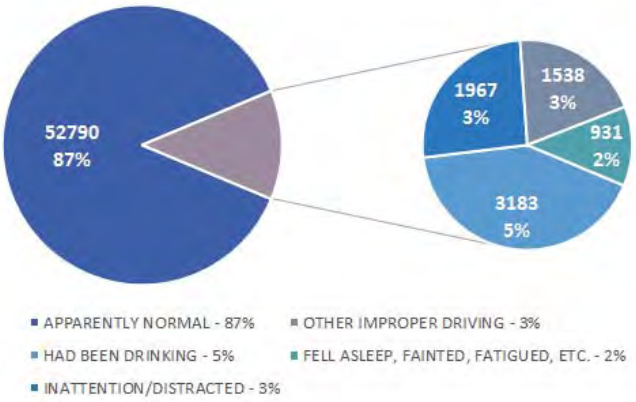


INJURY AND PDO CRASHES BY MONTH

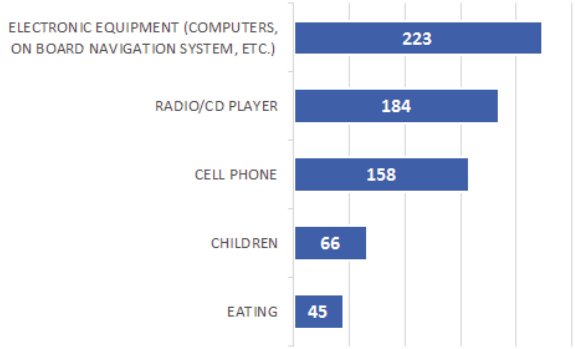
Statewide

Drivers and Vehicles

TOP DRIVER FACTORS



DRIVER DISTRACTIONS

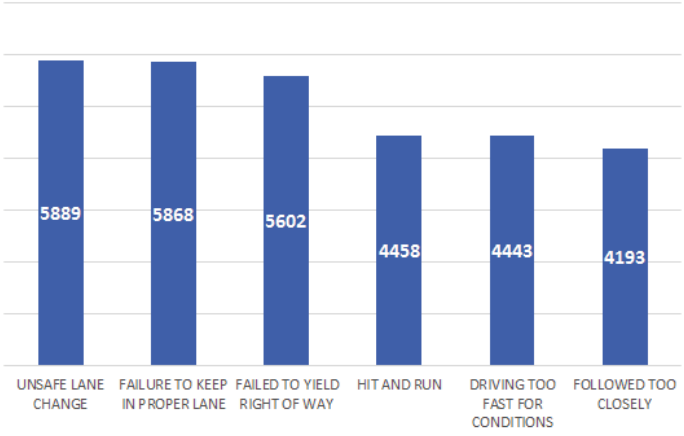


3% of Nevada crashes involved a Motorcycle.

18% of Nevada crashes involved a Lane Departure.

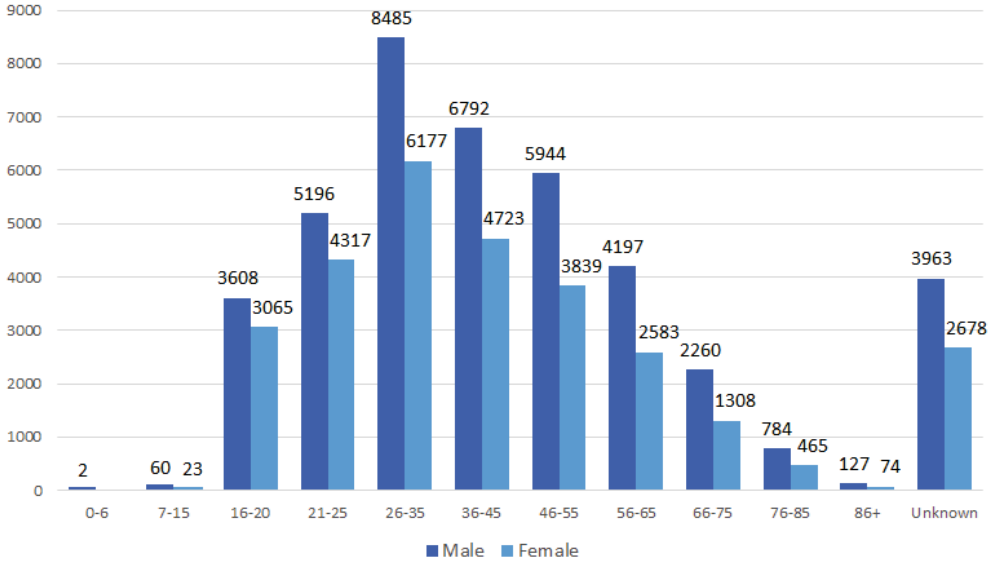
26% of Nevada crashes occurred at an Intersection.

TOP CONTRIBUTING FACTORS



* Multiple Driver and Contributing factors are allowed per unit

DRIVER AGE RANGE

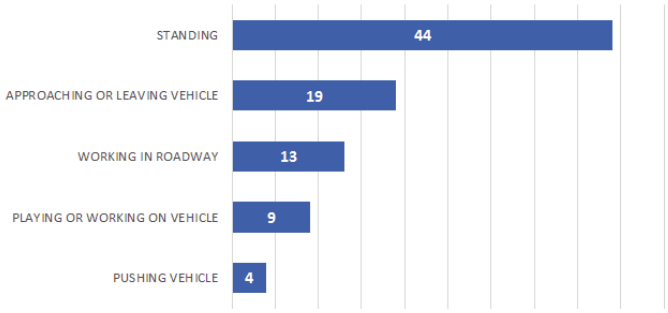


Statewide

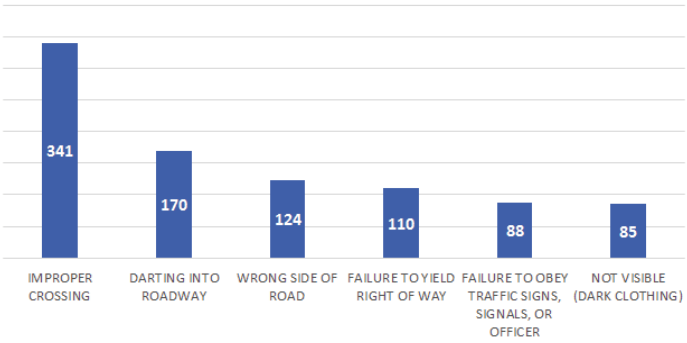
Non-Motorists

In Nevada 1535 Non-Motorists were involved in crashes. As a result 80 people died and 1323 were injured.

NON MOTORIST ACTIONS IN CRASHES

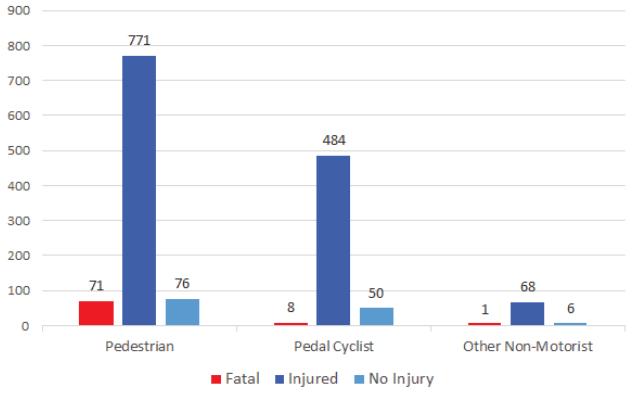


NON MOTORIST ACTIONS IN CRASHES



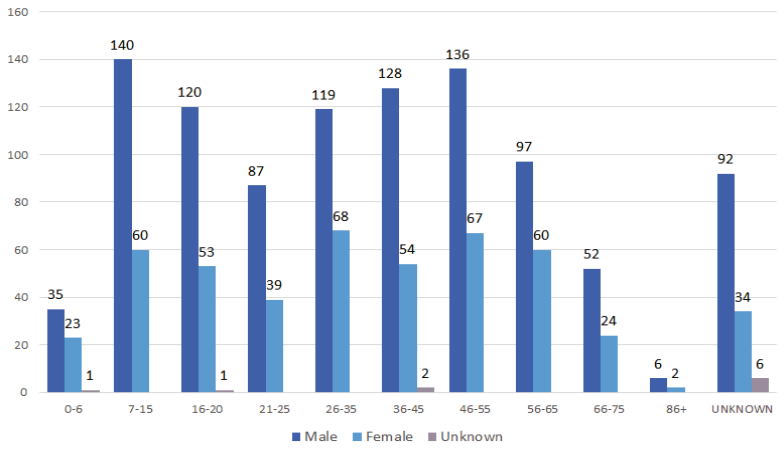
The total number of Non-Motorist fatalities increased from 76 in 2013 to 80 in 2014.

NON MOTORIST INJURY SEVERITY



Non-Motorist in the 46-55 age range were involved in the most crashes at 203. The 86+ age range was the least involved with 8 crashes.

NON MOTORIST AGE RANGE



Statewide

The 4 E's of Traffic Safety

"Coming together is an accomplishment, staying together is progress, working together is a success." (Henry Ford)

A Strategic Highway Safety Plan (SHSP) is a statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. An SHSP is developed in a cooperative process with State, Federal, local, Tribal, and other public- and private-sector safety stakeholders. It is a data-driven, multiyear comprehensive plan that establishes statewide goals, objectives, and key emphasis areas and integrates the 4 E's of highway safety—engineering, education, enforcement, and emergency medical services (EMS).

Get Your Partners Involved

Transportation safety is a diverse and complex field. States are implementing and updating SHSPs in collaboration with their safety stakeholders to ensure "emphasis areas" or safety priorities focus on areas with the greatest potential to reduce fatalities and serious injuries. Generally, the 4 E's of safety define the broad stakeholder partners who care about safety and are responsible for making the roads safe for all users. Their role is to provide the 4 E perspective to the SHSP process. Stakeholders from the 4 E's are typically from the following:

- **Engineering:** highway design, traffic, maintenance, operations, and planning professionals**;**
- **Enforcement:** State and local law enforcement agencies;
- **Education:** prevention specialists, communication professionals, educators, and citizen advocacy groups;
- **Emergency response:** first responders, paramedics, fire, and rescue.

Benefits of Collaboration

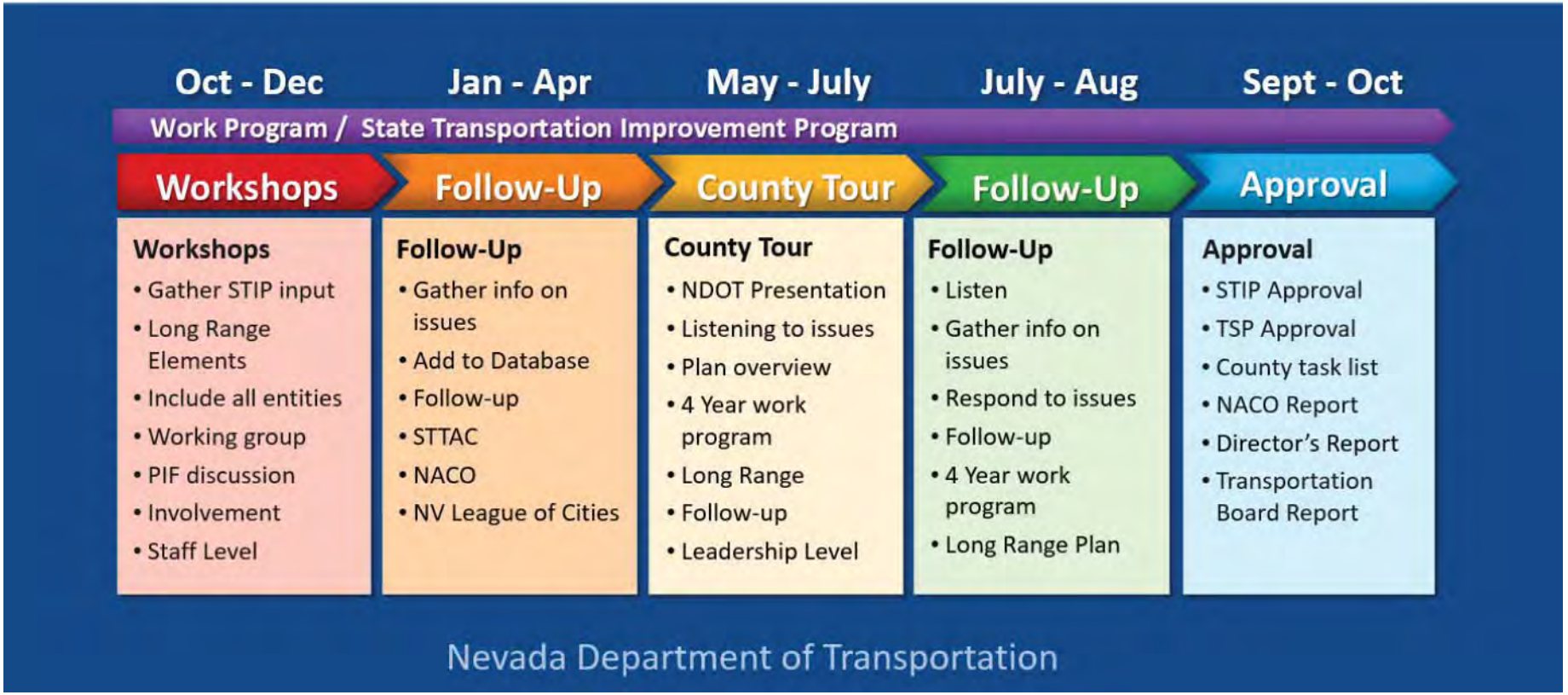
There are a number of benefits for establishing a broad-based SHSP coalition, including the following:

- **Shared responsibility**—The SHSP is designed to be the State's "umbrella" safety plan. While the State's Department of Transportation (DOT) has the primary responsibility to develop the SHSP, it is not intended to be just a DOT plan. Success is possible because stakeholders from the different disciplines combine their skills and work together toward a common mission. Teamwork means one organization does not carry all of the financial or technical burdens alone. It fosters camaraderie and trust, so individuals know where to turn with questions, problems, shared strategies, and new ideas.
- **Leverage resources**—Involvement in the SHSP brings the potential to leverage resources such as implementing low-cost safety improvements combined with high-visibility enforcement, which may improve safety more than either strategy alone. The possibilities for sharing resources through SHSP collaborations are endless. Collaboration brings about combinations of countermeasures that more effectively improve safety than any single countermeasure approach.
- **Multidisciplinary approach**—Each of the 4 E's brings a unique perspective to the SHSP. Engineers approach a safety problem from the roadway and vehicle perspectives, law enforcement focuses on road user behavior, education concentrates on prevention, and emergency response personnel handle post collision care. Each approach is required for the SHSP to succeed in its effort to move disciplines from their individual areas of expertise into a coordinated, comprehensive approach to safety.

County

NDOT Local Government Planning

County Consultation Process



Nevada Department of Transportation

CAMPO Tour Notes

Follow-up and Response

Meeting Title: CAMPO
Wednesday, July 8, 2015

Present CAMPO Board Members: Ray Fierro (CAMPO, Chair), Mark Kimbrough (RTC), Brad Bonkowski (Ward 2 Supervisor), Robert McQueary (RTC), Bob Crowell (Mayor), Jim Smolenski (RTC) **Absent CAMPO Board Members:** Vice-Chairman Jon Erb (Douglas County), Sondra Rosenberg (NDOT) **NDOT Staff:** Thor Dyson, Steve Williams, Ron Knecht, Rudy Malfabon, Pat Torvinen, Bob Madewell, Lee Bonner, Andrea Edwards and Jessica Riggleman. **FHWA Staff:** Christina Leach and Paul Schneider

Follow-up and Resolutions:

Item 1:	**I-580 – Eastlake Boulevard**
Issue:	Project was obligated in 2015, therefore, it wouldn't be listed in the FY16 Work Program.
Follow-Up Action(s):	**Map Location:** WA20100196 or CC20140014 **Location/Project Description (Phase) – Fund Source:** I 580 FROM THE SOUTHBOUND OFF RAMP AT THE NO CARSON ST INTERCHANGE TO 0.86 MI SOUTH OF THE BOWERS INTERCHANGE. MP CC 8.49 TO 9.28 AND MP WA 0.00 TO WA 5.99 ROADWAY REHABILITATION, WIDENING FOR AUXILIARY LANE AND SEISMIC RETROFIT. (I-812 N/S AND I-1261 N/S) **Total:** CC $3,707,955 WA $13,030,368
Status:	Project will provide easier merging with an acceleration lane.

Item 2:	**MPO Sub-allocations**
Issue:	Wants to receive funds like the larger MPO's.
Follow-Up Action(s):	NDOT is open to the idea of sub-allocations and will look at ways to do this. However, this would not mean that you could bypass certain funding restrictions and NDOT would still need to verify.
Status:	NDOT will be looking at this in the next six months.

Point of Contact	Lee Bonner (775) 888-7122 lbonner@dot.state.nv.us

Carson Area Metropolitan Planning Organization

Meeting Minutes

July 8, 2015

(4:31:32) – MOTION: I move to approve the minutes of the May 13, 2015 meeting as presented.

RESULT:	**APPROVED (6-0-0)**
MOVER:	Crowell
SECONDER:	Kimbrough
AYES:	Fierro, Bonkowski, Crowell, Kimbrough, McQueary, Smolenski
NAYS:	None
ABSTENTIONS:	None
ABSENT:	Erb

D. AGENDA MANAGEMENT NOTICE

(4:31:49) – None.

E. DISCLOSURES

(4:32:04) – None.

F. PUBLIC HEARING ITEMS

F-1 FOR POSSIBLE ACTION: TO ACCEPT THE NEVADA DEPARTMENT OF TRANSPORTATION (NDOT) FY 2016 WORK PROGRAM, SHORT RANGE ELEMENT (SRE), AND LONG RANGE ELEMENT (LRE) FOR THE CAMPO AREA.

(4:32:17) – Chairperson Fierro introduced the item.

(4:32:42) – Rudy Malfabon, Director, Nevada Department of Transportation (NDOT), introduced himself along with the following members of his staff: Thor Dyson, District Engineer, and several members of his staff; Ron Knecht, State Controller; several members from the Federal Highways Administration; and Lee Bonner, Local Government Liaison. Mr. Malfabon presented NDOT's Fiscal Year 2016 Work program Short and Long Range Elements, incorporated into the record, for the Carson Area Metropolitan Planning Organization (CAMPO) area.

(4:49:01) – Member Kimbrough inquired about the MPO size requirement changes by population, and Mr. Malfabon explained that the change "was looking favorable", adding that various programs geared toward smaller local communities in the rural areas have received federal funds. Member Smolenski was informed that the crash density data included both vehicle and pedestrian fatalities, adding that NDOT had the ability to extract pedestrian and/or vehicular fatality information from the available data.

There were no public comments.

(4:31:32) – MOTION: I move to accept the Nevada Department of Transportation (NDOT) FY 2016 Work Program, Short Range Element (SRE), and Long Range Element (LRE) for the CAMPO area.

RESULT:	**APPROVED (6-0-0)**
MOVER:	Crowell
SECONDER:	Smolenski
AYES:	Fierro, Bonkowski, Crowell, Kimbrough, McQueary, Smolenski
NAYS:	None
ABSTENTIONS:	None
ABSENT:	Erb

F-2 INFORMATION ON THE PROPOSED CAMPO FEDERAL FISCAL YEARS (FFY) 2016-2019 TRANSPORTATION IMPROVEMENT PROGRAM (TIP).

(4:55:47) – Chairperson Fierro introduced the item.

(4:56:05) – Mr. Doenges presented the agenda materials which are incorporated into the record.

There were no member or public comments.

F-3 FOR POSSIBLE ACTION: TO DETERMINE THE SELECTION OF CARSON CITY RTC'S FEDERAL TRANSIT ADMINISTRATION (FTA) 5339 APPLICATION TO BE SUBMITTED FOR FUNDING IN THE CAMPO PLANNING AREA.

(5:58:40) – Chairperson Fierro introduced the item.

(4:59:03) – Mr. Pittenger noted that he had received a message from Vice Chairperson Erb who would be absent today due to inclement weather. He also presented the agenda materials which are incorporated into the record.

There were no member or public comments.

(5:00:14) – MOTION: I move to determine the selection of Carson City RTC's Federal Transit Administration (FTA) 5339 application to be submitted for funding in the CAMPO planning area.

RESULT:	**APPROVED (6-0-0)**
MOVER:	McQueary
SECONDER:	Kimbrough
AYES:	Fierro, Bonkowski, Crowell, Kimbrough McQueary, Smolenski
NAYS:	None
ABSTENTIONS:	None
ABSENT:	Erb

G. INTERNAL COMMUNICATIONS AND ADMINISTRATIVE MATTERS (NON-ACTION ITEMS)

G1 FUTURE AGENDA ITEMS

FY17 Carson County Workshop

Local Concerns & Long Range Planning Ideas

Meeting Title – Carson County Workshop
Monday, December 14, 2015

Workshop Attendees

County: Patrick Pittenger, Dan Doenges, Mark Kimbrough, Cortney Bloomer, Graham Dollarhide, Adriana Fralick, Brad Bonkowski, Danny Campos and Dirk Goering

NDOT: Lee Bonner, Coy Peacock, Andrea Edwards, Lori Campbell, Steve Jackson and Steve Williams

Local Concerns:

- Bicyclist n' Pedestrian Improvements and Connectivity:
  - Improvements are needed for better bicycle, sidewalk and pedestrian connectivity.
  - Additional signalization for Pedestrians and Bicyclists.
  - Sidewalk and ADA around schools.
  - Safety Improvements for Pedestrians and bicyclists at intersections. (US 50 & US 395)
  - SR 529 Pedestrian Crossing – Pedestrians Jay-Walking
- Funding:
  - Transparency of funding.
  - STP Funding
  - MPO Funding – Set amount/sub allocation
  - Complete Streets – Additional funding
  - Transit Funding
  - Non-infrastructure
  - Tribal Roads
- The need for better mobility for freight, bike & pedestrian south of US 50 & US 395.
- US 50:
  - Improvements (like the Virginia City turn-off) all along Hwy 50 intersections.
  - Adequate Lighting
- Maintenance of Local Roads
- The wall blocks visibility at the south ingress lane at Arrowhead of oncoming traffic.
- There is a need for better communication between NDOT and CAMPO, Carson City, Private Land Owners.
- Is there a way for NDOT to educate on the warrant process?
- Could NDOT not micro surface Carson St and provide the funding to Carson to use in complete street design for this same area instead of doing work on the road twice?
- Carson Street & US 395:
  - There needs to be resolution of Carson Street and US 395.
  - Adequate lighting on Carson Street – North and South
  - Right-Of-Way Issues – Carson Street

Carson City County – Needs discussed at the 2015 workshop

Local Need identified	Project ID	Project Description	Year Scheduled
Sidewalk and ADA around Schools	CC20150020	Empire Elementary Sidewalk and ADA improvements. Construction/rehabilitation of pedestrian access/walkways near transit stops	2016

Long Range Planning Ideas:

- Availability of Federal funding for locals to use for Fed-Aid on eligible roads (STP funds)
- Bike traffic accommodations – especially on Nevada Street. Possibly cycle tracks.
- Roundabouts at as many intersections as possible.
- Zoning/transportation infrastructure geared toward infill (sprawling will naturally occur towards Dayton and towards Minden as well).
- College Avenue – Needs traffic control measures implemented.

CAMPO Project Ideas List

County	MeetingType	IssueTitle	IssueLocation	Issue	TSP#
CAMPO	Workshop	Bike and Ped	CAMPO	Bicyclist n' Pedestrian Improvements and Connectivity: Improvements are needed for better bicycle, sidewalk and pedestrian connectivity.	
CAMPO	Workshop	Mobility	South of US 50 and 395	Bicyclist n' Pedestrian Improvements and Connectivity: Improvements are needed for better bicycle, sidewalk and pedestrian connectivity.	
CAMPO	Workshop	Lighting	US 50	Improvements (like the Virginia City turn-off) all along Hwy 50 intersections.	
CAMPO	Workshop	Arrowhead ingress ramp	I-580	The wall blocks visibility at the south ingress lane at Arrowhead of oncoming traffic.	
CAMPO	Workshop	Bike and Pedestrian Improvements	CAMPO	Pedestrian Signalization	
CAMPO	Workshop	Sidewalks and ADA around schools.	CAMPO	Sidewalk and ADA around Schools.	
CAMPO	Workshop	Pedestrian and Bicyclists	US 50 & US 395	Safety improvements for Pedestrians and bicyclists at intersections. (US 50 & US 395)	
CAMPO	Workshop	Pedestrian Crossing	SR 529	SR 529 Pedestrian Crossing- Pedestrians Jay- Walking	
CAMPO	Workshop	SR 395	SR 395	Pedestrian Crossing- Pedestrians jay-walking	
CAMPO	Workshop	Sidewalk and ADA Improvements	Empire Elementary	Construction/rehabilitation of pedestrian access/walkways near transit stops	CC20150020- $258,000
CAMPO	Other	Intersection Lighting	Saliman Road & Colorado Street	Adequate Lighting	
CAMPO	Other	Intersection Lighting	College Parkway & Northgate Lane	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Lompa Lane & Northridge Drive/Carmine Street	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Lompa Lane & Nye Lane	Adequate Lighting	
CAMPO	Other	Intersection Lighting	College Parkway & Ormsby Boulevard	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Long Street & Mountain Street	Adequate Lighting	
CAMPO	Other	Intersection Lighting	King Street & Division Street	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Fifth Street & Airport Road	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Fifth Street & Carson River Road/Hells Bells Road	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Fairview Drive & Desatoya Drive	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Sonoma Street & Saliman Road	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Koontz Lane & Silver Sage Drive	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Arrowhead Drive & Goni Road	Adequate Lighting	
CAMPO	Other	Intersection Lighting	Lompa Lane & Sherman Lane	Adequate Lighting	
CAMPO	Other	Pedestrian Crossing	Fairview & Gordon	Pedestrian Crossing at the Intersection of Fairview & Gordon	
CAMPO	Other	Pedestrian Crossing	S. Carson & Tenth	Pedestrian Crossing at the Intersection of S. Carson and Tenth	
CAMPO	Other	Pedestrian Crossing	Koontz & Edmonds	Pedestrian Crossing at the Intersection of Koontz & Edmonds	
CAMPO	Other	Mid Block Crossing	N. Carson North of Bath	Mid-block crossing on N. Carson north of Bath	
CAMPO	Other	Pedestrian Crossing	Fairview	At the entrance to the National Gurard on Fairview	
CAMPO	Workshop	Bicycle safety	Campo	Bike traffic accommodations-especially on Nevada Street. Possibly cycle tracks.	
CAMPO	Workshop	US 395	Douglas	3 lanes to Johnson Lane	
CAMPO	Workshop	I-580 Interchange	Campo	Re-evaluate the future interchange at Spooner oCurry Street connection – Vista Grande – Jacks Valley Road oCongestion issues on US 395 South of the interchange	
CAMPO	Workshop	North Bypass	Carson/Dayton	Connect US 50 east of Carson to I-580 North of Carson	
CAMPO	Workshop	Carson Alt. Bridge	Campo	Need another way to get over the Carson River from Dayton to Carson	
CAMPO	Workshop	Frontage Rd.	Moundhouse	Allow for more traffic along US 50 corridor (near Moundhouse) – Limited access – Frontage Road	
CAMPO	Workshop	Frontage Rd.	Frontage Rd./ West side of 395 / 580	Possible Frontage Rd. connection; West side of 395 / 580 and Carson St.- access along the west side over or under US 50 to get to Costco and Walmart	
CAMPO	Workshop	Traffic Control Measures	College Ave.	College Avenue- Needs traffic control measures implemented	

Work Program

Annual Work Program / Short Range Element / Long Range Element

INTRODUCTION

This section of the Transportation System Projects document contains the ANNUAL WORK PROGRAM, SHORT RANGE ELEMENT, and LONG RANGE ELEMENT listed by County.

The ANNUAL WORK PROGRAM (AWP) includes: FY17 - Fiscal Year 2017

- Construction projects NDOT intends to start work on or participate in during the coming Federal Fiscal Year 2017
- Construction projects NDOT plans to award to contractors
- Major Maintenance work initiated by NDOT which may be completed by the end of the Federal Fiscal Year 2017.

The AWP is considered the Department's capital improvement program for the Federal Fiscal Year 2016. All projects are subject to the availability of state and federal funds as well as staff resources. Problems in financing, engineering, right-of-way acquisitions, or revised priorities may delay the completion of any project listed.

The SHORT RANGE ELEMENT (SRE) includes: FY18 – FY20

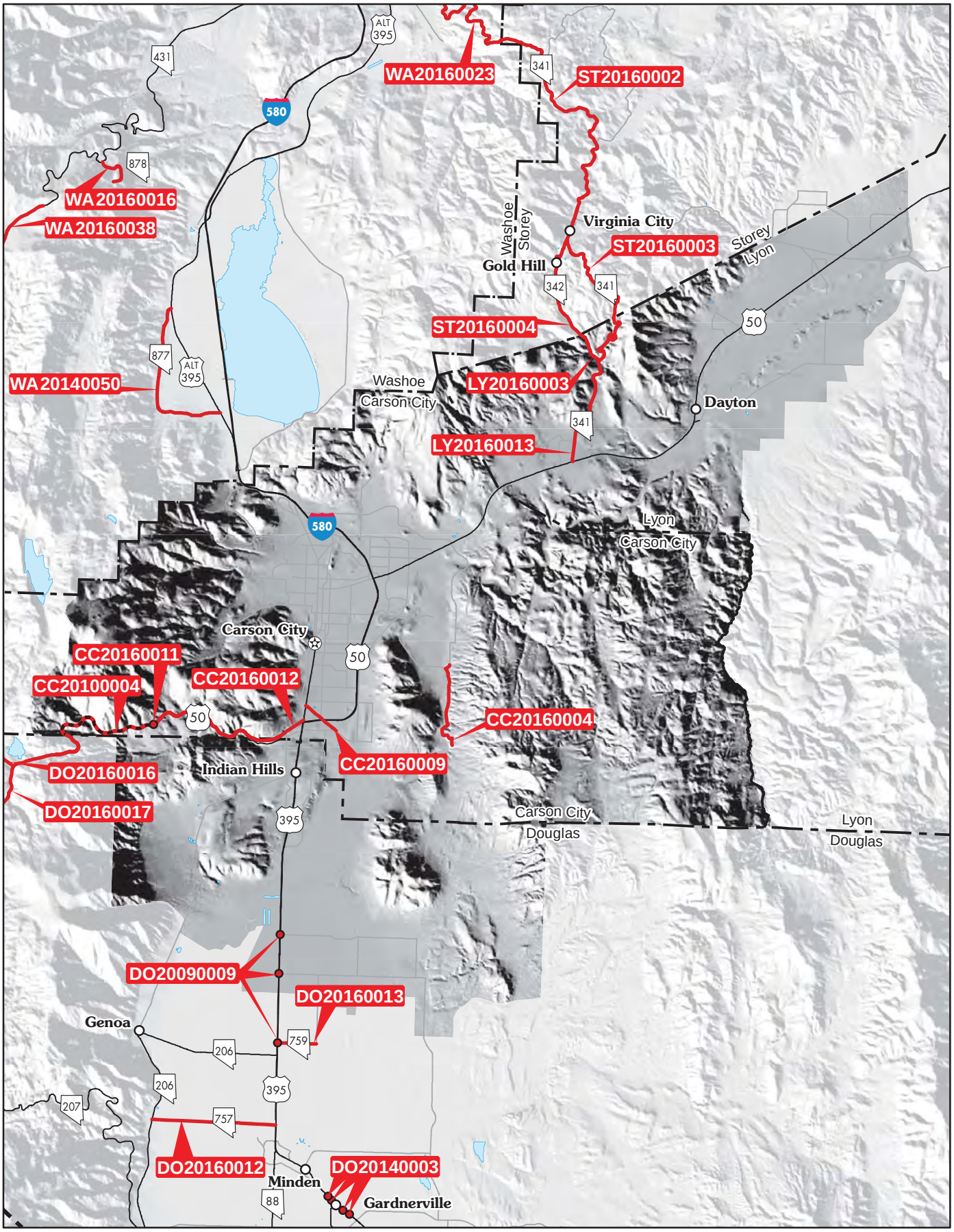
- Construction projects proposed for Federal Fiscal Year 2018 – 2020,
- Construction projects NDOT plans to award to contractors
- Major maintenance work initiated by NDOT to be completed by FY18.

The LONG RANGE ELEMENT (LRE) identifies: FY21 and beyond

Construction projects the State, the four Metropolitan Planning Organizations, and local governments would like to have initiated within Federal Fiscal Years 2021 and beyond.

PROGRAM DEVELOPMENT DIVISION
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712 (775) 888-7122

CAMPO Fiscal Year 2017 Work Program



Prepared by:
Nevada Department of Transporation
May, 2016

NEVADA DOT
SAFE AND CONNECTED

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PROPOSED CAMPO MPO WORK PROGRAM REPORT

FISCAL YEAR 2017 PROPOSED CAMPO MPO WORK PROGRAM REPORT

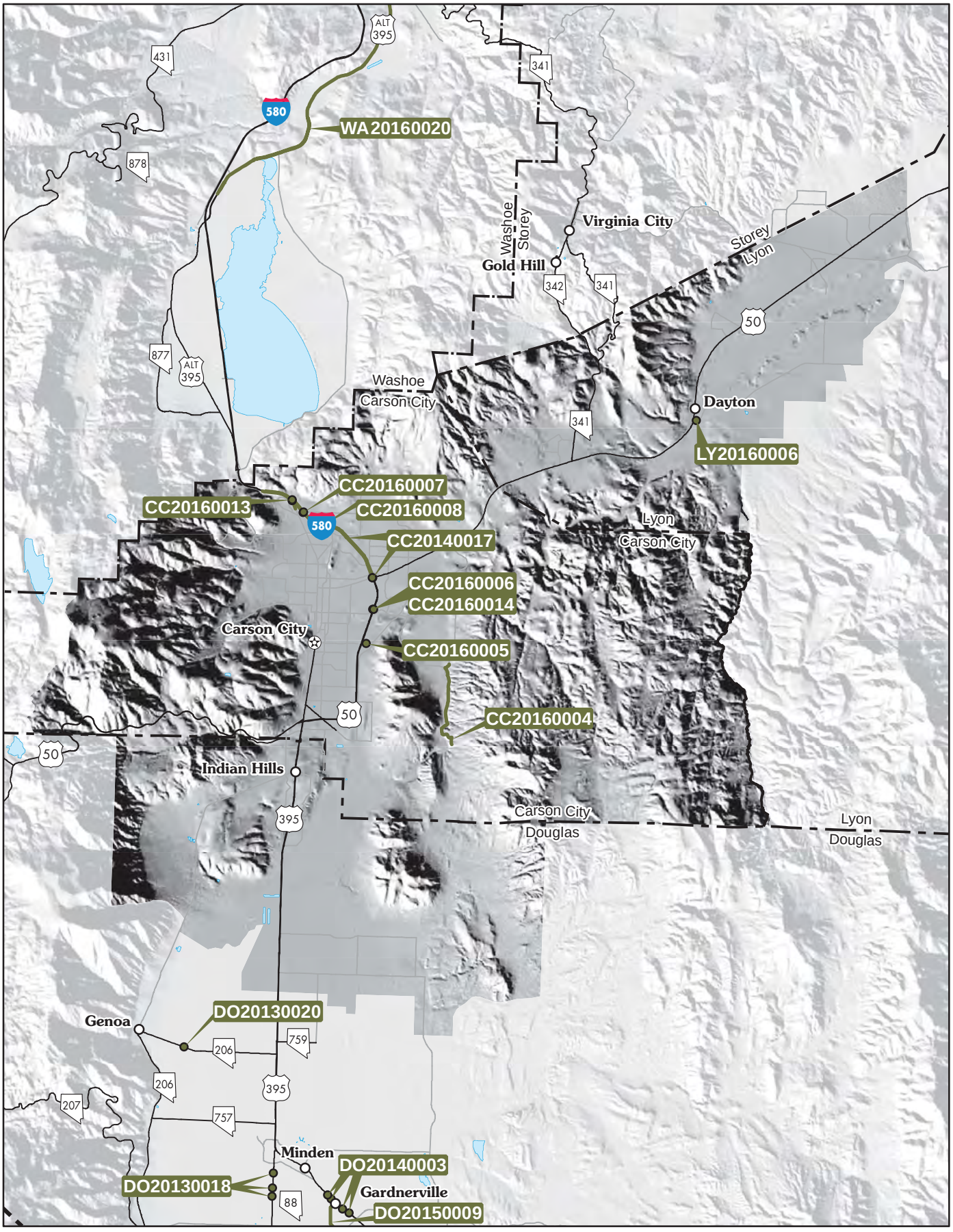
STIP ID	Location/Description (Phase) - Fund Source	PHASE	2017
CC20100004	Title: US 50 Drainage Improvements Description: Construct multiple storm drains, drop inlets, trench drains, slope flattening, grading, concrete curb and gutters and channel work. Location: From Spooner Summit to Clear Creek Interchange of Distance (mile) 5.0 Milepost begins at 0 ends at 3 Type: Environmental Project Funding: FEDERAL, LOCAL	CON	$6,000,000
CC20150004	Title: Jump Around Carson (JAC) Transit Service Description: Continued Operations of Fixed Route & Paratransit Services Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$803,000
CC20150029	Title: Vehicle Purchase for Public Transit Service - Carson City Description: Two (2) buses for Carson City JAC fixed route service Location: Not Location Specific Type: Transit-Capital & Rehab Funding: FEDERAL, LOCAL	OTHER	$700,000
CC20160004	Title: Sierra Vista Lane FLAP Grant Description: The project will reconstruct a 2.5 mile portion of Sierra Vista Lane and provide improved parking areas with way finding signs to improve recreational access for visitors to Federal lands. The Sierra Vista Lane transportation facility provides access to two recreational destinations, the Carson River and the Pine Nut Mountains. Location: From Pinion Hills to Rio Vista Lane of Distance (mile) 2.5 Type: Rd Recons/Rehab/Resurf Funding: FEDERAL, LOCAL	PE	$515,790
CC20150011	Title: Preventive Maintenance Description: Capital Cost of Preventive Maintenance Location: Not Location Specific Type: Transit-Maintenance Funding: FEDERAL, LOCAL	OTHER	$281,000

STIP ID	Location/Description (Phase) - Fund Source	PHASE	2017
CC20160011	Title: US 50 Install DMS Description: Install DMS Location: Nearest Crossstreet: Lake Tahoe Golf Course Drive Type: Betterments Funding: STATE	CON	$250,000
CC20150024	Title: Capital Cost of Contracting for Public Transit Service -- Carson City Description: Capital Cost of Enhanced Mobility for Seniors and Individuals with Disabilities Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$118,750
CC20160012	Title: US 50 Flush Seal Spooner Description: Flush Seal Full Width Location: From Douglas County Line to US 395 of Distance (mile) 7.6 Milepost begins at 0 ends at 7.6 Type: Betterments Funding: STATE	CON	$60,066
CC20150006	Title: RTC INTERCITY Transit Service: Reno to Carson City Description: RTC INTERCITY Operations within CAMPO Boundary, Commuter Service - M-F Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$42,000
CC20160009	Title: SR 518 Micro-surface Snyder Ave Description: Micro-Surface Full Width Location: From SR 529 to Snyder Ave of Distance (mile) 1.02 Milepost begins at 0 ends at 1.02 Type: Betterments Funding: STATE	CON	$30,694
CC20150023	Title: Purchase of Bus Stop Amenities Description: Purchase/install bus shelters and benches at transit stops Location: Various Locations Type: Transit-Capital & Rehab Funding: FEDERAL, LOCAL	OTHER	$30,000
CC20130027	Title: Transit Security Description: Security improvements on buses and bus facilities Location: Not Location Specific Type: Transit - Other Funding: FEDERAL, LOCAL	OTHER	$12,731

FISCAL YEAR 2017 PROPOSED CAMPO MPO WORK PROGRAM REPORT

STIP ID	Location/Description (Phase) - Fund Source	PHASE	2017
DO20090009	Title: US 395 Right Turn Lanes Description: Move deceleration lane and lengthen acceleration lane at Airport road, construct 2 acceleration lanes at Johnson Lane and Stephanie Way and lengthen acceleration lanes at all three locations Location: Nearest Crossstreet: Airport Road Type: Rd Expansion Funding: FEDERAL, STATE	CON	$1,200,000
DO20090009	Title: US 395 Right Turn Lanes Description: Move deceleration lane and lengthen acceleration lane at Airport road, construct 2 acceleration lanes at Johnson Lane and Stephanie Way and lengthen acceleration lanes at all three locations Location: Nearest Crossstreet: Airport Road Type: Rd Expansion Funding: FEDERAL, STATE	ROW	$5,000
LY20160013	Title: SR 341 Chip Seal Silver City Description: Chip Seal Location: From US 50 to Storey County Line of Distance (mile) 4.9 Milepost begins at 0 ends at 4.9 Type: Betterments Funding: STATE	CON	$166,168
LY20160003	Title: SR 342 Flush Seal Silver City Description: Flush Seal Full Width Location: From SR 341 to Storey County Line of Distance (mile) 0.84 Milepost begins at 0 ends at .84 Type: Betterments Funding: STATE	CON	$2,263
	TOTAL		$10,217,462

CAMPO FY18-FY20 Short Range Work Program



Prepared by:
Nevada Department of Transporation
May, 2016

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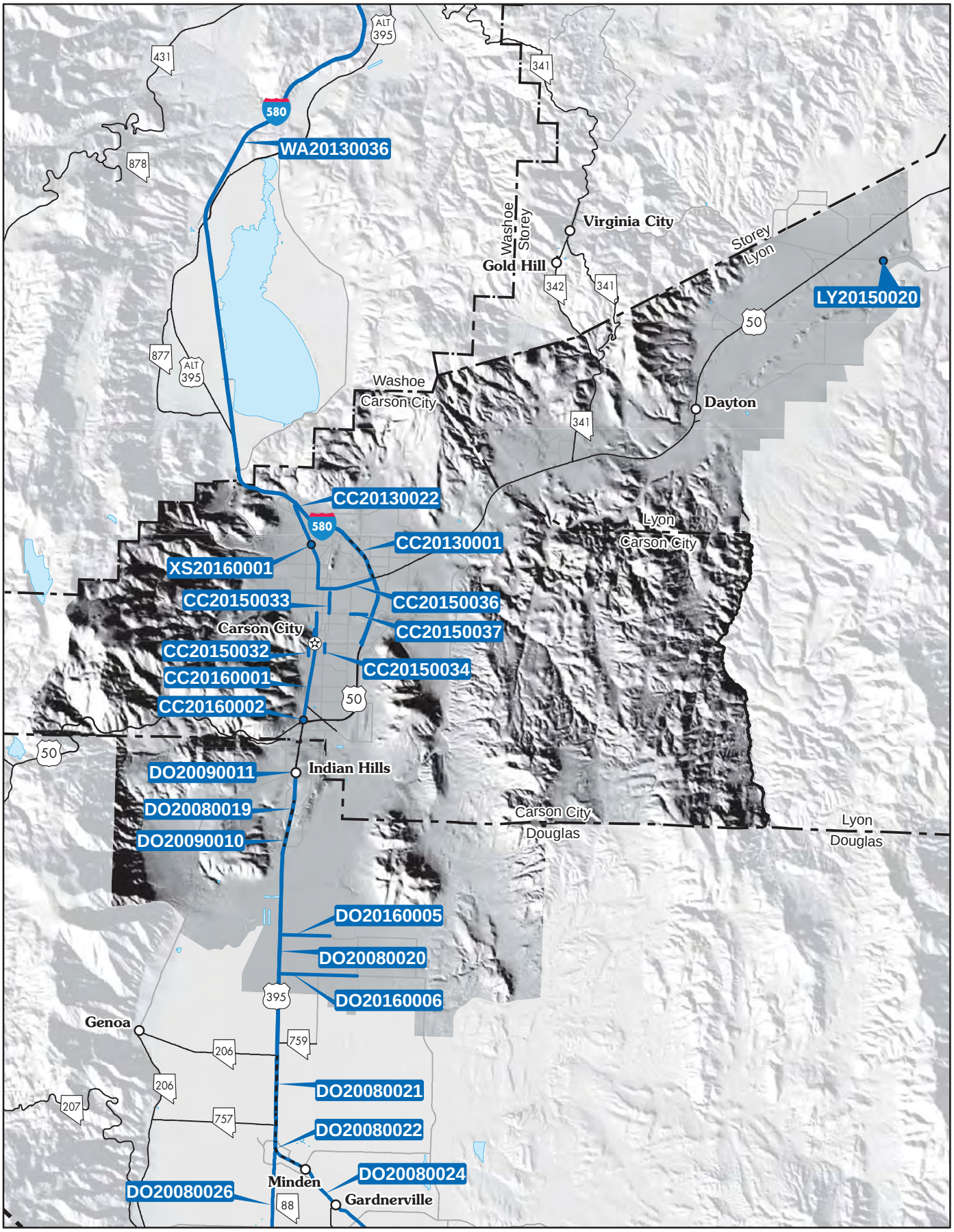
STIP ID	Location/Description (Phase) - Fund Source	PHASE	2018	2019	2020
CC20140017	Title: I 580 Carson City Roadway Rehabilitation Description: Roadway Rehabilitation Location: From Williams Street to .66 Miles South of CC/WA County Line of Distance (mile) 3.24 Milepost begins at 5.25 ends at 8.49 Type: Rd Recons/Rehab/Resurf Funding: FEDERAL, STATE	OTHER	$4,900,000	$0	$0
CC20160004	Title: Sierra Vista Lane FLAP Grant Description: The project will reconstruct a 2.5 mile portion of Sierra Vista Lane and provide improved parking areas with way finding signs to improve recreational access for visitors to Federal lands. The Sierra Vista Lane transportation facility provides access to two recreational destinations, the Carson River and the Pine Nut Mountains. Location: From Pinion Hills to Rio Vista Lane of Distance (mile) 2.5 Type: Rd Recons/Rehab/Resurf Funding: FEDERAL, LOCAL	CON	$4,239,000	$0	$0
CC20150004	Title: Jump Around Carson (JAC) Transit Service Description: Continued Operations of Fixed Route & Paratransit Services Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$828,000	$852,000	$0
CC20160005	Title: Fairview Maintenace Station Description: Site Prep Location: Nearest Crossstreet: Fairview Type: Betterments Funding: STATE	CON	$300,000	$0	$0
CC20150010	Title: Vehicle Purchase for Public Transit Service - Carson City Description: Two (2) Buses for Carson City JAC Assist service Location: Not Location Specific Type: Transit-Capital & Rehab Funding: FEDERAL, LOCAL	OTHER	$270,000	$0	$0

STIP ID	Location/Description (Phase) - Fund Source	PHASE	2018	2019	2020
CC20160006	Title: I 580 B-2291 Southbound Kings Canyon Creek Description: Grind concrete deck and approach slabs, clean relief and expansion joints drop inlets. Repair open incipient spalls and delaminations, overlay bridge deck and approach slab wearing surfaces with multi layer polymer concrete overlay. Location: Bridge #: B-2291 S Type: Betterments Funding: STATE	CON	$248,645	$0	$0
CC20160014	Title: I 580 Bridge Maintenance B-2291 North Kings Canyon Creek Description: Grind concrete deck and approach slabs, clean relief and expansion joints drop inlets. Repair open incipient spalls and delaminations, overlay bridge deck and approach slab wearing surfaces with multi layer polymer concrete overlay. Location: Bridge #: B-2291 N Type: Betterments Funding: STATE	CON	$248,645	$0	$0
CC20160013	Title: I 580 Bridge Maintenance I-2300 North Carson Street Description: Repair open incipient spalls and delaminations. Clean relief and expansion joints. Replace the bridge deck, approach slab and asphalt approach wearing surfaces with multi layer polymer concrete overlay. Location: Bridge #: I-2300 Type: Betterments Funding: STATE	CON	$244,246	$0	$0
CC20160007	Title: I 580 Bridge Maintenance I-2299 Arrowhead Drive Description: Repair open incipient spalls and delaminations. Clean relief and expansion joints. Repair southbound barrier rail, replace the bridge deck, approach slab and asphalt approach wearing surfaces with multi layer polymer concrete overlay. Location: Bridge #: I-2299 Type: Betterments Funding: STATE	CON	$236,018	$0	$0
CC20150011	Title: Preventive Maintenance Description: Capital Cost of Preventive Maintenance Location: Not Location Specific Type: Transit-Maintenance Funding: FEDERAL, LOCAL	OTHER	$156,000	$156,000	$0

STIP ID	Location/Description (Phase) - Fund Source	PHASE	2018	2019	2020
CC20150024	Title: Capital Cost of Contracting for Public Transit Service -- Carson City Description: Capital Cost of Enhanced Mobility for Seniors and Individuals with Disabilities Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$118,750	$118,750	$0
CC20150006	Title: RTC INTERCITY Transit Service: Reno to Carson City Description: RTC INTERCITY Operations within CAMPO Boundary, Commuter Service - M-F Location: Not Location Specific Type: Transit -Operating Funding: FEDERAL, LOCAL	OTHER	$43,000	$45,000	$0
CC20130027	Title: Transit Security Description: Security improvements on buses and bus facilities Location: Not Location Specific Type: Transit - Other Funding: FEDERAL, LOCAL	OTHER	$13,113	$14,000	$0
CC20150022	Title: Vehicle Purchase for Public Transit Service - Carson City Description: Three (3) buses for Carson City JAC fixed route service Location: Not Location Specific Type: Transit-Capital & Rehab Funding: FEDERAL, LOCAL	OTHER	$0	$1,111,000	$0
CC20160008	Title: US 395 Bridge Maintenance H-2298 Northgate Description: Repair open incipient spalls and delaminations. clean relief joints and expansions. Replace the bridge deck, approach slab and asphalt approach wearing surfaces with multi layer polymer concrete overlay. Location: Bridge #: H-2298 Type: Betterments Funding: STATE	CON	$0	$238,477	$0
CC20150023	Title: Purchase of Bus Stop Amenities Description: Purchase/install bus shelters and benches at transit stops Location: Various Locations Type: Transit-Capital & Rehab Funding: FEDERAL, LOCAL	OTHER	$0	$30,000	$0

STIP ID	Location/Description (Phase) - Fund Source	PHASE	2018	2019	2020
XS20150003	Title: Carson River Multi-Use Path Description: River Corridor multi-use trail feasibility analysis and preliminary design Location: Carson River Multi-Use Path from Deer Run Road to Santa Maria Park of Distance (mile) 4.5 Type: Bicycle & Pedestrian Funding: LOCAL	OTHER	$150,000	$0	$0
LY20160006	Title: SR 822 Bridge Maintenance B-637 Carson River Description: Repair open incipient spalls and delaminations and place a thin bonded multi layer concrete overlay on the bridge deck and approach slab wearing surfaces. Remove and replace all relief joint seals and miscellaneous tree trimming. Location: Bridge #: B-637 Type: Betterments Funding: STATE	CON	$0	$248,236	$0
	TOTAL		$11,995,417	$2,813,463	$0

CAMPO FY21+ Long Range Work Program



Prepared by:
Nevada Department of Transporation
May, 2016

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FISCAL YEAR >=2021 PROPOSED CAMPO MPO WORK PROGRAM REPORT

STIP ID	Location/Description (Phase) - Fund Source	PHASE	>=2021
CC20160002	Title: Carson City Freeway Interchange Description: South Carson Street interchange to complete four lane controlled access freeway. Location: Primary Interchange: South Carson Street, Secondary Interchange: US 50 Type: Rd Interchange/ Intersection Funding:	PE	$30,000,000
CC20150036	Title: William Street Corridor Improvements Description: Implement road diet on William Street from Freeway Interchange to Carson Street, construct/widen sidewalks, add bike lanes and streetscape improvements. Location: From Carson Street to Carson City Freeway Interchange of Distance (mile) 1.35 Type: Rd Improvement Funding: LOCAL	PE	$17,000,000
CC20150035	Title: Carson Street Road Diet Description: Implement road diet on downtown Carson Street (reduce by one lane in each direction), add center turn lane, add bike lanes, widen sidewalks, construct hard and soft street amenities. Location: From William Street to Fifth Street of Distance (mile) 0.6 Type: Rd Improvement Funding: LOCAL	PE	$11,388,776
CC20150038	Title: Lompa Ranch N/S Connector Description: New road connecting William Street to Fifth Street through future Lompa Ranch Development. Location: From William Street to Fifth Street of Distance (mile) 0.7 Type: Rd New Construction Funding: UNKNOWN	PE	$7,200,000
CC20130001	Title: I 580 Fairview Intg to College Pkwy Intg ITS-FUTURE PROJECT Description: Install ITS infrastructure Location: From Fairview Dr Intg to College Pkwy Intg of Distance (mile) 3.08 Milepost begins at 3.15 ends at 6.23 Type: ITS/system Efficiency Funding: UNKNOWN	CON	$7,000,000

STIP ID	Location/Description (Phase) - Fund Source	PHASE	>=2021
CC20160001	Title: South Carson Street Corridor Improvements Description: Implement Complete Street design concepts including road diet, ADA improvements, improved lighting, bike facilities, and landscaping. Location: From 5th Street to Spooner Interchange of Distance (mile) 2.8 Type: Rd Improvement Funding: LOCAL	PE	$6,100,000
CC20130022	Title: I 580 Fairview Dr to US 395 ITS-FUTURE PROJECT Description: Install ITS infrastructure - WC Pkg 3 Location: From Fairview Dr Intg to US 395 of Distance (mile) 4.81 Milepost begins at 3.15 ends at 7.96 Type: ITS/system Efficiency Funding: UNKNOWN	CON	$4,280,000
CC20150039	Title: Robinson Street Extension Description: Extend Robinson Street east to connect with future N/S connector in Lompa Ranch Development. Location: From Robinson Street to Lompa Ranch Connector of Distance (mile) 0.4 Type: Rd Expansion Funding: UNKNOWN	PE	$3,400,000
CC20150041	Title: Snyder Avenue Realignment Description: Realign Snyder Avenue to connect to Appion Way east of Carson Street and install traffic signal. Location: From Carson Street to Appion Way of Distance (mile) .18 Type: Rd Interchange/ Intersection Funding: UNKNOWN	PE	$2,900,000
CC20150033	Title: Roop Street Widening Description: Widen Roop Street to 4 lanes from Washington Street to Fifth Street, add bike lanes. Location: From Washington Street to Fifth Street of Distance (mile) 0.5 Type: Rd Expansion Funding: LOCAL	PE	$2,700,000
CC20150032	Title: Curry Street Improvements Description: Improve Curry Street between Rhodes Street and Lake Glen Drive, construct sidewalk and bike lanes. Location: From Rhodes Street to Lake Glen Drive of Distance (mile) 0.7 Type: Rd Improvement Funding: LOCAL	PE	$2,400,000

FISCAL YEAR >=2021 PROPOSED CAMPO MPO WORK PROGRAM REPORT

STIP ID	Location/Description (Phase) - Fund Source	PHASE	>=2021
XS20160001	Title: North Carson Street Corridor Improvements Description: Implement complete streets design concepts including ADA improvements, traffic calming, improved lighting, and landscaping. Location: From Freeway Interchange to William Street of Distance (mile) 2.3 Type: Rd Improvement Funding: LOCAL	PE	$1,500,000
CC20150037	Title: Fifth Street Widening Description: Widen Fifth Street to 4 lanes from Saliman Road to Lompa Ranch Development connection. Location: From Saliman Road to Lompa Ranch Development of Distance (mile) 0.3 Type: Rd Expansion Funding: UNKNOWN	PE	$1,300,000
CC20150034	Title: Saliman Road Widening Description: Widen Saliman Road from Fairview Drive to Colorado Street, add bike lanes. Location: From Fairview Drive to Colorado Street of Distance (mile) .25 Type: Rd Expansion Funding: LOCAL	PE	$1,200,000
CC20150042	Title: College Parkway - Arrowhead Drive Connection Description: Construct a new road to connect College Parkway to Arrowhead Drive east of Carson City Airport. Location: From College Parkway to Arrowhead Drive of Distance (mile) .55 Type: Rd New Construction Funding: UNKNOWN	PE	$1,200,000
CC20150043	Title: Ormsby Blvd. Extension Description: Extend Ormsby Blvd. between Ash Canyon Road and Winnie Lane Location: From Ash Canyon Road to Winnie Lane of Distance (mile) .45 Type: Rd Expansion Funding: UNKNOWN	PE	$1,100,000

STIP ID	Location/Description (Phase) - Fund Source	PHASE	>=2021
CC20150040	Title: Hillview Drive Extension Description: Extend Hillview Drive between Koontz Lane and Valley View Drive Location: From Koontz Lane to Valley View Drive of Distance (mile) .12 Type: Rd Expansion Funding: UNKNOWN	PE	$300,000
DO20080020	Title: US 395 Johnson Ln to Plymouth Dr Build Four Lane Freeway-FUTURE PROJECT Description: Build four lane freeway, with one lane one way frontage roads on each side with overpass and interchange Location: From Johnson Ln to Plymouth Dr of Distance (mile) 3.00 Milepost begins at 28 ends at 31 Type: Rd Expansion Funding: UNKNOWN	CON	$73,000,000
DO20080019	Title: US 395 Plymouth Dr to Jacks Valley Rd Widening-FUTURE PROJECT Description: Build four lane freeway, with one lane one way frontage roads on each side with overpass and interchange Location: From Plymouth Dr to Jacks Valley Rd of Distance (mile) 2.00 Milepost begins at 31 ends at 33 Type: Rd Expansion Funding: UNKNOWN	CON	$65,000,000
DO20160004	Title: East Valley Road Connection Description: New alignment from Fremont Street to Vicky Lane Location: From Fremont Street to Vicky Lane of Distance (mile) 2.5 Type: Rd New Construction Funding: UNKNOWN	PE	$15,900,000
DO20160006	Title: Johnson Lane Widening Description: Widen Johnson Lane from 2 lanes to 4 lanes from US 395 to Vicky Lane Location: From US 395 to Vicky Lane of Distance (mile) 2 Type: Rd Expansion Funding: UNKNOWN	PE	$15,700,000
DO20160005	Title: Stephanie Way Widening Description: Widen Stephanie Way from two lanes to four lanes from US 395 to Santa Barbara Drive. Location: From US 395 to Santa Barbara Drive of Distance (mile) .3 Type: Rd Expansion Funding: UNKNOWN	PE	$9,400,000

FISCAL YEAR >=2021 PROPOSED CAMPO MPO WORK PROGRAM REPORT

STIP ID	Location/Description (Phase) - Fund Source	PHASE	>=2021
DO20160001	Title: North Valley Road Description: Construct a new two lane road from Topsy Lane south to new development. Location: From Topsy Lane to New Development of Distance (mile) .5 Type: Rd New Construction Funding: UNKNOWN	PE	$6,100,000
DO20160003	Title: Heybourne Road Extension Description: Extend Heybourne Road from Stephanie Way to Johnson Lane Location: From Stephanie Way to Johnson Lane of Distance (mile) 1 Type: Rd Expansion Funding: UNKNOWN	PE	$6,000,000
DO20160002	Title: Vista Grande Boulevard Extension Description: Extend Vista Grande Boulevard from Topsy Lane to Jacks Valley Road Location: From Topsy Lane to Jacks Valley Road of Distance (mile) .6 Type: Rd Expansion Funding: UNKNOWN	PE	$3,000,000
DO20090010	Title: US 395 Mica Dr to Sunridge Truck Climbing Lane-FUTURE PROJECT Description: Construct truck climbing lane Location: From Mica Dr to Sunridge Dr of Distance (mile) 1.00 Milepost begins at 32 ends at 33 Type: Rd Expansion Funding: UNKNOWN	CON	$2,000,000
DO20090011	Title: US 395 South Bound at Jacks Valley Rd Third Through Lane-FUTURE PROJECT Description: Construct third through lane Location: Nearest Crossstreet: Jacks Valley Rd DO 33.17 Type: Rd Expansion Funding: UNKNOWN	CON	$2,000,000
LY20150020	Title: Dayton Valley Carson River Bridge Description: Construct a new bridge from Dayton Valley Road to Chaves Road over the Carson River Location: Bridge #: 2 Type: Bridge - New/replace Funding: LOCAL	PE	$12,000,000
		TOTAL	$311,068,776

Thank you for allowing the
Nevada Department of Transportation to
engage with the Board, Staff
and citizens of CAMPO.

Carson Area Metropolitan Planning Organization
C A M P O

STAFF REPORT

Report To: The Carson Area Metropolitan Planning Organization **Meeting Date:** July 13, 2016

Staff Contact: Graham Dollarhide, Transit Coordinator

Agenda Title: (For Possible Action) To approve the proposed Disadvantaged Business Enterprise (DBE) goal and goal-setting methodology for Federal Fiscal Years 2017-19 (October 1, 2016 – September 30, 2019); and direct staff to submit the goal to the Federal Transit Administration (FTA) for review and approval by the August 1, 2016 deadline.

Staff Summary: In compliance with 49 C.F.R. 26, staff has developed a DBE goal for the next three-year Federal Fiscal Year term. The methodology used, which included consultation with regional stakeholders and a refining of the base figure, resulted in a proposed goal of 0.13% for the period October 1, 2016 – September 30, 2019. Comments received during the consultation process supported this proposed goal.

Agenda Action: Formal Action/Motion **Time Requested:** 10 minutes

---

Proposed Motion – I move to approve the proposed Disadvantaged Business Enterprise (DBE) goal and goal-setting methodology for Federal Fiscal Years 2017-19 (October 1, 2016 – September 30, 2019); and direct staff to submit the goal to the Federal Transit Administration (FTA) for review and approval by the August 1, 2016 deadline.

Background/Issues & Analysis – CAMPO is required to submit a DBE goal and goal setting methodology to the Federal Transit Administration (FTA) once every three years. The current DBE goal expires on September 30, 2016, and a new DBE goal for the subsequent three-year period must be submitted to FTA for review by August 1, 2016.

The proposed DBE goal captures, as completely and accurately as possible, all of the FTA-assisted contracting opportunities CAMPO reasonably anticipates having over the three upcoming federal fiscal years. Should CAMPO's contracting opportunities unexpectedly increase or significantly change during the three-year period, CAMPO shall amend the goal in order to ensure the program as a whole is narrowly tailored and accurately reflects the actual contracting opportunities available during the specified time period.

In compliance with DBE program requirements, CAMPO published a Public Notice in the Nevada Appeal on May 24, 2016 announcing the proposed DBE goal, and allowing for a 30-day inspection period (expired June 23, 2016) and 45-day comment period (expired July 8, 2016). CAMPO staff also undertook a consultation process with area individuals, firms and organizations seeking information regarding DBEs. The questions posed, and a summary of input received are included as attachments in the proposed DBE goal document.

Applicable Statute, Code, Policy, Rule or Regulation - 49 C.F.R. 26

Financial Information
Is there a fiscal impact? ☐ Yes ☒ No

If yes, account name/number:

Is it currently budgeted? ☐ Yes ☒ No

Explanation of Fiscal Impact: N/A

Alternatives – N/A

Supporting Material – Draft CAMPO DBE Goal FFY 2017-19

Board Action Taken:

Motion: _____ 1) _____ Aye/Nay
2) _____ _____
_____
_____
_____
_____
_____

_____
(Vote Recorded By)

Carson Area
Metropolitan Planning Organization
C A M P O

Disadvantaged Business Enterprise Program Goal for Federal Transit Administration Section 5307 Funds

Federal Fiscal Years 2017-2019
(October 1, 2016 – September 30, 2019)

Proposed DBE Goal: 0.13%

Recipient: Carson Area Metropolitan Planning Organization (CAMPO)

Preparer: Graham Dollarhide, Transit Coordinator, DBE Liaison Officer

Phone: (775) 283-7583

Goal Period: October 1, 2016 – September 30, 2019

GOAL METHODOLOGY

The CAMPO DBE goal is established and submitted to the Federal Transit Administration (FTA) on a triennial basis.

The race neutral goal for Federal Fiscal Year (FFY) 2017-2019 has been set at 0.13%. This goal is expressed as a percentage of all FTA funds (exclusive of FTA funds to be used for the purchase of transit vehicles) that CAMPO anticipates expending on DBE firms in FTA-assisted contracts in the three forthcoming fiscal years. The total annual FTA funding available to CAMPO, is established in the FAST Act, and is anticipated to be approximately:

- $979,702 in FY 2017
- $1,000,374 in FY 2018
- $1,021,682 in FY 2019

The relevant geographic market for contractors that could reasonably be expected to be used on projects initiated by CAMPO has been determined to be Carson City, Douglas County, Storey County, Lyon County and Washoe County, in the State of Nevada.

The methodology for setting the overall goal is as follows.

49 CFR Part 26, § 26.45(b) states that:

"Your overall goal must be based on demonstrable evidence of the availability of ready, willing and able DBEs relative to all businesses ready, willing and able to participate on your DOT-assisted contracts (hereafter, the "relative availability of DBEs"). The goal must reflect your determination of the level of DBE participation you would expect absent the effects of discrimination. You cannot simply rely on either the 10 percent national goal, your previous overall goal or past DBE participation rates in your program without reference to the relative availability of DBEs in your market."

Further, § 26.45 provides for a two-step process, consisting of the following:

Step 1 – Determine a base figure for the relative availability of DBEs

CAMPO has elected to use the methodology described in § 26.45(c)(1) to determine the base figure for the relative availability of DBEs. CAMPO will be using the Nevada Unified Certification Program DBE Directory, posted on the Nevada Department of Transportation website, and the Census Bureau's County Business Patterns to determine the number of ready, willing and able DBEs in the CAMPO market. Based on the type of projects CAMPO proposes to complete, the 6-digit North American Industry Classification System (NAICS) code will be determined using the Census Bureau's NAICS page.

CAMPO uses staff to oversee transit operations, and City resources—including buses, facilities and administrative and maintenance services—to support the transit service; and a contract operator to operate the service. Additionally, CAMPO may regularly undertake other projects intended to enhance the transit service. Potential contracting opportunities for FFY 2017-2019 are as follows:

- Operating Service Contract
- Transit Facility Upgrade (Fueling Station Construction/Installation)
- Transit Facility Demolition/Renovation
- Rehabilitation/Renovation of Pedestrian Access/Walkways

The trade classifications expected to be used for these projects over the three-year period are as follows:

Table 1 - Anticipated Project Expenditures by Trade Classification, FFY 2017-2019

Project	Dollar Amount	NAICS Code	NAICS Code Corresponding Description/Index Entry
Operating Service Contract	$2,483,000	485113	Bus and Other Motor Vehicle Transit Systems
Transit Facility Upgrade (Fueling Station Construction/Installation)	$50,000	237120	Oil and Gas Pipeline and Related Structures Construction
Transit Facility Demolition/Renovation	$100,000	236220	Commercial and Institutional Building Construction
Transit Facility Demolition/Renovation	$50,000	238910	Site Preparation Contractors
Rehabilitation/Renovation of Pedestrian Access/Walkways	$100,000	237310	Sidewalk, public, construction
Total	$2,783,000		

DBE availability has been determined by utilizing the Census Bureau 2014 County Business Patterns (CBP) at http://www.census.gov/econ/cbp/ and the Nevada Unified Certification Program (UCP) DBE Directory at http://nevadadbe.com/dbe-vendors. Census and Directory information was extracted for the trades listed above.

The DBE availability calculations are as follows:

Table 2 - DBE Availability Percentages

% OF DBE FIRMS VS. ALL FIRMS				
NAICS Code Corresponding Description/Index Entry	NAICS Code	Census # of Firms	Directory # of Firms	*DBE %
Bus and Other Motor Vehicle Transit Systems	485113	1	0	0.00%
Oil and Gas Pipeline and Related Structures Construction	237120	2	0	0.00%
Commercial and Institutional Building Construction	236220	86	2	2.33%
Site Preparation Contractors	238910	87	2	2.30%
Sidewalk, public, construction	237310	19	0	0.00%

* Percentage obtained by dividing Directory # of Firms by Census # of Firms.

Based on the information provided in Table 2, CAMPO's Step One Base Figure proposed goal would be 4.63% for FFY 2017-2019. However, this number has been refined in order to obtain a more accurate goal calculation, resulting in a final proposed goal of 0.13%. The process used for this was a weighting system that was applied to the Step One Base Figure based on the percentage of contract dollars spent under each NAICS code, with this same percentage applied to the relative availability of DBE firms.

The formula used is as follows:

[(2,483,000/2,783,000)(0/1) + (50,000/2,783,000)(0/2) +
(100,000/2,783,000)(2/86) + (50,000/2,783,000)(2/87) +
(100,000/2,783,000)(0/19)] x 100 = Step One Base Figure, weighted by type of work to be performed

=

[.89(.0000) + .02(.0000) + .035(.0233) + .02(.0230) + .035(.0000)] x 100

=

(.0000 + .0000 + .0008 + .0005 + .0000) x 100

=

.0013 x 100

=

0.13%

Step 2 – Examine data to determine what adjustment, if any, is needed to the Base Figure.

In compliance with § 26.45(d) and § 26.45(g)(1), CAMPO has reached out to officials and organizations which could be expected to have information concerning the availability of disadvantaged and non-disadvantaged businesses, the effects of discrimination on opportunities for DBEs, and efforts to be made to establish a level playing field for the participation of DBEs. Those solicited for comment included trade organizations, small and minority business development/advocacy groups, chambers of commerce, and DBE and non-DBE firms.

The overall goal submission to the FTA includes a summary of information and comments received during this consultation process, and during the public participation process, which is included in Appendix B of this document. A blank questionnaire that was provided to prospective respondents during the consultation process is included as Attachment A. No comments from the public were received during the public comment period, thus Appendix B includes only a summary of comments received during the consultation process, as completed by the DBE Liaison using the questionnaire provided during the consultation process. The DBE Liaison also encouraged those consulted (during verbal discussions) to review, and later comment on the draft DBE Goal document.

As a result of the public participation and consultation processes, CAMPO has determined that the base figure DBE goal established in Step 1 of this document is fair and accurate. While there was one comment received indicating that DBE goals in the area were not high enough, and another indicating that a DBE goal of 5% or more should be attainable, these comments were not directed specifically toward CAMPO's proposed DBE goal, methodology, or circumstances and did not include any backup documentation. Therefore, a DBE goal of 0.13% as determined by the methodology described above is appropriate.

RACE-NEUTRAL VS. RACE-CONSCIOUS GOAL

In keeping with the Ninth Circuit Court of Appeals decision in *Western States Paving v. Washington State Department of Transportation*, CAMPO proposes to set all goals as race-neutral for this goal period. Race-neutral DBE participation includes any time a DBE wins a prime contract through customary competitive procurement procedures; is awarded a subcontract on a prime contract that does not carry a DBE requirement; or even if there is a DBE requirement, wins a subcontract from a prime contractor that did not consider its DBE status in making the award (e.g., a prime contractor that uses a strict low bid system to award subcontracts).

PUBLIC NOTICE

The following public notice was published in the Nevada Appeal, a local newspaper of general circulation, on May 24, 2016; as well as the May 25, 2016 issue of the Record-Courier, another local newspaper of general circulation:

PUBLIC NOTICE
CARSON AREA METROPOLITAN PLANNING ORGANIZATION
FFY 2017-2019 DISADVANTAGED BUSINESS ENTERPRISE GOAL

The Carson Area Metropolitan Planning Organization (CAMPO) announces its proposed FFY 2017-2019 goal of 0.13% for Disadvantaged Business Enterprise (DBE) participation in applicable federally funded contracts. The proposed goal methodology are available for review by appointment during normal business hours at the CAMPO office for 30 days from the date of this notice. CAMPO will accept comments on the goal for 45 days from the date of this notice. CAMPO has also initiated a consultation process for firms, DBE or non-DBE, to provide input on development and assessment of the proposed goal and methodology, the availability of DBEs and non-DBEs, and the effects of discrimination on opportunities for DBEs.

Comments may be submitted via U.S. Postal Service or electronically to:

Graham Dollarhide
DBE Liaison Officer
CAMPO
3505 Butti Way
Carson City, NV 89701
Phone: 775-283-7583
Fax: 775-887-2112
gdollarhide@carson.org

Appendix A

Carson Area Metropolitan Planning Organization (CAMPO) DBE Goal Update Consultation Questionnaire

The Carson Area Metropolitan Planning Organization (CAMPO) is in the process of updating its Disadvantaged Business Enterprise (DBE) goal for the period Federal Fiscal Year (FFY) 2017 – 2019. Federal regulation at 49 C.F.R. 26.45(g) states that the DBE goal setting process must include consultation with minority, women's and general contractor groups, community organizations, and other officials or organizations which could be expected to have information concerning the availability of DBEs and non-DBEs. This consultation process must also be used to gather information concerning the effects of discrimination on opportunities for DBEs, if present, and to establish a level playing field for the participation of DBEs. This consultation process must include communication with individuals or groups of interested persons for the purpose of developing and/or assessing a proposed goal and methodology and for seeking information or advice before a decision is made.

As such, CAMPO has identified groups within its contracting market that are likely to have information relevant to the goal setting process or that have a stake in the outcome of the process. In order to better shape its DBE program, overall goal, and methodology, CAMPO is seeking information and input on the following topics:

Individual Work/Trade/Professional Service Areas: Are there individual work, trade or professional service areas in which it is difficult to find DBE firms to participate? Are there any work areas in which DBE firms feel there is not enough opportunity?

_____
_____
_____
_____
_____

Individual Projects: Are there individual projects that were especially difficult to meet the local DBE goal or to find DBE firms to participate? Were there projects that could have or should have been "unbundled" to accommodate more participation by DBEs?

_____
_____
_____
_____
_____

Certification: Is the certification process too onerous for firms to go through? Are small businesses aware of the availability of the certification and how to become a certified DBE? Are there few/some/many firms that are not currently DBEs that could potentially become certified DBEs? What are some reasons firms may not want to become certified?

_____
_____
_____
_____
_____

Appendix A

Barriers: What types of barriers (actual or perceived) are there with regards to doing business with public agencies? Please describe your experience with learning about prime and sub contract opportunities, restrictive contract specifications, getting paid on work performed, unfair treatment or discrimination, unfavorable work environments, bid shopping, etc.

_____
_____
_____
_____
_____

General: What sort of discrimination, if any, is present, and what are the effects of this discrimination? What can be done to help establish a level playing field for the participation of DBEs? What can CAMPO add, remove or change with regards to its proposed FFY2017-19 DBE goal?

_____
_____
_____
_____
_____

Please provide any additional comments you may have:

_____
_____
_____
_____
_____

Name of Firm: _____
Address: _____
Contact Person: _____
Phone: _____
Email: _____
DBE Certifications (include dates): _____
Type of work done by firm (include NAICS codes, if known): _____
_____

Please remit this information to:

Graham Dollarhide
DBE Liaison Officer
775-283-7583
gdollarhide@carson.org
Carson Area Metropolitan Planning Organization
3505 Butti Way
Carson City, Nevada 89701

Your participation in this effort is appreciated and will help establish realistic DBE goals for future CAMPO projects.

Appendix B

Consultation Process Responses
As Summarized by CAMPO DBE Liaison Officer

Question: Individual Work/Trade/Professional Service Areas: Are there individual work, trade or professional service areas in which it is difficult to find DBE firms to participate? Are there any work areas in which DBE firms feel there is not enough opportunity?

Staff Summary: The general feeling is that there are certainly fields in which it is still difficult to find DBE firms to participate. The trucking and asphalt fields are relatively easy to get DBE participation, and DBEs specializing in signage, striping, or guard rail installation can find plenty of work. Outside of these fields, it can be very difficult or even impossible to find available DBE firms. Many contracts include work for the same type of projects over and over again, so DBEs in certain fields (outside the scope of those projects) are rarely needed or solicited. DBEs in fields where work is commonly available only find it difficult to participate when the economy is down and having an impact on all businesses, and not as a result of their DBE status.

Question: Individual Projects: Are there individual projects that were especially difficult to meet the local DBE goal or to find DBE firms to participate? Were there projects that could have or should have been “unbundled” to accommodate more participation by DBEs?

Staff Summary: Projects that had DBE goals of 5% or more were particularly difficult to meet, according to prime contractors, especially if the prime had no need for trucking or asphalt supply subcontractors. Although more and more firms have attained DBE status, it can still be challenging (for primes) to find DBEs to participate due to a lack of interest (primes will commonly refer small firms to apply for DBE status so that it is easier for the primes to meet DBE goals). From the DBE perspective, most of the projects available are in construction, so if you do not do that kind of work then there is little opportunity to participate.

Question: Certification: Is the certification process too onerous for firms to go through? Are small businesses aware of the availability of the certification and how to become a certified DBE? Are there few/some/many firms that are not currently DBEs that could potentially become certified DBEs? What are some reasons firms may not want to become certified?

Summary: It seems that many small companies aren't aware of the DBE program; it is not common to see new ones come available, and primes are forced to deal with the same DBEs year after year. The general sentiment is that the process is not too difficult, and is becoming more streamlined and less onerous, while at the same time increasing the level of scrutiny in order to verify the authenticity of the firm and its ability to attain true DBE status. There is some feeling that the program hinders small business and that there is too much regulation. The word is getting out, however slowly that may be, as larger firms, trade associations, and business development agencies continue to provide notice to smaller firms. However, some firms choose not to apply for DBE certification due to a number of factors, including a lack of understanding of the concept and/or benefits of the DBE program, an aversion to the term "disadvantaged," or a simple lack of interest in the program. One DBE noted that they receive many solicitations from prime contractors in the state of California, but that it is more difficult to become DBE certified there.

Appendix B

Question: Barriers: What types of barriers (actual or perceived) are there with regards to doing business with public agencies? Please describe your experience with learning about prime and sub contract opportunities, restrictive contract specifications, getting paid on work performed, unfair treatment or discrimination, unfavorable work environments, bid shopping, etc.

Staff Summary: Typically, contracts that have federal funding have a lot more documentation, which can be discouraging or intimidating to small companies. Additionally, it is more difficult for DBEs to participate on CMAR contracts due to their limited resources, not because of their DBE status. It is also difficult for small firms to mobilize to get to rural areas, which prevents them from bidding on contracts outside of their immediate area. There is added time and expense to businesses of all sizes with contracts with a DBE goal. From the DBE perspective, primes can show a tendency to be selective in hiring of DBEs to meet the established goal (going "back to the well," due to familiarity or convenience). It has been noted by primes and subs alike that it is not uncommon to have trouble obtaining payment for work performed, and one prime even suggested that payments by the public agency to the prime should be made twice per month so that they can in turn pay their subs in a timely fashion. However, it was also noted that this trouble in receiving payment has been changing due to concerted efforts by public agencies to correct this issue. While paperwork may not be a barrier from the DBE perspective, a limiting factor to DBEs may be their own decision-making when it comes to deciding how much effort to put into DBE-related matters.

Question: General: What sort of discrimination, if any, is present, and what are the effects of this discrimination? What can be done to help establish a level playing field for the participation of DBEs? What can CAMPO add, remove or change with regards to its proposed FFY2017-19 DBE goal?

Staff Summary: Overwhelmingly, respondents said that they were not aware of any discrimination, and that all subcontractors are treated equitably. However, one respondent did mention feelings that politics or favoritism may be at play on occasion in southern Nevada (but never in northern Nevada), and had also spoken to the owner of another firm that had felt discriminated against. Another respondent feels that the DBE program actually hinders business (or at least has only a minimal positive impact), and that "the way to create opportunity for all is to have a vibrant, progressive economy, thus everyone prospers. Large and small, more rules, more regulation, more oversight helps large business and hinders small business, including DBE firms."

Question: Please provide any additional comments you may have:

Staff Summary: One firm commented that the proposed DBE goal of 0.13% is reasonable because "there just aren't enough DBE subs and suppliers in northern Nevada." On the contrary, another firm commented that DBE goals are not high enough. Another respondent noted that the latest economic downturn hit the construction industry the hardest, which may help to explain the decline in the total and/or relative number of DBEs, also pointing out that within the Hispanic community, individuals tend to be resourceful but can be reluctant to search for work or expand their business outside of their community due to a lack of familiarity or trust, or due to language or education barriers. Another respondent added that public agencies seem to all be doing their part in providing ample opportunity for DBEs to participate, and that a DBE goal of 5% (as seen on an NDOT project) should be easily attainable, although no documentation was provided to back up this feeling. A DBE noted that primes may be soliciting quotes, even in a circumstance in which they are aware the firm does not have the ability to perform the work, simply to meet the Good Faith Effort requirement, and do not necessarily make finding DBE firms to participate on their contract a top priority. Finally, it was asserted that the DBE program is flawed and does little to advance small business.

STAFF REPORT

Report To: The Carson Area Metropolitan Planning Organization

Meeting Date: July 13, 2016

Staff Contact: Dirk Goering, Senior Transportation Planner

Agenda Title: (Information only) Transportation Alternative Program (TAP) Call for Projects for FY16-FY18.

Staff Summary: To provide information about the Call for Projects for NDOT'S Transportation Alternative Program. Grant applications are due to NDOT July 8, 2016.

Agenda Action: Other/Presentation **Time Requested:** 5 minutes

---

Proposed Motion - N/A

Background/Issues & Analysis

TAP includes two types of eligible projects: transportation infrastructure and non-infrastructure projects. These projects may be part of an existing planned projects or a "stand alone" project and must be publicly accessible 24 hours a day, seven days a week. Applications will be accepted for three years of funding FY16-FY18. There is approximately $2.8 million of funding available for FY16 in three funding categories in population areas less than 5K-200K and statewide.

Applicable Statute, Code, Policy, Rule or Regulation - N/A

Financial Information

Is there a fiscal impact? ☐ Yes ☒ No

If yes, account name/number: N/A

Is it currently budgeted? ☐ Yes ☒ No

Explanation of Fiscal Impact: N/A

Alternatives - N/A

Supporting Material – TAP Application Package

Nevada Transportation Alternatives Program (TAP)/Surface Transportation Program (STP) Set-Aside Guidance for 2016 - 2018 Funding

www.nevadadot.com/tap

Transportation Alternatives Program
Nevada Department of Transportation
1263 S. Stewart Street, Rm 205
Carson City, NV 89712
(775) 888-7124

Crystal Bay Pedestrian Improvements

Table of Contents

I. INTRODUCTION

Background

The Transportation Alternatives Program (TAP)/Surface Transportation Block Grant (STBG) Set-Aside provides federal funds for community based small scale transportation projects. Examples of these projects include: pedestrian and bicycle facilities, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to storm water and habitat connectivity. The Nevada Department of Transportation administers this program and projects are selected through a competitive process utilizing a selection committee.

This guidebook provides the following information:

1. Program Purpose
2. Eligibility requirements
3. Roles and responsibilities for NDOT and the project sponsor
4. Selection process to provide transparency and guidance as projects are developed
5. Application instructions

Authorizing Legislation

The Transportation Alternatives Program was established in 2012 and authorized under section 1122 of MAP-21. This program consolidated three programs from the 2005 Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—Transportation Enhancement (TE) activities, and Safe Routes to School (SRTS). Under MAP-21, Federal law provided for the reservation of funds apportioned to a State under section 104(b) of title 23 to carry out the TAP. The TAP provided funding for programs and projects defined as transportation alternatives.

On December 4, 2015 the Fixing America's Surface Transportation (FAST) Act was enacted and TAP was replaced with the "STP Set-Aside" under the Surface Transportation Block Grant Program and is now called TAP/STP Set-aside. The STP Set-Aside provides funds "for projects or activities described in section 101 (a) (29) or 213." The enactment of the FAST Act made minimal changes to the program.

II. PROGRAM PURPOSE

The purpose of the Nevada Transportation Alternatives Program (TAP) is to create safe, accessible, attractive, and environmentally sensitive communities where people want to live, work, and recreate. The TAP program supports the national goals of the Department of Transportation (DOT) as shown in Table I by completing projects with federal funds that improve non-motorized mobility, historic preservation, scenic accessibility, Safe Routes to School programs, and environmental/vegetation management.

Table I: Relationship of the TAP/STP Set-aside to the Department of Transportation's National Goals

Goal Area	National Goal	TAP Considerations
Safety	To achieve a significant reduction in fatalities and serious injuries on all public roads	Improve safety for all project users
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair	Maintain good to excellent pavement quality on shared-use paths and key bicycle facilities: ensure accessible pedestrian facilities and maintain adequate striping (and width) for on-street bicycle facilities
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System	Reduce vehicle travel by providing non-motorized alternatives
System reliability	To improve the efficiency of the surface transportation system	Expand bicycle infrastructure in congested urban core areas to provide a more reliable alternative to driving and the development of a fully connected network for both bike and pedestrians
Freight movement and economic vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development	Improve non-driver access to jobs, education, services and community amenities
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment	Reduce emissions future construction, land use dedicated to vehicles, and energy use by encouraging non-motorized travel Improve storm water management, vegetation management, and ecological performance of the transportation system

*Established in MAP21(http://www.fhwa.dot.gov/tpm/about/goals.cfm

TAP/STP Set-aside also supports other important local and national priorities such as:

- **Ladders of Opportunity**—Ladders of Opportunity aims to ensure a better quality of life by revitalizing neighborhoods; providing people with safe, reliable, and affordable connections to employment, education, services, and other opportunities; and creating pathways to jobs through improved transportation

connections. TAP-funded projects can make communities more attractive and also provide safe first- and last-mile infrastructure to connect people to jobs and other opportunities.

- **Equity**—Lower-income Americans rely on walking and bicycling to reach public transportation and jobs, yet too often live in neighborhoods with limited access to sidewalks and bikeways. TAP-funded projects can help improve the equity of the transportation system.

- **Health**—TAP/STP Set-aside-funded projects support active transportation and encourage physical activity, helping to improve public health and reduce health care costs.

- **Livability**— TAP/STP Set-aside -funded community improvement activities focused on control of outdoor advertising, historic preservation, archeology, and environmental mitigation can make communities more attractive places to live and work. Pedestrian and bicycle facilities also make important contributions to livability.

- **Connectivity**— TAP/STP Set-aside -funded projects can help fill critical gaps in pedestrian and bicycle infrastructure, providing safe, continuous facilities for local trips and to access longer-distance trips by public transportation.

Most TAP/STP Set-aside projects will contribute to one or more of the goal areas in Table I. These goals areas are included in the TAP scoring criteria shown in Appendices A and B.

III. ELIGIBILITY

Sponsors
Eligible sponsors include:

- Local governments
- Tribal Governments
- Regional Transportation Authorities
- Transit Agencies
- Natural resource or public land agencies
- School Districts, local education agencies, or schools;
- Local or regional governmental entity with responsibility for oversight of transportation or recreational trails that the State determines is eligible
- Nonprofit entities responsible for the administration of local transportation safety programs

If you submit more than one application please make sure your agency has the capacity to deliver these projects within the three year timeframe. If you have any questions regarding sponsor eligibility contact the TAP/STP Set-aside Program Manager.

General responsibilities of the Sponsor

1. Verify eligibility of project sponsor and proposed project. Potential sponsors are encouraged to contact the NDOT Program Manager with any questions regarding eligibility.

2. Complete TAP application in accordance with the Application Process described in Section V of this document.
3. If the sponsor's project is selected attend project kick off meeting to determine appropriate contracts are completed and the project is included in the Statewide Transportation Improvement Program (STIP).
4. Provide monthly updates on project status to NDOT.
5. Attend quarterly project status meetings with NDOT.
6. Ensure projects are completed on time and within budget.
7. Complete a final report that includes scope, before and after photos (not necessarily applicable to non-infrastructure projects), final budget and duration of project. This report will be reviewed by the selection committee.

Activities

There are two broad types of eligible activities:
1) Transportation infrastructure (constructed improvements); and
2) Non-infrastructure projects (efforts related to Education, Encouragement, Enforcement and Evaluation) that effect kindergarten (K) through eighth (8th) grade students. Each of these project categories will be evaluated with unique scoring and ranking criteria shown in Appendices A and B. Additional TAP STP Set-aside Guidelines and Selection Criteria's shown in Appendix C. Additional information Appendix's D – H. The following is a list of potential projects eligible for TAP funds:

Transportation Infrastructure:

Construction of scenic overlooks, vehicle turnouts and viewing areas - Communities develop the scenic and historic character of highways. These projects make the travel experience educational and attract tourists to local roads.

Scenic Beautification- Projects such as streetscape, corridor landscaping, junkyard screening and removal may be eligible.

Traffic calming improvements related to improving the roadway environment for non-motorized users. This may include speed humps, chicanes, speed tables, raised intersections, chokers, closures, road reconfiguration, neighborhood traffic circles, etc. Traffic calming can result in:

- slower motor vehicle speeds
- reduce collision frequency/severity
- reduced cut-through traffic
- increased safety for all modes
- reduced need for law enforcement
- calmer street environments, and
- increased access for all transportation modes.

Inventory, control, or removal of outdoor advertising - This category includes billboard inventories and removal of illegal and nonconforming billboards. Inventory control may include, but not be limited to,

data collection, acquisition and maintenance of digital aerial photography, video logging, scanning and imaging of data, developing and maintaining an inventory and control database, and hiring of outside legal counsel.

Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways

Historic preservation and rehabilitation of historic transportation facilities –This category includes the preservation of buildings and facades in historic districts; restoration of historic buildings for transportation-related purposes; and access improvements to historic sites, as well as restoration of railroad depots, bus stations and lighthouses; rehabilitation of rail trestles, tunnels, bridges and canals.

Archaeological Planning and Research - This category is limited to research on sites relating to impacts from implementation of a transportation project eligible under United States Code of Federal Regulations Title 23 – Highways. This category is not for routine excavations.

Archaeological activities relating to impacts from implementation of a transportation project are eligible.

Vegetation Management - Vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control.

Environmental mitigation activities, including pollution prevention and pollution abatement activities and mitigation to:

- address storm water management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff, including activities described in 23 U.S.C. 133(b)(11), 328(a), and 329; or
- reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.

Bicycle Facilities - may include facilities such as; separated share-use paths, bicycle lanes, signage on bicycle boulevards, pavement markings and colorings, innovative treatments, and bicycle network gap closures. Also eligible are; bicycle parking racks, bicycle lockers, designated areas with safety lighting, and covered bicycle shelters, and projects related to making bicycling a safer and more appealing alternative for non-drivers.

On all bicycle facility projects proponents are encouraged to develop projects using available applicable guidance (i.e. American Association of State Highway Transportation Officials (AASHTO), National Association of City Transportation Officials (NACTO), Institution of Transportation Engineers (ITE), etc.)

Pedestrian Facilities-such as bulb-out crossings, sidewalks, raised crosswalks, raised intersections, median refuges, pedestrian signals, lighting, enhanced mid-block crossings, sidewalk furnishings and trash receptacles, etc.

All pedestrian facility projects should be designed and constructed based on appropriate published guidance (i.e. AASHTO, NACTO, ITE, etc.) and must be compliant with the Americans with Disabilities Act (ADA) of 1990.

Conversion and use of abandoned railroad corridors for trails - for pedestrians, bicyclists, or other non-motorized transportation users. This category is meant to convert abandoned railroad corridors to trails to help expand travel and recreational opportunities within communities. Converted rail corridors make ideal trails because of their flat grade, long length, and intact right-of-way. Rail-trails, as these types of trails are called, help to encourage physical activity and reduce air pollution.

Non-Infrastructure:

Safe Routes to School (SRTS)

Activities include Archaeological Planning and Research, Planning and Design for Non-motorized Transportation and programs that substantially improve the ability of kindergarten through 8th grade students to walk and bicycle to/from school include:

- secure bike areas/skateboard and scooter parking
- walking/bicycling encouragement programs (e.g. crossing guard equipment)
- traffic enforcement
- education programs related to bicycling and walking
- public awareness campaigns
- safe routes training
- Regional Safe Routes to School Coordinators

If a project is a SRTS type project it is important to have coordination with the SRTS coordinator, the school district and other SRTS stakeholders.

- In Clark County: Sherie Moore, skmoore@interact.ccsd.net or 702-799-6560
- In Washoe County: MJ Cloud, mcloud@washoeschools.net or 775-333-3782
- In Western Nevada including; Carson City Douglas, Storey and Lyon Counties: Cortney Bloomer, cbloomer@carson.org or 775-283-7525
- All other areas of the state: Tim Rowe, trowe@dot.state.nv.us or 775-888-7357

Applications received for proposed projects located within the boundaries of a Metropolitan Planning Organization (MPO) jurisdiction (Carson Area MPO, RTC of Southern Nevada, Tahoe Area MPO and Washoe RTC) NDOT will coordinate with the appropriate MPO for review and inclusion in the RTIP. The NDOT Program Manager will contact the sponsor if this occurs.

It is recommended that projects have a requested funding amount of maximum soft cap of $750,000. Should you have a project that is more than this amount please contact the Program Manager.

Project must receive federal authorization within three years of the date the project sponsor is notified of project selection. If the project is not authorized within three years of the notification, the project will be rescinded and the sponsor will have to reapply.

Ineligible Activities

This is not a comprehensive list but listed below are some activities that will not be funded with federal TAP monies and are the sponsor's responsibility.

- Visitor/Welcome Centers and Transportation Museums (pedestrian walkways and bikeways that provide access to these facilities are eligible)
- Historic Preservation of non-transportation facilities
- Bicycle and Pedestrian Safety and education programs targeted at populations other than K-8th grade students
- Acquisition of scenic easements or scenic or historic sites
- Archaeological planning and research as part of mitigation for highway projects
- Operation of historic transportation facilities

IV. TAP/STP Set-aside APPLICATION PROCESS

Eligible sponsors may submit one application per each funding cycle (not including different entities in the same community). The NDOT will evaluate and facilitate the ranking of projects though a competitive process for each cycle. This application is available at www.nevadadot.com/tap .

NDOT TAP/STP Set-aside Application Process
#1 The NDOT announces the application deadline for the funding cycle.
#2 Applications are received by the NDOT by the funding cycle deadline approximately six weeks.
#3 The NDOT determines project eligibility/ineligibility and notifies sponsor approximately two weeks.
#4 Proposed projects/activities located within a MPO planning boundaries will be forwarded to the MPO. The NDOT Program Manager will contact the sponsor if this occurs.

#5 Based on the applications received by the NDOT, the Carson Area MPO will identify (in writing) one priority infrastructure project from within their respective planning boundaries to receive bonus points. These bonus points are applied due to the extensive, federally required, planning efforts of these MPOs.

#6 All applications are forwarded to the TAP Scoring Committee members for review and initial scoring based on TAP Scoring Criteria. Infrastructure and non-infrastructure projects are scored separately using appropriate criteria.

#7 Project sponsors may request a presentation at the TAP Scoring Committee meeting. Scoring Committee members may modify their scores based on the presentations and discussions. Scores are turned into NDOT staff at the end of the meeting.

#8 A 10% point bonus (10 points, based on a 100 point scoring maximum) is added, by NDOT Staff, to the average score of the identified Carson Area MPO (as identified in #5 above).

#9 The NDOT creates a ranked list of projects based off the score by the TAP Scoring Committee including bonus point calculations.

#10 Ranked projects are reviewed by TAP staff and selected based on their scores and available funding.

#11 Based on funding available, a list of recommended projects is developed by the NDOT staff and forwarded to the NDOT Director for Approval.

#12 Project sponsors are notified of the NDOT Director's determination.

#13 NDOT will initiate a project kick off meeting to explain requirements and ensure the project is ready to be included in the STIP.

#14 Successful projects will be listed in the Statewide Transportation Improvement Program (STIP) a legal agreement will then be developed between the sponsor and the NDOT.

V. FUNDING PROVISIONS

The Nevada TAP/STP Set-aside program is not a grant program but a cost reimbursement program. Prior to the initiation of any TAP/STP Set-aside project, the project must be included in the NDOT Statewide Transportation Improvement Program (STIP) and authorized by the Federal Highway Administration (FHWA). A fully executed legal agreement is also required prior to the NDOT's issuance of a Notice to Proceed (NTP). No expenses incurred prior to the issuance of the NTP will be eligible for reimbursement.

Funding through the NDOT, will provide up to a maximum of 95 percent of the project costs. The

sponsor is required to provide a minimum of 5 percent of the project costs as matching funds. “In kind” matching funds may be allowable as a portion of the project cost, but must be well documented to the value of the match.

It is the project sponsor's responsibility for ensuring that the cost estimate is realistic and will fully meet the project's needs. It is recommended that the services of a licensed professional engineer, registered architect, registered landscape architect, licensed contractor, or safe routes to school coordinator (as applicable) be obtained to assist in the development of the application to ensure the accuracy of required project services and cost estimates. Costs for professional services associated with preparation of the application are not eligible for reimbursement. Any increase in state/federal/local funding will require an amendment to the original project agreement.

For the purpose of estimating project costs the NDOT has a cost wizard tool available at http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/TAP_Docs.aspx (go to the Project Estimate Wizard link in the right side column of the page). Sponsors should carefully control increases and overruns as they may jeopardize completion of the entire project.

Should the project sponsor have questions or need assistance with the estimate please contact the NDOT Program Manager for assistance.

Additional Costs

The sponsor is responsible for all costs over and above the approved awarded funding amount. Funding for project costs in excess of those awarded initially will not be provided. Therefore, **obtaining realistic cost estimates** for the services/tasks to be performed are extremely important to ensure that adequate funding is provided. A contingency is recommended but the funds are specific to each project and cannot be transferred to another project. If the sponsor decides not to complete a project, the sponsor will be responsible to reimburse all TAP expenditures to NDOT.

Right of Way and NEPA

Projects that involve acquisition of right of way or a National Environmental Policy Act (NEPA) document generally require additional funding and time to complete. If your project involves Right of Way or NEPA please contact the NDOT Program Manager before applying to discuss the status of the needs and current status of the project. Right of Way includes temporary construction easements or permissions to construct and utilities (relocation). NEPA is required on all projects to some degree. Please add a minimum of $10,000 for Environmental activities. This may increase due to location, environmental conditions and/or historic relevance. Although RW is not required on all projects a minimum of $5,000 needs to be added to the cost estimate for Utilities and $5,000 for Acquisition totaling $10,000 per application for staff review. If further acquisition is needed the additional funding will need to be added. (See below)

If the applicant does not identify the need for Right of Way or NEPA prior to the application process, the application will be rescinded and the sponsor will need to reapply.

Project Completion

1. After a project is selected, if a sponsor and or NDOT determine that the project will not be completed within the specified time frame the project is withdrawn. The funding from that project will go back through the competitive process or be assigned to the next project on the Selection Committee's ranked project list.

2. If it is determined through monthly updates and status meetings that a project is not making sufficient progress and there is a risk of losing funding NDOT may cancel that project. The funding from that project will go back through the competitive process or be assigned to the next project on the Selection Committee's ranked project list.

VI. SPONSOR RESPONSIBILITIES

It is the responsibility of the sponsor to comply with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) to assess and/or mitigate effects on social, economic and environmental factors. Similarly, work involving sensitive historic structures or archaeological sites must conform to the U.S. Secretary of the Interior's standards and guidelines for archaeology and historic preservation.

The sponsor must also carry out and comply with all Federal, State and local laws, and acquire environmental approvals and any required permits from the appropriate Federal, State and local agencies. Also, the sponsor must acquire building and other local permits, if applicable.

Engineering and architectural designs for all facilities must comply with the Americans with Disabilities Act (ADA).

The sponsor may be required to provide long-term maintenance of a constructed project, on a year round basis, after completion.

For the purpose of estimating project costs the NDOT has a **Cost Wizard** tool available at www.nevadadot.com/tap , (go to the documents/info page). Sponsors should carefully control increases and overruns as they may jeopardize completion of the entire project.

VII. Funding, Scope and Deadlines

Maximum project/program funding will be limited to $750,000 per project

Changes of project scope will be looked at on a project by project basis. It is the NDOT's intent to allow for changes if they are in the "spirit" of the original project as presented to the TAP Scoring Committee. The NDOT does not want to slow or delay any project due to scope changes. The NDOT does reserve the right to ask for additional clarification if scope changes are desired. Changes in project scope may require an additional review by the TAP Scoring Committee and/or amendment to the legal agreement.

Nevada Transportation Alternatives Program (TAP) /STBG Set-aside

Surface Transportation Block Grant Program Suballocation and Transportation Alternatives Suballocation percentage breakdown flow charts are found in Appendix D.

Table II TAP/STP Set-aside Project Deadlines

	Infrastructure Projects Constructed through NDOT LPA# Process	Infrastructure Projects Constructed by NDOT directly	Non-Infrastructure Projects
Within 15 days after the sponsor receives notification that their proposed project has been selected for funding, the applicant must:	Sponsor must indicate their choice of project management		n/a
Within 30 days after the sponsor receives notification that their proposed project has been selected for funding, the applicant must:	Contact NDOT LPA Manager	n/a	Contact NDOT SRTS Coordinator and TAP STP Set-aside Program Manager
Within 9 Months after receiving the funding notification the sponsor must enter into a legal agreement outlining their responsibilities:	√	√	√
Within 3 years after receiving the funding notification, the project must be advertised for construction*	√	√	n/a
TAP/STP Set-aside must be given a Notice to Proceed within three years.	√	√	√
Sponsors are required to provide quarterly updates, to the Program Manager, on project status. NDOT will develop a project status form which will be provided	√	n/a	√
Sponsors are required to participate in quarterly status update meetings with NDOT	√	n/a	√
Within, 3 months of the project becoming operable, the implementing agency must provide a final delivery report to NDOT that includes:	√	n/a	n/a

The scope of the completed project as compared to the programmed project, before and after photos documenting the project, the final costs as compared to the approved project budget, its duration compared to the project schedule in the project application and the benefits of the project to the community.			

* This requires having plans, specifications, estimates, certifications (e.g., rights-of-way, environmental, cultural, etc.) and other required documents completed and submitted and approved by the NDOT in order to advertise for construction.
#Local Public Agency (LPA)

Project Completion
Project completion is of upmost importance to NDOT. Monthly updates to NDOT staff are needed to help ensure that the project is moving forward. If there is no response from a sponsor after being contacted by NDOT staff for a period of three months, NDOT may cancel the project. Failure to meet any of the requirements listed in Table II may result in the cancellation of the project.

VIII. APPLICATION INSTRUCTIONS AND REQUIRED ATTACHMENTS

Applications must be submitted by using the NDOT Project Initiation Form (PIF) found at www.nevadadot.com/tap .

If additional description/information is needed it may be submitted separately. Please send to address shown on the cover of this document to the attention of the TAP coordinator.

Selected Federal Requirements

National Environmental Policy Act (NEPA)

This act identifies requires Federal agencies to disclose and consider, through an Environmental Assessment and, sometimes, through an Environmental Impact Statement, any significant effect a project may have on the environment (including cultural, natural, social and historical resources). Except in unusual circumstances, a TE project will be processed as a categorical exclusion (CE). A CE does not mean that no environmental work is required, only that there is not a significant environmental effect; therefore, less documentation is required.

Section 4(f) of the U.S. Department of Transportation Act

The FHWA cannot approve a project that uses land from a Section 4(f) resource (publicly owned parks, recreation areas, wildlife and waterfowl refuges, and national, state, or local historical sites) unless the project sponsor is also the owner/administrator of the park, or FHWA determines that no feasible

alternative exists. In such a case, all efforts must be made to minimize harm to the resource. Note that this Section does not apply to restoration, rehabilitation or maintenance of historic transportation facilities if the work does not adversely affect the resource's historic qualities.

Section 106 National Historic Preservation Act (NHPA) of 1966

Federal agencies are required to consider the potential effects of a project on a property that is listed in or eligible for the National Register of Historic Places.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, As Amended

This act provides requirements for real property acquisition and provides for relocation payments. Note that all TAP/STP Set-aside projects are subject to the Act except those that do not involve acquisition of additional property or relocations.

Brooks Act

Federally assisted consultant contracts for engineering and design services must use qualification-based selection procedures, which disallow price as a factor in the selection process.

Competitive Bidding

Construction projects must be advertised and awarded to the lowest responsible and responsive bidder through open competitive bidding.

Predetermined Minimum Wage (Davis-Bacon)

The minimum prevailing wage rate must be paid to all workers on Federal-aid highway projects that exceed $2,000. Note that if the project is a transportation facility and is eligible solely on function (e.g., restoration of a railroad station, an independent bike path, etc.), then this Act does not apply unless the project is physically located within the existing right-of-way of a Federal-aid highway.

Non-Infrastructure Activities

Education, Encouragement, Enforcement and Evaluation activities must comply with the safe routes to school program under section 1404 of Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

All state regulations and statues must also be followed, unless exempt, in the administration, development and implementation of projects under this program.

*This list is by no means comprehensive for the full listing of federal regulations please visit http://www.ecfr.gov/cgi-bin/ECFR?page=browse

TRANSPORTATION ALTERNATIVES PROGRAM/STP SET-ASIDE CONTACT

Coy Peacock
Transportation Alternatives Program (TAP)/STP Set-aside Manager
NDOT
1263 S. Stewart Street
Carson City, NV 89712
cpeacock@dot.state.nv.us
(775) 888-7124

www.nevadadot.com/tap

APPENDIX A

Transportation Alternative Program

STP Set-aside

Scoring Criteria

(INFRASTRUCTURE Projects Only)

Summary Sheet

Project Name _____

Project Sponsor_____

Evaluator_____ **Total Score** _____

Criteria	*Possible Points (100 max.)*	*Points Awarded*
1. Project Preparedness	10	
2. Safety Enhancements	10	
3. Mobility Enhancements	10	
4. Requires NEPA	15	
5. Requires Right of Way	15	
6. Public Support / Community Values	10	
7. Meet National Goals for safety, infrastructure, congestion reduction, system reliability, freight movement, economic vitality, environmental sustainability	10	
8. Scoping / Engineering / District Review (After Committee Rankings)	20	
	TOTAL POINTS >>>	

Instructions: Please use whole numbers (+/-). Zero can be used and 10-15 points are the maximum awarded per question.

Additional information can be found on the TAP webpage at www.nevadadot.com/tap

Transportation Alternatives Program Scoring Criteria

Worksheets

Criteria Infrastructure	Points
1) Project Preparedness **At what stage is the project preparedness?** The proposed project is ready to go to construction (8-10 points). The proposed project has some preliminary engineering completed (4-7 points). The proposed project has no preliminary engineering completed (0-3 points).	
2) Safety Enhancements **Will the project enhance the safety of non-motorized users?** The proposed project will enhance safety (8-10 points). The proposed project may enhance safety (4-7points). The proposed project will not enhance safety (0-3 points).	
3) Mobility Enhancements **Does the proposed project enhance non-motorized mobility** The proposed project will enhance non-motorized mobility and provide for improved community values listed above (8-10points). The proposed project may enhance non-motorized mobility and provide improved community values listed above (4-7 points). The proposed project will not enhance non-motorized mobility and provide improved community values listed above (0-3 points).	
4) Requires NEPA **Does the proposed project require NEPA above a Categorical Exclusion** The proposed project does not require NEPA and can be secured within 6 months (10-15 points) The proposed project does require NEPA and can be secured from 6-12 months (5-10 points) The proposed project does require NEPA and can be secured within 12 or more months (0-5 points)	

Criteria Infrastructure	
5) Requires Right of Way **Does the proposed project require Right-of-Way Acquisition** The proposed project does not require Right-of-Way Acquisition and provides documentation (10-15 points) The proposed project does require Right-of-Way Acquisition and acquisition is already started (5-10 points) The proposed project Right-of-Way Acquisition needs are unknown (0 -5 points)	
6) Public Support / Community Values **Has there been documented community support through a public process (i.e. with support letters, through meetings and/or included in studies/plans) and improve community values. Local, School Transportation, School Safety, Community Master Plans, active health and obesity plans, ect?** The proposed project is strongly supported by the public and does significantly improve community values (8-10 points) The proposed project is moderately supported by the public and shows some improved community values (4-7 points) The proposed project is minimally supported by the public and does not significantly improve community values (0-3 points)	
7) Meets National Goals for safety, infrastructure, congestion reduction, system reliability, freight movement, economic vitality, environmental sustainability **Does the project meet National Goals for safety, infrastructure, congestion reduction, system reliability, freight movement, economic vitality, environmental sustainability?** The proposed project meets three or more of the National Goals (8-10 points) The proposed project meets two or more of the National Goals (4-7 points) The proposed project meets at least one of the National Goals (0-3 points)	
8) Scoping / Engineering / District Review (After Initial Committee Rankings)	

APPENDIX B

Transportation Alternatives Program

STP Set-aside Scoring Criteria

(NON-INFRASTRUCTURE Projects only)

Summary Sheet

Project Name_____

Project Sponsor _____

Evaluator_____ **Total Score** _____

Criteria	*Possible Points (80 max.)*	*Points Awarded*
1. **Reduction of Vehicle Dependence Program**	10	
2. **Student Safety Education**	10	
3. **Public Support / Community Values**	10	
4. **Knowledge and Skills**	10	
5. **Program Performance**	10	
6. **Improves Safety of the Transportation System for Non-Motorized Users**	10	
7. **Local Agency Approval**	10	
8. **Meet National Goals-safety, congestion reduction, system reliability, freight movement, economic vitality, environmental sustainability**	10	
	TOTAL POINTS >>	

Instructions: Please use whole numbers. Zero can be used and 10 points is the maximum awarded per question.

Please note: Non-infrastructure funding may only be used for projects affecting students in grades K-8. Funding is not eligible for any other age group. In addition, funding is only allowed for activities related to education, encouragement, enforcement and evaluation. Non-infrastructure funding may also be used for planning activities only as it relates to student trips to and from school by foot or bike.

Additional information can be found on the TAP webpage at www.nevadadot.com/tap

Criteria <u>Non-Infrastructure</u>	Points
1)Reduction of Vehicle Dependence Program ***Does this project reduce the number of vehicular trips to and from school only as it relates to student trips to and from school by foot or bike. (grades K-8 students)?** The proposed program or plan <u>will</u> reduce the number of vehicular trips to and from school (8-10 points). The proposed program or plan <u>may</u> reduce the number of vehicular trips to and from school (4-7 points). The proposed program or plan <u>will not</u> reduce the number of vehicular trips to and from school (0-3 points).	
2) Student Safety Education **Will the proposed activities significantly improve the safety education of students (grade K-8) using non-motorized modes of transportation?** The proposed program or plan <u>will</u> significantly improve safety education, of students walking or bicycling to/from school (8-10 points). The proposed program or plan <u>may</u> significantly improve safety education, either real or perceived, of students walking or bicycling to/from school (4-7points). The proposed program or plan <u>will not</u> significantly improve safety education, either real or perceived, of students walking or bicycling to/from school (0-3 points).	

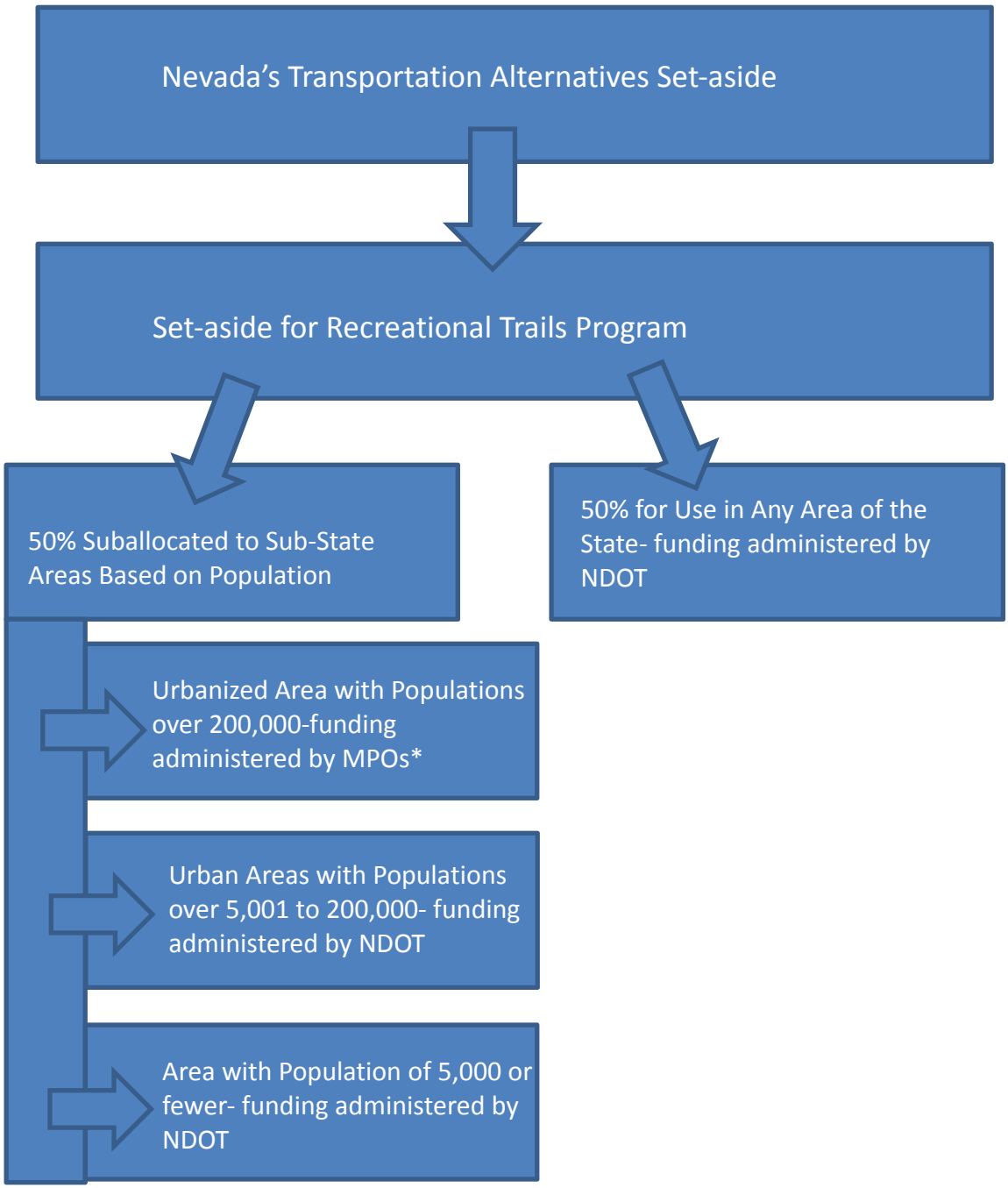
3) Public Support / Community Values **Does this project have documented support (i.e. with support letters, through meetings and/or included in bike and pedestrian studies/plans, school district transportation and/or safety plans and/or complete streets plans)?** The proposed program or plan has strong support from the community (8-10 points). The proposed program or plan has limited support from the community (4-7 points). The proposed program or plan has minimal support from the community (0-3 points).	
4) Knowledge and Skills **Will the project improve the knowledge and skills needed for students to safely walk and bike to school?** The proposed program or plan will improve knowledge and skills to create a better walking and bicycling environment (8-10 points). The proposed program or plan may improve knowledge and skills to create a better walking and bicycling environment (4-7 points). The proposed program or plan will not improve knowledge and skills to create a better walking and bicycling environment (0-3 points).	
5) Program Performance **Will the results of this program be evaluated and documented (This can only be evaluated, under the objectives of SRTS, based on mode shift on trips to and from school)?** The proposed program or plan will provide for a process to determine performance (6-10 points). The proposed program or plan will not provide for a process to determine performance (0-5 points).	

6) Level of Local Match **Does this program have a larger than required local match?** The proposed program or plan will have a significantly larger local match than required (8-10 points). The proposed program or plan will have limited additional local match than required (4-7 points). The proposed program or plan will have the local match required (0-3 points).	
7) Local Agency Approval **Does this program or plan have documented support from their local agency(s) (this includes non-profit programs, school district programs and law enforcement initiatives?** The proposed program or plan has strong support from their local agency(s) (8-10 points). The proposed program or plan has limited support from their local agency(s) (4-7 points). The proposed program or plan has minimal support from their local agency(s) (0-3 points).	
8. Meet National Goals-for safety, infrastructure, congestion reduction, system reliability, freight movement, economic vitality, and environmental sustainability **Does the project meet National Goals-safety, infrastructure, congestion reduction, system reliability, freight movement, economic vitality, environmental sustainability** The proposed project meets three or more of the National Goals (8-10 points) The proposed project meets two or more of the National Goals (4-7 points) The proposed project meets at least one of the National Goals (0-3 points)	

* Please note the concept of "perceived" safety is a key component in the FHWA Safe Routes National Training Program. Many times safety programs will have to target issues that may, or may not, be documented, but per FHWA and SRTS these "perceived" issues may be greater hindrances to kids walking and biking than actual safety messaging. Please see national SRTS training curricula developed by the FHWA. 4/21/2016

APPENDIX C

TRANSPORTATION ALTERNATIVES SUBALLOCATION



* This funding is sub allocated to RTCSNV, RTC Washoe and TMPO who conduct a competitive process separate from NDOT to utilize funds within their planning boundaries

APPENDIX D

Additional Transportation Alternatives Program

STP Set-aside Scoring Criteria

Eligible Non-infrastructure Activities

SAFETEA-LU specifies that eligible non-infrastructure activities are ***activities to encourage walking and bicycling to school, including***

- ***public awareness campaigns and outreach to press and community leaders,***
- ***traffic education and enforcement in the vicinity of schools,***
- ***student sessions on bicycle and pedestrian safety, health, and environment, and***
- ***funding for training, volunteers, and managers of safe routes to school programs. (Section 1404(f)(2)(A))***

The above categories are broad in nature. There are several sources of information available nationally that provide further guidance on non-infrastructure activities, such as the National Highway Traffic Safety Administration's (NHTSA) *Safe Routes to Schools: Practice and Promise*, and NHTSA's *Safe Routes to School Toolkit*.

Existing SRTS programs have used non-infrastructure funds for the following purposes:

- Creation and reproduction of promotional and educational materials.
- Bicycle and pedestrian safety curricula, materials and trainers.
- Training, including SRTS training workshops that target school- and community-level audiences.
- Modest incentives for SRTS contests, and incentives that encourage more walking and bicycling over time.
- Safety and educational tokens that also advertise the program.
- Photocopying, duplicating, and printing costs, including CDs, DVDs, etc.
- Mailing costs.
- Costs for data gathering, analysis, and evaluation reporting at the local project level.
- Pay for substitute teacher if needed to cover for faculty attending SRTS functions during school hours.
- Costs for additional law enforcement or equipment needed for enforcement activities.
- Equipment and training needed for establishing crossing guard programs.
- Stipends for parent or staff coordinators. (The intent is to be able to reimburse volunteers for materials and expenses needed for coordination and efforts. The intent is not to pay volunteers for their time. In some cases, however, a State may permit paying a stipend to a "super volunteer" to coordinate its local program(s). This is an important possibility to keep open for low-income communities. It may be beneficial to set a limit on the maximum value of a stipend, such as $2000/school year.).

- Costs to employ a SRTS Program Manager, which is a person that runs a SRTS program for an entire city, county, or some other area-wide division that includes numerous schools. (Program Managers may coordinate the efforts of numerous stakeholders and volunteers, manage the process for implementation at the local or regional level, and may be responsible for reporting to the State SRTS Coordinator.)
- Costs to engage the services of a consultant (either non-profit or for-profit) to manage a SRTS program as described in the prior bullet.

https://www.fhwa.dot.gov/environment/safe_routes_to_school/guidance/#toc123542199

Eligible Infrastructure Projects

SAFETEA-LU specifies that eligible infrastructure-related projects include ***the planning, design, and construction of infrastructure-related projects that will substantially improve the ability of students to walk and bicycle to school, including***

- ***sidewalk improvements,***
- ***traffic calming and speed reduction improvements,***
- ***pedestrian and bicycle crossing improvements,***
- ***on-street bicycle facilities,***
- ***off-street bicycle and pedestrian facilities,***
- ***secure bicycle parking facilities, and***
- ***traffic diversion improvements in the vicinity of schools. (Section 1404(f)(1)(A))***

Given the general guidelines established in the legislation, each State DOT will be responsible for determining the specific types of infrastructure projects that are eligible for this program. Below is a list of potential infrastructure projects that some States have used for existing SRTS or related programs. This list is not intended to be comprehensive; other types of projects that are not on this list may also be eligible if they meet the objectives of reducing speeds and improving pedestrian and bicycle safety and access.

- **Sidewalk improvements**: new sidewalks, sidewalk widening, sidewalk gap closures, sidewalk repairs, curbs, gutters, and curb ramps.
- **Traffic calming and speed reduction improvements**: roundabouts, bulb-outs, speed humps, raised crossings, raised intersections, median refuges, narrowed traffic lanes, lane reductions, full- or half-street closures, automated speed enforcement, and variable speed limits.
- **Pedestrian and bicycle crossing improvements**: crossings, median refuges, raised crossings, raised intersections, traffic control devices (including new or upgraded traffic signals, pavement markings, traffic stripes, in-roadway crossing lights, flashing beacons, bicycle-sensitive signal actuation devices, pedestrian countdown signals, vehicle speed feedback signs, and pedestrian activated signal upgrades), and sight distance improvements.
- **On-street bicycle facilities**: new or upgraded bicycle lanes, widened outside lanes or roadway shoulders, geometric improvements, turning lanes, channelization and roadway realignment, traffic signs, and pavement markings.
- **Off-street bicycle and pedestrian facilities**: exclusive multi-use bicycle and pedestrian trails and pathways that are separated from a roadway.

- **Secure bicycle parking facilities**: bicycle parking racks, bicycle lockers, designated areas with safety lighting, and covered bicycle shelters.
- **Traffic diversion improvements**: separation of pedestrians and bicycles from vehicular traffic adjacent to school facilities, and traffic diversion away from school zones or designated routes to a school.

Planning, design, and engineering expenses, including consultant services, associated with developing eligible infrastructure projects are also eligible to receive infrastructure funds.

https://www.fhwa.dot.gov/environment/safe_routes_to_school/guidance/#toc123542197

4/22/2016

Appendix E

Eligible Project Sponsors

Under 23 U.S.C. 213(c)(4)(B), the **Eligible Entities** to receive TAP funds are:

- Local governments;
- Regional transportation authorities;
- Transit agencies;
- Natural resource or public land agencies;
- School districts, local education agencies, or schools;
- Tribal governments; and
- Any other local or regional governmental entity with responsibility for oversight of transportation or recreational trails (other than a metropolitan planning organization or a State agency) that the State determines to be eligible, consistent with the goals of subsection (c) of section 213 of title 23.

State DOTs and MPOs are not eligible entities as defined under 213(c)(4)(B) and therefore are not eligible project sponsors for TAP funds. However, State DOTs and MPOs may partner with an eligible entity project sponsor to carry out a project.

Nonprofit organizations are not eligible as direct grant recipients for TAP funds unless they qualify through one of the eligible entity categories (e.g., where a nonprofit organization is a designated transit agency or a school). Nonprofits are eligible to partner with any eligible entity on a TAP project, if State or local requirements permit.

- Local government entities include any unit of local government below a State government agency, except for a Metropolitan Planning Organization. Examples include city, town, township, village, borough, parish, or county agencies.
- Regional transportation authorities are considered the same as the Regional Transportation Planning Organizations defined in the statewide planning section (23 U.S.C. 135(m)).
- Transit agencies include any agency responsible for public transportation that is eligible for funds under the Federal Transit Administration.
- Natural resource or public land agencies include any Federal, Tribal, State, or local agency responsible for natural resources or public land administration. Examples include:
    - State or local park or forest agencies
    - State or local fish and game or wildlife agencies
    - Department of the Interior Land Management Agencies
    - U.S. Forest Service

- School districts, local education agencies, or schools may include any public or nonprofit private school. Projects should benefit the general public, and not only a private entity.

Appendix F

Eligible Categories

Infrastructure Projects

- **Bicycle and Pedestrian Facilities for Non- Drivers (including children, older adults, and individuals with disabilities)**
- **ADA Improvements**
- **Storm Water Management**
- **Non-Motorized Safety Infrastructure**
- **Safe Routes to School related projects (must be within 2 mi of a K-8 school)**
- **Traffic Calming**
- **Lighting**
- **Historic Preservation & Rehabilitation of Historic Transportation Facilities**
- **Vegetation Management Practices**
- **Inventory, Control and Removal of Outdoor Advertising**
- **Wildlife Mortality Mitigation**
- **Restoration and Maintenance of Habitat Connectivity**
- **Boulevard Conversion / Divided Highways**
- **Scenic Turnouts, Overlooks, and Viewing Areas**
- **Conversion of Abandoned Railway Corridors for use by bicycles, pedestrians and other non-motorized users**

Non-Infrastructure Programs

- **Archaeological Planning and Research**
- **Planning and design for non-motorized Transportation**
- **Safe Routes to School related projects (must be within 2 mi of a K-8 school):**
  - **Projects that will substantially improve the ability of students (grades K-8) to walk and bicycle to school**
  - **Traffic diversions**
  - **Secure bicycle parking facilities**
  - **Regional Safe Routes to School Coordinators**
  - **Walking /Bicycling Encouragement programs**
  - **Education programs related to bicycle/pedestrian safety, health, and the environment**
  - **SRTS Training for volunteers and managers**
  - **Traffic Education and Enforcement**
  - **Public Awareness Campaigns**

Source:
http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm

Transportation Alternatives Program (TAP)
STP Set-aside Infrastructure Supplemental Questionnaire

Appendix G

Project Name_____

Project Sponsor_____

County_____

The purpose of these questions is to provide us with sufficient information for the scoring committee to use with the scoring criteria to accurately rank your submitted TAP/STP Set-aside projects. This first section is for Infrastructure projects/programs only. Please see Appendix A for possible points) (Please attach more sheets if necessary)

1) *At what stage is the project preparedness(what is the anticipated timeline/when will the project begin construction)? Please explain.*

_____
_____
_____
_____

2) *Will the project enhance the safety of non-motorized users? Please explain.*

_____
_____
_____
_____

3) *Does the proposed project enhance non-motorized mobility? Please explain.*

_____
_____
_____
_____

4) *Does the proposed project require NEPA above a Categorical Exclusion? Please explain.*

_____
_____
_____
_____

5) *Does the proposed project require Right-of-Way Acquisition? Please explain.*

_____
_____
_____
_____

6) *Has there been documented community support through a public process (i.e. attach support letters, through meetings and/or included in studies (plans) and improve community values. Local, School Transportation, School Safety, Community Master Plans, active health and obesity plans, ect)? Please explain.*

_____
_____
_____
_____

7) *Does the proposed project meet National Goals for safety, infrastructure, congestion reduction, system reliability, freight movement economic vitality, and or environmental sustainability? Please explain.*

_____
_____
_____
_____

Transportation Alternatives Program (TAP)
STP Set-aside Non-Infrastructure Supplemental Questionnaire

Appendix H

Project Name_____

Project Sponsor_____

County_____

The purpose of these questions is to provide us with sufficient information for the scoring committee to use with the scoring criteria to accurately rank your submitted TAP/STP Set-aside projects. This first section is for Non-Infrastructure projects/programs only. (Please see Appendix B for possible points) (Please attach more sheets if necessary)

1) *How may this project/plan reduce vehicle dependence? i.e. Will this project potentially reduce the number of vehicular trips to and from school (K–8)? Please explain.*

_____
_____
_____

2) *Will the proposed activities significantly improve safety education of students walking and biking to/from school (K-8)? Please explain.*

_____
_____
_____

3) *Does this project/plan have documented public/community support (i.e. attach support letters, meeting minutes and/or included in bike and pedestrian studies/plans, school district transportation and/or safety and/or complete streets plans)? Please explain.*

_____
_____
_____

4) *Will the project/plan improve the knowledge and skills needed for students to safely walk and bike to school (K-8)? Please explain.*

_____
_____
_____

5) *Will the results of this program be evaluated and documented to assess program performance (This can only be evaluated, under the objectives of SRTS, based on mode shift on trips to and from school? Please provide details related to all modes (e.g., vehicular traffic, transit, pedestrians and bicyclists).*

_____
_____
_____

6) *How will this project/program improve safety for non-motorized users?*

_____
_____
_____

7) *Does this program or plan have documented support from their local agency(s) (this includes non-profit programs, school district programs and law enforcement initiatives?*

_____
_____
_____

8) *Does this program or plan meet National Goals-for safety, congestion reduction, system reliability, freight movement, economic vitality and/or environmental sustainability?*_____
_____
_____
_____

STAFF REPORT

Report To: The Carson Area Metropolitan Planning Organization (CAMPO)

Meeting Date: July 13, 2016

Staff Contact: Dirk Goering, Senior Transportation Planner

Agenda Title: **(For Possible Action)** To approve Contract 1617-027, for a South Carson Street Complete Streets Study, to Kimley-Horn for a not to exceed amount of $75,000, to be funded from the CAMPO/Unified Planning Work Program (UPWP) Account in the CAMPO Fund. This is a professional services contract and therefore not suitable for public bidding pursuant to NRS 332.115 (1) (b).

Staff Summary: As part of CAMPO's Unified Planning Work Program, staff is responsible for completing a South Carson Street Corridor Study, due to the significant changes in traffic patterns and volumes anticipated with the opening of the Carson City freeway extension. Associated costs are reimbursable at a rate of 95%.

Agenda Action: Formal Action/Motion **Time Requested:** 5 minutes

---

Proposed Motion

I move to approve Contract 1617-027 for a South Carson Street Complete Streets Study, to Kimley-Horn for a not to exceed amount of $75,000 to be funded from the CAMPO/Unified Planning Work Program.

Background/Issues & Analysis

Pursuant to NRS 332.115(1) (b): Contracts which by their nature are not adapted to award by competitive bidding, including contracts for (b) Professional Services.

Applicable Statute, Code, Policy, Rule or Regulation

NRS Chapter 332.115 (1) (b)

Financial Information

Is there a fiscal impact? ☒ Yes ☐ No

If yes, account name/number: CAMPO/Unified Planning Work Program Account / 245-3028-431.12-01

Is it currently budgeted? ☒ Yes ☐ No

Explanation of Fiscal Impact: If approved the above account will have a net decrease of $3,750. The $3,750 cost to CAMPO is the required 5% local match for the total contract amount of $75,000.

Alternatives - N/A

Supporting Material
-Draft contract

Board Action Taken:

Motion: _____	1) _____	Aye/Nay
	2) _____	_____
		_____
		_____
		_____
		_____
		_____

_____
(Vote Recorded By)

PROFESSIONAL SERVICES CONSULTANT AGREEMENT
Contract No.1617-027
Title: South Carson Street Conceptual Complete Streets Study

THIS CONTRACT made and entered into this 13th day of July, 2016, by and between Carson City, a consolidated municipality, a political subdivision of the State of Nevada, hereinafter referred to as **"CITY"**, and Kimley-Horn and Associates, Inc. hereinafter referred to as **"CONSULTANT".**

WITNESSETH:

WHEREAS, the Purchasing and Contracts Manager for **CITY** is authorized pursuant to Nevada Revised Statutes (hereinafter referred to as "NRS") 332 and 338 and Carson City Purchasing Resolution #1990-R71, to approve and accept this Contract as set forth in and by the following provisions; and

WHEREAS, this Contract is for consulting services from one or more licensed architects, engineers and/or land surveyors; and

WHEREAS, this Contract (does involve __) (does not involve _X___) a "public work" construction project, which pursuant to NRS 338.010(17) means any project for the new construction, repair or reconstruction of an applicable project financed in whole or in part from public money; and

WHEREAS, **CONSULTANT'S** compensation under this agreement (does X__) (does not __) utilize in whole or in part money derived from one or more federal grant funding source(s); and

WHEREAS, it is deemed necessary that the services of **CONSULTANT** for **CONTRACT No. 1617-027** (hereinafter referred to as "Contract") are both necessary and in the best interest of **CITY**; and

NOW, THEREFORE, in consideration of the aforesaid premises, and the following terms, conditions and other valuable consideration, the parties mutually agree as follows:

1. REQUIRED APPROVAL:

This Contract shall not become effective until approved by the Carson Area Metropolitan Planning Organization.

2. SCOPE OF WORK (Incorporated Contract Documents):

2.1 **CONSULTANT** shall provide and perform the following services set forth in **Exhibit A,** which shall all be attached hereto and incorporated herein by reference for and on behalf of **CITY** and hereinafter referred to as the "SERVICES".

2.2 **CONSULTANT** represents that it is duly licensed by **CITY** for the purposes of performing the SERVICES.

2.3 **CONSULTANT** represents that it is duly qualified and licensed in the State of Nevada for the purposes of performing the SERVICES.

For P&C Use Only	
CCBL expires	_____
GL expires	_____
AL expires	_____
PL expires	_____
WC expires	_____

2.4 **CONSULTANT** represents that it and/or the persons it may employ possess all skills and training necessary to perform the SERVICES described herein and required hereunder. **CONSULTANT** shall perform the SERVICES faithfully, diligently, in a timely and professional manner, to the best of its ability, and in such a manner as is customarily performed by a person who is in the business of providing such services in similar circumstances. **CONSULTANT** shall be responsible for the professional quality and technical accuracy of all SERVICES furnished by **CONSULTANT** to **CITY**.

2.5 **CONSULTANT** represents that neither the execution of this Contract nor the rendering of services by **CONSULTANT** hereunder will violate the provisions of or constitute a default under any other contract or agreement to which **CONSULTANT** is a party or by which **CONSULTANT** is bound, or which would preclude **CONSULTANT** from performing the SERVICES required of **CONSULTANT** hereunder, or which would impose any liability or obligation upon **CITY** for accepting such SERVICES.

2.6 Before commencing with the performance of any work under this Contract, **CONSULTANT** shall obtain all necessary permits and licenses as may be necessary. Before and during the progress of work under this Contract, **CONSULTANT** shall give all notice and comply with all the laws, ordinances, rules and regulations of every kind and nature now or hereafter in effect promulgated by any Federal, State, County, or other Governmental Authority, relating to the performance of work under this Contract. If **CONSULTANT** performs any work that is contrary to any such law, ordinance, rule or regulation, it shall bear all the costs arising therefrom.

2.7 Special Terms and Conditions for Engineers, Architects, and Land Surveying/Testing:

2.7.1 *Use of **CONSULTANT'S** Drawings, Specifications and Other Documents:*

2.7.1.1 The drawings, specifications and other documents prepared by **CONSULTANT** for this Contract are instruments of **CONSULTANT'S** service for use solely with respect to this Contract and, unless otherwise provided, **CONSULTANT** shall be deemed the author of these documents and shall retain all common law statutory and other reserved rights, including the copyright.

2.7.2 *Cost Accounting and Audits:*

2.7.2.1 If required by **CITY**, **CONSULTANT** agrees to make available to **CITY** for two (2) years after the completion of the SERVICES under this Contract, such books, records, receipts, vouchers, or other data as may be deemed necessary by **CITY** to enable it to arrive at appropriate cost figures for the purpose of establishing depreciation rates for the various materials and other elements which may have been incorporated into the SERVICES performed under this Contract.

2.7.3 FAIR EMPLOYMENT PRACTICES: Pursuant to NRS 338.125, Fair Employment Practices, the following provisions must be included in any contract between **CONSULTANT** and a public body such as **CITY**:

2.7.3.1 ***In connection with the performance of work or SERVICES under this Contract, CONSULTANT agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, gender identity, or age, including, without limitation, with regard to***

employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including without limitation, apprenticeship.

2.7.3.2 **CONSULTANT** further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

2.7.4 PREFERENTIAL EMPLOYMENT: Unless, and except if, this Contract is funded in whole or in part by federal grant funding (*see* 40 C.F.R. § 31.36(c) *Competition)*, pursuant to NRS 338.130, in all cases where persons are employed in the construction of public works, preference must be given, the qualifications of the applicants being equal: (1) First: To persons who have been honorably discharged from the Army, Navy, Air Force, Marine Corps or Coast Guard of the United States, a reserve component thereof or the National Guard; and are citizens of the State of Nevada. (2) Second: To other citizens of the State of Nevada.

2.7.4.1 In connection with the performance of SERVICES under this Contract, **CONSULTANT** agrees to comply with the provisions of NRS 338.130 requiring certain preferences to be given to which persons are employed in the construction of a public work. If **CONSULTANT** fails to comply with the provisions of NRS 338.130, pursuant to the terms of NRS 338.130(3), this Contract is void, and any failure or refusal to comply with any of the provisions of this section renders this Contract void.

2.8 **CITY** Responsibilities:

2.8.1 **CITY** shall make available to **CONSULTANT** all technical data that is in **CITY'S** possession, reasonably required by **CONSULTANT** relating to the SERVICES.

2.8.2 **CITY** shall provide access to and make all provisions for **CONSULTANT** to enter upon public and private lands, to the fullest extent permitted by law, as reasonably required for **CONSULTANT** to perform the SERVICES.

2.8.3 **CITY** shall examine all reports, correspondence, and other documents presented by **CONSULTANT** upon request of **CITY**, and render, in writing, decisions pertaining thereto within a reasonable time so as not to delay the work of **CONSULTANT**.

2.8.4 It is expressly understood and agreed that all work done by **CONSULTANT** shall be subject to inspection and acceptance by **CITY** and approval of SERVICES shall not forfeit the right of **CITY** to require correction, and nothing contained herein shall relieve **CONSULTANT** of the responsibility of the SERVICES required under the terms of this Contract until all SERVICES have been completed and accepted by **CITY**.

3. CONTRACT TERM:

3.1 This Contract shall be effective from July 13, 2016, to June 30, 2017, unless sooner terminated by either party as specified in **Section 7** (CONTRACT TERMINATION).

4. NOTICE:

4.1 Except any applicable bid and award process where notices may be limited to postings by **CITY** on its Finance Department/Bid Opportunities website (www.carson.org), all notices or other

communications required or permitted to be given under this Contract shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by e-mail, by regular mail, by telephonic facsimile with simultaneous regular mail, or by certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other party at the address specified below.

4.2 Notice to **CONSULTANT** shall be addressed to:

Molly O'Brien, Project Manager
Kimley- Horn and Associates, Inc.
5370 Kietzke Lane, Suite 201
Reno, NV 89511
775-200-1979
Email: molly.obrien@kimley-horn.com

4.3 Notice to **CITY** shall be addressed to:

Carson City Purchasing and Contracts Department
Laura Tadman, Purchasing and Contracts Administrator
201 North Carson Street, Suite 3
Carson City, NV 89701
775-283-7137 / FAX 775-887-2107
LTadman@carson.org

5. COMPENSATION:

5.1 The parties agree that **CONSULTANT** will provide the SERVICES specified in **Section 2** (SCOPE OF WORK) and **CITY** agrees to pay **CONSULTANT** the Contract's compensation based upon Time and Materials and the Scope of Work Fee Schedule for a not to exceed maximum amount of Seventy Five Thousand Dollars and 00/100 ($75,000.00), and hereinafter referred to as "Contract Sum".

5.2 Contract Sum represents full and adequate compensation for the completed SERVICES, and includes the furnishing of all materials; all labor, equipment, tools, and appliances; and all expenses, direct or indirect, connected with the proper execution of the SERVICES.

5.3 **CONSULTANT** shall provide **CITY** with a scope of work for each task to be completed and if approved by the Public Works Director, **CONSULTANT** will be provided a "Task Order" authorizing the work.

5.4 **CITY** has provided a sample invoice and **CONSULTANT** shall submit its request for payment using said sample invoice.

5.5 Payment by **CITY** for the SERVICES rendered by **CONSULTANT** shall be due within thirty (30) calendar days from the date **CITY** acknowledges that the performance meets the requirements of this Contract or from the date the correct, complete, and descriptive invoice is received by **CITY** employee designated on the sample invoice, whichever is the later date.

5.6 **CITY** does not agree to reimburse **CONSULTANT** for expenses unless otherwise specified.

6. TIMELINESS OF BILLING SUBMISSION:

6.1 The parties agree that timeliness of billing is of the essence to this Contract and recognize that **CITY** is on a fiscal year which is defined as the period beginning July 1 and ending June 30 of the following year. All billings for dates of service prior to July 1 must be submitted to **CITY** no later than the first Friday in August of the same year. A billing submitted after the first Friday in August will subject **CONSULTANT** to an administrative fee not to exceed $100.00. The parties hereby agree this is a reasonable estimate of the additional costs to **CITY** of processing the billing as a stale claim and that this amount will be deducted from the stale claim payment due to **CONSULTANT**.

7. CONTRACT TERMINATION:

7.1 Termination Without Cause:

7.1.1 Any discretionary or vested right of renewal notwithstanding, this Contract may be terminated upon written notice by mutual consent of both parties or unilaterally by either party without cause.

7.1.2 **CITY** reserves the right to terminate this Contract for convenience whenever it considers termination, in its sole and unfettered discretion, to be in the public interest. In the event that the Contract is terminated in this manner, payment will be made for SERVICES actually completed. If termination occurs under this provision, in no event shall **CONSULTANT** be entitled to anticipated profits on items of SERVICES not performed as of the effective date of the termination or compensation for any other item, including but not limited to, unabsorbed overhead. **CONSULTANT** shall require that all subcontracts which it enters related to this Contract likewise contain a termination for convenience clause which precludes the ability of any subconsultant to make claims against **CONSULTANT** for damages due to breach of contract, of lost profit on items of SERVICES not performed or of unabsorbed overhead, in the event of a convenience termination.

7.2 Termination for Nonappropriation:

7.2.1 All payments and SERVICES provided under this Contract are contingent upon the availability of the necessary public funding, which may include various internal and external sources. In the event that Carson City does not acquire and appropriate the funding necessary to perform in accordance with the terms of the Contract, the Contract shall automatically terminate upon **CITY'S** notice to **CONSULTANT** of such nonappropriation, and no claim or cause of action may be based upon any such nonappropriation.

7.3 Cause Termination for Default or Breach:

7.3.1 A default or breach may be declared with or without termination.

7.3.2 This Contract may be terminated by either party upon written notice of default or breach to the other party as follows:

7.3.2.1 If **CONSULTANT** fails to provide or satisfactorily perform any of the conditions, work, deliverables, goods, or any SERVICES called for by this Contract within the time requirements specified in this Contract or within any granted extension of those time requirements; or

7.3.2.2 If any state, county, city or federal license, authorization, waiver, permit,

qualification or certification required by statute, ordinance, law, or regulation to be held by **CONSULTANT** to provide the goods or SERVICES or any services required by this Contract is for any reason denied, revoked, debarred, excluded, terminated, suspended, lapsed, or not renewed; or

7.3.2.3 If **CONSULTANT** becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of the bankruptcy court; or

7.3.2.4 If **CITY** materially breaches any material duty under this Contract and any such breach impairs **CONSULTANT'S** ability to perform; or

7.3.2.5 If it is found by **CITY** that any quid pro quo or gratuities in the form of money, services, entertainment, gifts, or otherwise were offered or given by **CONSULTANT**, or any agent or representative of **CONSULTANT**, to any officer or employee of **CITY** with a view toward securing a contract or securing favorable treatment with respect to awarding, extending, amending, or making any determination with respect to the performing of such contract; or

7.3.2.6 If it is found by **CITY** that **CONSULTANT** has failed to disclose any material conflict of interest relative to the performance of this Contract.

7.4 Time to Correct (Declared Default or Breach):

7.4.1 Termination upon a declared default or breach may be exercised only after providing 7 (seven) calendar days written notice of default or breach, and the subsequent failure of the defaulting or breaching party, within five (5) calendar days of providing that default or breach notice, to provide evidence satisfactory to the aggrieved party demonstrating that the declared default or breach has been corrected. Time to correct shall run concurrently with any notice of default or breach and such time to correct is not subject to any stay with respect to the nonexistence of any Notice of Termination. Untimely correction shall not void the right to termination otherwise properly noticed unless waiver of the noticed default or breach is expressly provided in writing by the aggrieved party. There shall be no time to correct with respect to any notice of termination without cause or termination for nonappropriation.

7.5 Winding Up Affairs Upon Termination:

7.5.1 In the event of termination of this Contract for any reason, the parties agree that the provisions of this **Subsection 7.5** (Winding Up Affairs Upon Termination) survive termination:

7.5.1.1 The parties shall account for and properly present to each other all claims for fees and expenses and pay those which are undisputed and otherwise not subject to set off under this Contract. Neither party may withhold performance of winding up provisions solely based on nonpayment of fees or expenses accrued up to the time of termination; and

7.5.1.2 **CONSULTANT** shall satisfactorily complete SERVICES in progress at the agreed rate (or a pro rata basis if necessary) if so requested by **CITY**; and

7.5.1.3 **CONSULTANT** shall execute any documents and take any actions necessary to effectuate an assignment of this Contract if so requested by **CITY**; and

7.5.1.4 **CONSULTANT** shall preserve, protect, and promptly deliver into **CITY** possession all proprietary information in accordance **Section 19 (**CITY OWNERSHIP OF

PROPRIETARY INFORMATION)**.**

7.6 Notice of Termination:

7.6.1 Unless otherwise specified in this Contract, termination shall not be effective until seven (7) calendar days after a party has provided written notice of default or breach, or notice of without cause termination. Notice of Termination may be given at the time of notice of default or breach, or notice of without cause termination. Notice of Termination may be provided separately at any time after the running of the 7-day notice period, and such termination shall be effective on the date the Notice of Termination is provided to the party unless a specific effective date is otherwise set forth therein. Any delay in providing a Notice of Termination after the 7-day notice period has run without a timely correction by the defaulting or breaching party shall not constitute any waiver of the right to terminate under the existing notice(s).

8. REMEDIES:

Except as otherwise provided for by law or this Contract, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, without limitation, actual damages, and to a prevailing party reasonable attorney's fees and costs. The parties agree that, in the event a lawsuit is filed and a party is awarded attorney's fees by the court, for any reason, the amount of recoverable attorney's fees shall not exceed the rate of $125 per hour. **CITY** may set off consideration against any unpaid obligation of **CONSULTANT** to **CITY**.

9. LIMITED LIABILITY:

CITY will not waive and intends to assert available NRS Chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. Liquidated damages shall not apply unless otherwise expressly provided for elsewhere in this Contract. Damages for any **CITY** breach shall never exceed the amount of funds appropriated for payment under this Contract, but not yet paid to **CONSULTANT**, for the fiscal year budget in existence at the time of the breach. **CONSULTANT'S** tort liability shall not be limited.

10. FORCE MAJEURE:

Neither party shall be deemed to be in violation of this Contract if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitation, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of this Contract after the intervening cause ceases.

11. INDEMNIFICATION:

11.1 To the extent permitted by law, including, but not limited to, the provisions of NRS Chapter 41, each party shall indemnify, hold harmless and defend, not excluding the other's right to participate, the other party from and against all liability, claims, actions, damages, losses, and expenses, including but not limited to reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the indemnifying party, its officers, employees and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of the indemnity which would otherwise exist as to any party or person described in this Section.

11.2 As required by NRS 338.155, if this Contract involves a "public work" construction project as defined above, **CONSULTANT** shall defend, indemnify and hold harmless the **CITY**, and the employees, officers and agents of the public body from any liabilities, damages, losses, claims, actions or proceedings, including without limitation, reasonable attorney's fees, to the extent that such liabilities, damages, losses, claims, actions or proceedings are caused by the negligence, errors, omissions, recklessness or intentional misconduct of the **CONSULTANT** or the employees or agents of the **CONSULTANT** in the performance of the Contract. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of the indemnity which would otherwise exist as

to any party or person described in this section. However, with respect to any anticipated benefits to **CITY** resulting from the Scope of Work, **CONSULTANT** shall not be responsible or liable to **CITY** for any warranties, guarantees, fitness for a particular purpose or loss of anticipated profits resulting from any termination of this Contract. Additionally, **CONSULTANT** shall not be responsible for acts and decisions of third parties, including governmental agencies, other than **CONSULTANT'S** subcontractors, that impact project completion and/or success.

11.3 Except as otherwise provided in **Subsection 11.5** below, the indemnifying party shall not be obligated to provide a legal defense to the indemnified party, nor reimburse the indemnified party for the same, for any period occurring before the indemnified party provides written notice of the pending claim(s) or cause(s) of action to the indemnifying party, along with:

11.3.1 a written request for a legal defense for such pending claim(s) or cause(s) of action; and

11.3.2 a detailed explanation of the basis upon which the indemnified party believes that the claim or cause of action asserted against the indemnified party implicates the culpable conduct of the indemnifying party, its officers, employees, and/or agents.

11.4 After the indemnifying party has begun to provide a legal defense for the indemnified party, the indemnifying party shall not be obligated to fund or reimburse any fees or costs provided by any additional counsel for the indemnified party, including counsel through which the indemnified party might voluntarily choose to participate in its defense of the same matter.

11.5 After the indemnifying party has begun to provide a legal defense for the indemnified party, the indemnifying party shall be obligated to reimburse the reasonable attorney's fees and costs incurred by the indemnified party during the initial thirty (30) day period of the claim or cause of action, if any, incurred by separate counsel.

12. INDEPENDENT CONTRACTOR:

12.1 **CONSULTANT**, as an independent contractor, is a natural person, firm or corporation who agrees to perform SERVICES for a fixed price according to his or its own methods and without subjection to the supervision or control of the **CITY**, except as to the results of the SERVICES, and not as to the means by which the SERVICES are accomplished.

12.2 It is mutually agreed that **CONSULTANT** is associated with **CITY** only for the purposes and to the extent specified in this Contract, and in respect to performance of the contracted SERVICES pursuant to this Contract. **CONSULTANT** is and shall be an independent contractor and, subject only to the terms of this Contract, shall have the sole right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Contract.

12.3 Nothing contained in this Contract shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for **CITY** whatsoever with respect to the indebtedness, liabilities, and obligations of **CONSULTANT** or any other party.

12.4 **CONSULTANT**, in addition to **Section 11** (INDEMNIFICATION), shall indemnify and hold **CITY** harmless from, and defend **CITY** against, any and all losses, damages, claims, costs, penalties, liabilities, expenses arising out of or incurred in any way because of, but not limited to, **CONSULTANT'S** obligations or legal duties regarding any taxes, fees, assessments, benefits, entitlements, notice of benefits, employee's eligibility to work, to any third party, subcontractor, employee, state, local or federal governmental entity.

12.5 Neither **CONSULTANT** nor its employees, agents, or representatives shall be considered employees, agents, or representatives of **CITY**.

13. INSURANCE REQUIREMENTS (GENERAL):

13.1 ***NOTICE: The following general insurance requirements shall apply unless these general requirements are altered by any specific requirements set forth in CITY'S solicitation for bid document, the adopted bid or other document incorporated into this Contract by the parties.***

13.2 **CONSULTANT**, as an independent contractor and not an employee of **CITY**, must carry policies of insurance in amounts specified and pay all taxes and fees incident hereunto. **CITY** shall have no liability except as specifically provided in this Contract.

13.3 **CONSULTANT** shall not commence work before: (1) **CONSULTANT** has provided the required evidence of insurance to **CITY** Purchasing and Contracts, and (2) **CITY** has approved the insurance policies provided by **CONSULTANT**.

13.4 Prior approval of the insurance policies by **CITY** shall be a condition precedent to any payment of consideration under this Contract and **CITY'S** approval of any changes to insurance coverage during the course of performance shall constitute an ongoing condition subsequent this Contract. Any failure of **CITY** to timely approve shall not constitute a waiver of the condition.

13.5 *Insurance Coverage (13.6 through 13.23)*:

13.6 **CONSULTANT** shall, at **CONSULTANT'S** sole expense, procure, maintain and keep in force for the duration of this Contract the following insurance conforming to the minimum requirements specified below. Unless specifically specified herein or otherwise agreed to by **CITY**, the required insurance shall be in effect prior to the commencement of work by **CONSULTANT** and shall continue in force as appropriate until the later of:

13.6.1 Final acceptance by **CITY** of the completion of this Contract; or

13.6.2 Such time as the insurance is no longer required by **CITY** under the terms of this Contract.

13.6.3 Any insurance or self-insurance available to **CITY** under its coverage(s) shall be in excess of and non-contributing with any insurance required from **CONSULTANT. CONSULTANT'S** insurance policies shall apply on a primary basis. Until such time as the insurance is no longer required by **CITY**, **CONSULTANT** shall provide **CITY** with renewal or replacement evidence of insurance no less than thirty (30) calendar days before the expiration or replacement of the required insurance. If at any time during the period when insurance is required by this Contract, an insurer or surety shall fail to comply with the requirements of this Contract, as soon as **CONSULTANT** has knowledge of any such failure, **CONSULTANT** shall immediately notify **CITY** and immediately replace such insurance or bond with an insurer meeting the requirements.

13.7 *General Insurance Requirements (13.8 through 13.23)*:

13.8 **Certificate Holder:** Each liability insurance policy shall list Carson City c/o Carson City Purchasing and Contracts, 201 N. Carson Street, Suite 3, Carson City, NV 89701 as a certificate holder.

13.9 **Additional Insured:** By endorsement to the general liability insurance policy evidenced by **CONSULTANT**, The City and County of Carson City, Nevada, its officers, employees and immune contractors shall be named as additional insureds for all liability arising from this Contract.

13.10 **Waiver of Subrogation**: Each liability insurance policy shall provide for a waiver of subrogation as to additional insured, unless:

13.10.1 **CONSULTANT** maintains an additional $5,000,000.00 umbrella policy in lieu of the Waiver of Subrogation Clause.

13.11 **Cross-Liability**: All required liability policies shall provide cross-liability coverage as would be achieved under the standard ISO separation of insureds clause.

13.12 **Deductibles and Self-Insured Retentions**: Insurance maintained by **CONSULTANT** shall apply on a first dollar basis without application of a deductible or self-insured retention unless otherwise specifically agreed to by **CITY**. Such approval shall not relieve **CONSULTANT** from the obligation to pay any deductible or self-insured retention. Any deductible or self-insured retention shall not exceed $50,000.00 per occurrence, unless otherwise approved by **CITY**.

13.13 **Policy Cancellation**: Except for ten (10) calendar days notice for non-payment of premium, each insurance policy shall be endorsed to state that; without thirty (30) calendar days prior written notice to Carson City Purchasing and Contracts, the policy shall not be canceled, non-renewed or coverage and /or limits reduced or materially altered, and shall provide that notices required by this paragraph shall be sent by mail to Carson City Purchasing and Contracts, 201 N. Carson Street, Suite 3, Carson City, NV 89701.

13.14 **Approved Insurer**: Each insurance policy shall be issued by insurance companies authorized to do business in the State of Nevada or eligible surplus lines insurers acceptable to the State and having agents in Nevada upon whom service of process may be made, and currently rated by A.M. Best as "A-VII" or better.

13.15 **Evidence of Insurance:** Prior to commencement of work, **CONSULTANT** must provide the following documents to Carson City Purchasing and Contracts, 201 North Carson Street, Suite 3, Carson City, NV 89701:

13.16 **Certificate of Insurance:** The Acord 25 Certificate of Insurance form or a form substantially similar must be submitted to Carson City Purchasing and Contracts to evidence the insurance policies and coverages required of **CONSULTANT**.

13.17 **Additional Insured Endorsement:** An Additional Insured Endorsement (CG20 10 or C20 26), signed by an authorized insurance company representative, must be submitted to Carson City Purchasing and Contracts to evidence the endorsement of **CITY** as an additional insured per **Subsection 13.9** (Additional Insured).

13.18 **Schedule of Underlying Insurance Policies:** If Umbrella or Excess policy is evidenced to comply with minimum limits, a copy of the Underlyer Schedule from the Umbrella or Excess insurance policy may be required.

13.19 **Review and Approval:** Documents specified above must be submitted for review and approval by **CITY** Purchasing and Contracts prior to the commencement of work by **CONSULTANT**. Neither approval by **CITY** nor failure to disapprove the insurance furnished by **CONSULTANT** shall relieve **CONSULTANT** of **CONSULTANT'S** full responsibility to provide the insurance required by this Contract. Compliance with the insurance requirements of this Contract shall not limit the liability of **CONSULTANT** or its sub-contractors, employees or agents to **CITY** or others, and shall be in addition to and not in lieu of any other remedy available to **CITY** under this Contract or otherwise. **CITY** reserves the right to request and review a copy of any required insurance policy or endorsement to assure compliance with these requirements.

13.20 **COMMERCIAL GENERAL LIABILITY INSURANCE**:

13.20.1 *Minimum Limits required*:

13.20.2 Two Million Dollars ($2,000,000.00) - General Aggregate.

13.20.3 Two Million Dollars ($2,000,000.00) - Products & Completed Operations Aggregate.

13.20.4 One Million Dollars ($1,000,000.00) - Each Occurrence.

13.20.5 Coverage shall be on an occurrence basis and shall be at least as broad as ISO 1996 form CG 00 01 (or a substitute form providing equivalent coverage); and shall cover liability arising from premises, operations, independent contractors, completed operations, personal

injury, products, civil lawsuits, Title VII actions and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

13.21 **BUSINESS AUTOMOBILE LIABILITY INSURANCE:**

13.21.1 *Minimum Limit required*:

13.21.2 One Million Dollars ($1,000,000.00) per occurrence for bodily injury and property damage.

13.21.3 Coverage shall be for "any auto", including owned, non-owned and hired vehicles. The policy shall be written on ISO form CA 00 01 or a substitute providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.

13.22 **PROFESSIONAL LIABILITY INSURANCE (Architects, Engineers and Land Surveyors)**

13.22.1 *Minimum Limit required*:

13.22.2 One Million Dollars ($1,000,000.00).

13.22.3 Retroactive date: Prior to commencement of the performance of this Contract.

13.22.4 Discovery period: Three (3) years after termination date of this Contract.

13.22.5 A certified copy of this policy may be required.

13.23 **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE:**

13.23.1 **CONSULTANT** shall provide workers' compensation insurance as required by NRS Chapters 616A through 616D inclusive and Employer's Liability insurance with a minimum limit of $500,000.00 each employee per accident for bodily injury by accident or disease.

13.23.2 **CONSULTANT** may, in lieu of furnishing a certificate of an insurer, provide an affidavit indicating that **CONSULTANT** is a sole proprietor; that **CONSULTANT** will not use the services of any employees in the performance of this Contract; that **CONSULTANT** has elected to not be included in the terms, conditions, and provisions of NRS Chapters 616A-616D, inclusive; and that **CONSULTANT** is otherwise in compliance with the terms, conditions, and provisions of NRS Chapters 616A-616D, inclusive.

14. BUSINESS LICENSE:

14.1 **CONSULTANT** shall not commence work before **CONSULTANT** has provided a copy of his Carson City business license to Carson City Purchasing and Contracts.

14.2 The Carson City business license shall continue in force until the later of: (1) final acceptance by **CITY** of the completion of this Contract; or (2) such time as the Carson City business license is no longer required by **CITY** under the terms of this Contract.

15. COMPLIANCE WITH LEGAL OBLIGATIONS:

CONSULTANT shall procure and maintain for the duration of this Contract any state, county, city, or federal license, authorization, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by **CONSULTANT** to provide the goods or SERVICES or any services of this Contract. **CONSULTANT** will be responsible to pay all government obligations, including, but not limited to, all taxes, assessments, fees, fines, judgments, premiums, permits, and licenses required or imposed by law or a court. Real property and personal property taxes are the responsibility of **CONSULTANT** in accordance with NRS Chapter 361 generally and NRS 361.157 and 361.159, specifically regarding for profit activity. **CONSULTANT** agrees to be responsible for payment of any such government obligations not paid by its subcontractors during performance of this Contract. **CITY** may set-off against consideration due any delinquent government obligation.

16. WAIVER OF BREACH:

Failure to declare a breach or the actual waiver of any particular breach of this Contract or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach.

17. SEVERABILITY:

If any provision contained in this Contract is held to be unenforceable by a court of law or equity, this Contract shall be construed as if such provision did not exist and the nonenforceability of such provision shall not be held to render any other provision or provisions of this Contract unenforceable.

18. ASSIGNMENT / DELEGATION:

To the extent that any assignment of any right under this Contract changes the duty of either party, increases the burden or risk involved, impairs the chances of obtaining the performance of this Contract, attempts to operate as a novation, or includes a waiver or abrogation of any defense to payment by **CITY,** such offending portion of the assignment shall be void, and shall be a breach of this Contract. **CONSULTANT** shall neither assign, transfer nor delegate any rights, obligations or duties under this Contract without the prior written approval of **CITY**. The parties do not intend to benefit any third party beneficiary regarding their respective performance under this Contract.

19. CITY OWNERSHIP OF PROPRIETARY INFORMATION:

Any files, reports, histories, studies, tests, manuals, instructions, photographs, negatives, blue prints, plans, maps, data, system designs, computer programs, computer codes, and computer records (which are intended to be consideration under this Contract), or any other documents or drawings, prepared or in the course of preparation by **CONSULTANT** (or its subcontractors) in performance of its obligations under this Contract shall be the exclusive property of **CITY** and all such materials shall be delivered into **CITY** possession by **CONSULTANT** upon completion, termination, or cancellation of this Contract. **CONSULTANT** shall not use, willingly allow, or cause to have such materials used for any purpose other than performance of **CONSULTANT'S** obligations under this Contract without the prior written consent of **CITY**. Notwithstanding the foregoing, **CITY** shall have no proprietary interest in any materials licensed for use by **CITY** that are subject to patent, trademark or copyright protection.

20. PUBLIC RECORDS:

Pursuant to; NRS 239.010, information or documents received from **CONSULTANT** may be open to public inspection and copying. **CITY** will have the duty to disclose unless a particular record is made confidential by law or a common law balancing of interests. **CONSULTANT** may clearly label specific parts of an individual document as a "trade secret" or "confidential" in accordance with NRS 332.061, provided that **CONSULTANT** thereby agrees to indemnify and defend **CITY** for honoring such a designation. The failure to so label any document that is released by **CITY** shall constitute a complete waiver of any and all claims for damages caused by any release of the records.

21. CONFIDENTIALITY:

CONSULTANT shall keep confidential all information, in whatever form, produced, prepared, observed or received by **CONSULTANT** to the extent that such information is confidential by law or otherwise required by this Contract.

22. FEDERAL FUNDING:

22.1 *In the event federal funds are used for payment of all or part of this Contract*:

22.1.1 **CONSULTANT** certifies, by signing this Contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. This certification is made pursuant to the regulations implementing Executive Order 12549, Debarment and Suspension, 28 C.F.R. pt. 67, § 67.510, as published as pt. VII of the May 26, 1988, Federal

Register (pp. 19160-19211), and any relevant program-specific regulations. This provision shall be required of every subcontractor receiving any payment in whole or in part from federal funds.

22.1.2 **CONSULTANT** and its subcontractors shall comply with all terms, conditions, and requirements of the Americans with Disabilities Act of 1990 (P.L. 101-136), 42 U.S.C. 12101, as amended, and regulations adopted thereunder contained in 28 C.F.R. 26.101-36.999, inclusive, and any relevant program-specific regulations.

22.1.3 **CONSULTANT** and its subcontractors shall comply with the requirements of the Civil Rights Act of 1964, as amended, the Rehabilitation Act of 1973, P.L. 93-112, as amended, and any relevant program-specific regulations, and Executive Order 11478 (July 21, 2014) and shall not discriminate against any employee or offeror for employment because of race, national origin, creed, color, sex, sexual orientation, gender identity, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions).

22.1.4 If and when applicable to the particular federal funding and the Scope of Work under this Contract, **CONSULTANT** and its subcontractors shall comply with: American Recovery and Reinvestment Act of 2009, Section 1605 – Buy American (100% Domestic Content of iron, steel and manufactured goods); Federal Highway Administration (FHWA) 23 U.S.C. § 313 – Buy America, 23 C.F.R. § 635.410 (100% Domestic Content of steel, iron and manufactured products); Federal Transit Administration (FTA) 49 U.S.C. § 5323(j), 49 C.F.R. Part 661 – Buy America Requirements (See 60% Domestic Content for buses and other Rolling Stock).

23. LOBBYING:

23.1 The parties agree, whether expressly prohibited by federal law, or otherwise, that no funding associated with this Contract will be used for any purpose associated with or related to lobbying or influencing or attempting to lobby or influence for any purpose the following:

23.1.1 Any federal, state, county or local agency, legislature, commission, council or board;

23.1.2 Any federal, state, county or local legislator, commission member, council member, board member, or other elected official; or

23.1.3 Any officer or employee of any federal, state, county or local agency; legislature, commission, council or board.

24. GENERAL WARRANTY:

CONSULTANT warrants that it will perform all SERVICES required hereunder in accordance with the prevailing standard of care by exercising the skill and care normally required of individuals performing the same or similar SERVICES, under the same or similar circumstances, in the State of Nevada.

25. PROPER AUTHORITY:

The parties hereto represent and warrant that the person executing this Contract on behalf of each party has full power and authority to enter into this Contract. **CONSULTANT** acknowledges that this Contract is effective only for the period of time specified in this Contract. Any SERVICES performed by **CONSULTANT** before this Contract is effective or after it ceases to be effective is performed at the sole risk of **CONSULTANT**.

26. ALTERNATIVE DISPUTE RESOLUTION (Public Work):

If the SERVICES under this Contract involve a “public work” as defined under NRS 338.010(17), then pursuant to NRS 338.150, a public body charged with the drafting of specifications for a public work shall include in the specifications a clause requiring the use of a method of alternative dispute resolution (“ADR”) before initiation of a judicial action if a dispute arising between the public body and the **CONSULTANT** engaged on the public work cannot otherwise be settled. Therefore, unless ADR is otherwise provided for by the parties in any other incorporated attachment to this Contract, in the event that a dispute arising between **CITY** and **CONSULTANT** regarding that public work cannot otherwise be settled, **CITY** and **CONSULTANT** agree that, before judicial action may be initiated, **CITY** and **CONSULTANT** will submit the dispute to non-binding mediation. **CITY** shall present

CONSULTANT with a list of three potential mediators. **CONSULTANT** shall select one person to serve as the mediator from the list of potential mediators presented by **CITY**. The person selected as mediator shall determine the rules governing the mediation.

27. GOVERNING LAW / JURISDICTION:

This Contract and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada, without giving effect to any principle of conflict-of-law that would require the application of the law of any other jurisdiction. **CONSULTANT** consents and agrees to the jurisdiction of the courts of the State of Nevada located in Carson City, Nevada for enforcement of this Contract.

28. ENTIRE CONTRACT AND MODIFICATION:

This Contract and its integrated attachment(s) constitute the entire Contract of the parties and such are intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other Contracts that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Contract specifically displays a mutual intent to amend a particular part of this Contract, general conflicts in language between any such attachment and this Contract shall be construed consistent with the terms of this Contract. Unless otherwise expressly authorized by the terms of this Contract, no modification or amendment to this Contract shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto. Conflicts in language between this Contract and any other agreement between CITY and CONSULTANT on this same matter shall be construed consistent with the terms of this Contract. The parties agree that each has had their respective counsel review this Contract which shall be construed as if it was jointly drafted.

29. ACKNOWLEDGMENT AND EXECUTION:

This Contract may be executed in counterparts. The parties hereto have caused this Contract to be signed and intend to be legally bound thereby as follows:

CITY
Chief Financial Officer
Attn: Laura Tadman, Purchasing & Contracts Administrator
Purchasing and Contracts Department
201 North Carson Street, Suite 3
Carson City, Nevada 89701
Telephone: 775-283-7137
Fax: 775-887-2107
LTadman@carson.org

By:_____
Nancy Paulson, Chief Financial Officer

Dated _____

CITY'S LEGAL COUNSEL
Carson City District Attorney

I have reviewed this Contract and approve as to its legal form.

By:_____
Deputy District Attorney

Dated _____

CITY'S ORIGINATING DEPARTMENT
CONSULTANT will not be given authorization to begin work until this Contract has been signed by Purchasing and Contracts

BY: Darren Schulz, Director of Public Works
3505 Butti Way
Carson City, NV 89701
Telephone: 775-887-2355
Fax: 775-887-2112
dschulz@carson.org

By: _____

Dated _____

Funding Source: 245-3028-431.12-01

PROJECT CONTACT PERSON:

Dirk Goering, Project Manager
Telephone: 775-283-7431

PROFESSIONAL SERVICES CONSULTANT AGREEMENT
Contract No.1617-027
Title: South Carson Street Conceptual Complete Streets Study

Undersigned deposes and says under penalty of perjury: That he/she is **CONSULTANT** or authorized agent of **CONSULTANT**; that he/she has read the foregoing Contract; and that he/she understands the terms, conditions and requirements thereof.

CONSULTANT
BY: Molly O'Brien
TITLE: Project Manager
FIRM: Kimley-Horn and Associates
CARSON CITY BUSINESS LICENSE #: n/a as no work will be performed in Carson City
Address: 5370 Kietzke Lane, Suite 201
City: Reno **State:** NV **Zip Code:** 89511
Telephone: 775-200-1979
E-mail Address: molly.obrien@kimley-horn.com

_____
(Signature of Contractor)

DATED _____

STATE OF_____)
)ss
County of _____)

Signed and sworn (or affirmed before me on this _____day of _____, 20__.

_____
(Signature of Notary)

(Notary Stamp)

PROFESSIONAL SERVICES CONSULTANT AGREEMENT
Contract No.1617-027
Title: South Carson Street Conceptual Complete Streets Study

CONTRACT ACCEPTANCE AND EXECUTION:

The Carson Area Metropolitan Planning Organization for Carson City, Nevada at their publicly noticed meeting of July 13, 2016, approved the acceptance of the attached Contract hereinbefore identified as **CONTRACT No. 1617-027** and titled South Carson Street Conceptual Complete Streets Study. Further, the Carson Area Metropolitan Planning Organization authorizes the Chairperson of the Carson Area Metropolitan Planning Organization, Nevada to set his hand to this document and record his signature for the execution of this Contract in accordance with the action taken.

CARSON CITY, NEVADA

_____
Ray Fierro, CHAIRPERSON

DATED this 13th day of July, 2016.

ATTEST:

_____
Kathleen King, CLERK-RECORDER

DATED this 13th day of July, 2016.

PROFESSIONAL SERVICES CONSULTANT AGREEMENT
Contract No.1617-027
Title: South Carson Street Conceptual Complete Streets Study

SAMPLE INVOICE

Invoice Number: _____
Invoice Date: _____
Invoice Period: _____

Vendor Number: _____
_____
_____

Invoice shall be submitted to:

Carson City Public Works
Attn: Karen White
3505 Butti Way
Carson City NV 89701

Line Item #	Description	Unit Cost	Units Completed	Total $$
			Total for this invoice	

Original Contract Sum $ _____
Less amount previously billed $ _____
= contract sum prior to this invoice $ _____
Less this invoice $ _____
=Dollars remaining on Contract $ _____

ENCLOSE COPIES OF RECEIPTS & INVOICES FOR EXPENSES & OUTSIDE SERVICES

SCOPE OF SERVICES FOR SOUTH CARSON STREET CONCEPTUAL COMPLETE STREETS STUDY

Kimley-Horn and Associates, Inc. ("CONSULTANT") is pleased to submit this letter agreement (the "Agreement") to Carson City ("CITY") for providing professional transportation planning services for the South Carson Street Conceptual Complete Streets Study.

Project Understanding

The CONSULTANT understands that the CITY would like to develop a conceptual complete streets study for South Carson Street from 5th Street to Snyder Avenue (approximately 2.4 miles). Due to significant changes in traffic patterns and volumes anticipated with the opening of the freeway from Fairview to US 50, traffic counts and traffic analysis will not be conducted as part of the study. It is anticipated that traffic counts and/or traffic analysis could be conducted at a later date after the opening of the freeway and the concept is developed.

Scope of Services

The CONSULTANT will provide the services specifically set forth below.

Task 1: Project Administration

The CONSULTANT will conduct project administration activities, including monthly invoicing and progress reports.

Task 2: Project Meetings

The CONSULTANT will prepare for and attend up to three (3) project meetings. The following meetings are anticipated:

- Kick-Off Meeting
- Comment/Resolution Meeting (after CITY reviews Draft Report)
- Presentation of Final Document (attend Board Meeting)

Task 3: Existing Conditions

A site visit will be conducted to document existing lane configurations and traffic control along the corridor signalized intersections (6 intersections). Cross-section data will also be collected along 5 cross-sections along the corridor.

The CONSULTANT will obtain the following data to aid in documenting conditions along the corridor:

- Aerial from the CITY
- Property line data from the CITY
- Other relevant data/CAD files from the CITY

Task 4: Identify Potential Improvements

The CONSULTANT will identify potential improvement opportunities including enhanced pedestrian and bicycle accommodation along the corridor, access control, review options for the existing frontage road, and recommendations on whether or not a new speed limit should be considered along the roadway.

The CONSULTANT will develop potential cross-sections, based on the field review and right-of-way constraints. Up to 2 conceptual cross-sections will be provided per segment (5 segments total). A plant palette will be created identifying up to 5 shrubs, 5 accent plants, and 3 trees. Up to 3 photo simulations will be prepared graphically depicting before and after conditions.

Task 5: Public Meetings

Two (2) public meetings are planned under this task. The first public meeting is anticipated to occur at the beginning of the project, and the second public meeting is anticipated to occur after Task 6 is completed.

Public Meeting #1

The first public meeting is anticipated to consist of introducing the project and gathering feedback from attendees. The CONSULTANT will develop a brief PowerPoint for the meeting. The PowerPoint is anticipated to include an overview of complete streets and project background/need. The CONSULTANT will bring an aerial plot of the project extents and comment cards for meeting attendees to provide their input on what complete streets improvements they would like to see incorporated into the study. The CITY will secure a location, provide public notice (newspaper ads and/or mailing to residents), ADA accommodation, and any other items necessary to conduct the public meeting.

Public Meeting #2

The CONSULTANT will prepare up to five (5) boards depicting the project in support of the public meeting. The CITY will review the boards prepared by the CONSULTANT prior to the public meeting. The CITY will secure a location, provide public notice (newspaper ads and/or mailing to residents), ADA accommodation, and any other items necessary to conduct the public meeting.

Task 6: Develop Conceptual Complete Streets Layout

The CONSULTANT will determine in coordination with the CITY and comments received from the public meeting, the preferred conceptual design for the study corridor. The CITY will conduct additional public outreach on the development of the conceptual plans and will share the results with the CONSULTANT to be incorporated into the conceptual complete streets layouts. The CONSULTANT will prepare a preliminary complete streets layout for the corridor and will develop a preliminary opinion of probable cost for the preferred conceptual design layout.

Task 7: Draft and Final Report

The CONSULTANT will prepare a Draft Report. The Report is anticipated to include the following:

- An Executive Summary describing the project purpose, process, and recommendations.

- Summary of the existing conditions along the corridor.
- Potential improvements considered for the corridor.
- Summary of the public meetings.
- Conceptual complete streets layout and preliminary opinion of probable cost for improvements.

The CITY will review the draft report and provide written comments or verbal comments in the comment resolution meeting described under Task 2. The CONSULTANT will prepare a comment/resolution form and revise the report as necessary. The CONSULTANT will provide two (2) hard copies and an electronic copy of the report in Adobe PDF format to the CITY.

Additional Services

Any services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates. Additional services we can provide include, but are not limited to, the following:

- Design of recommended improvements
- Traffic counts
- Traffic analysis
- Traffic simulation
- Drainage analysis

Information Provided By the CITY

The CONSULTANT shall be entitled to rely on the completeness and accuracy of all information provided by the CITY or the CITY's consultants or representatives. The CITY shall provide all information requested by the CONSULTANT during the project, including but not limited to the following:

- Aerial from the CITY
- Property line data from the CITY
- Other relevant data/CAD files from the CITY

Schedule

The CONSULTANT will provide our services as expeditiously as practicable with the goal of meeting the following schedule: completion of the project within one year of notice to proceed.

Fee and Expenses

The CONSULTANT will perform the services in Task 1 through Task 7 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the CITY.

Task 1	Project Administration	$ 5,571
Task 2	Project Meetings	$ 3,594
Task 3	Existing Conditions	$ 4,529
Task 4	Identify Potential Improvements	$10,848

Task 5	Public Meetings	$ 8,693
Task 6	Develop Conceptual Complete Streets Layout	$18,931
Task 7	Prepare Draft and Final Report	$22,823
Total Lump Sum Fee		**$74,989**

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 30 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

STAFF REPORT

Report To: Carson Area Metropolitan Planning Organization **Meeting Date:** July 13, 2016

Staff Contact: Dirk Goering, Senior Transportation Planner

Agenda Title: (**Information only**) Informational presentation on the draft 2040 Regional Transportation Plan (RTP).

Staff Summary: The Regional Transportation Plan is a long-term planning document, intended to analyze the regional transportation network and to identify current and future needs to maintain a safe, efficient, and sustainable transportation system. The Carson Area Metropolitan Planning Organization (CAMPO), who represents Carson City, northern Douglas County, and western Lyon County, has developed this plan.

Agenda Action: Other/Presentation **Time Requested:** 15 minutes

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Proposed Motion
N/A

Background/Issues & Analysis
As part of CAMPO's Fiscal Year 2016 Unified Planning Work Program, staff is responsible for the development of a 20 plus year regional transportation plan (RTP). The draft plan identifies five goals to help guide investment into the region's transportation system. The goals are as followed:

- Increase the safety of the transportation system for all users
- Maintain a sustainable regional transportation system
- Increase the mobility and reliability of the transportation system for all users
- Maintain and develop a transportation system that supports economic vitality
- Provide an integrated transportation system

Applicable Statute, Code, Policy, Rule or Regulation
N/A

Financial Information
Is there a fiscal impact? ☐ Yes ☒ No

If yes, account name/number:

Is it currently budgeted? ☐ Yes ☐ No

Explanation of Fiscal Impact:

Alternatives
N/A

Supporting Material
2040 Regional Transportation Plan

2040 Regional Transportation Plan

Carson Area Metropolitan Planning Organization

CAMPO

This report was funded in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the Carson Area Metropolitan Planning Organization expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

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Executive Summary

Purpose and Goals

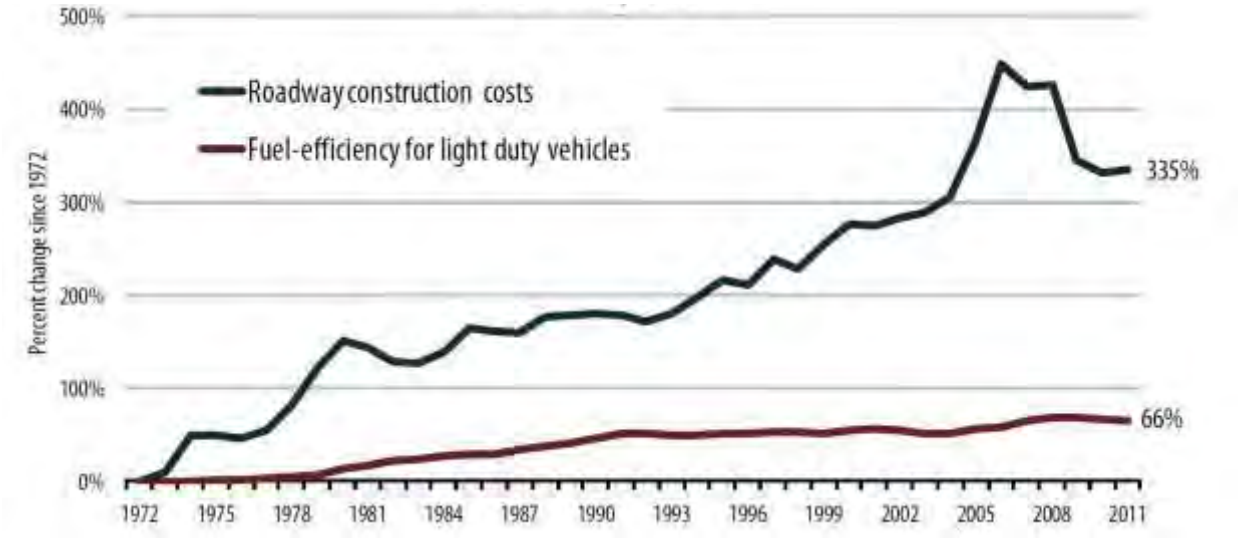
This Regional Transportation Plan is a long-term planning document, intended to analyze the regional transportation network and to identify current and future needs to maintain a safe, efficient, and sustainable transportation system. The Carson Area Metropolitan Planning Organization (CAMPO), who represents Carson City, northern Douglas County, and western Lyon County, has developed this plan. The intent of this plan is supported by the following five goals:

- **Increase the safety of the transportation system for all users**
- **Maintain a sustainable regional transportation system**
- **Increase the mobility and reliability of the transportation system for all users**
- **Maintain and develop a transportation system that supports economic vitality**
- **Provide an integrated transportation system**

Current Conditions

The current condition of the transportation system includes a backlog of deferred maintenance projects due to insufficient revenue. The motor vehicle fuel tax that provides the majority of maintenance funds for Carson City, Douglas County, and Lyon County has remained unchanged since 1993 (Federal) and 1992 (State). Due to the rising costs of transportation improvements and the efficiency gains in vehicles, the purchasing power and the amount of tax collected per vehicle mile traveled has declined.

Figure ES.1 Construction Cost and Fuel-Efficiency Growth



Source: ITEP, A Federal Gas Tax for the Future, September 2013

Due to a statewide concern for insufficient transportation funds, Assembly Bill 191 has required all counties in Nevada to place a question on the November 2016 ballot asking the voters whether to index the motor vehicle fuel revenue tax to a specified inflation rate, except Washoe County, which already has fuel revenue indexing. If voters turn down the fuel revenue indexing, local decisions makers will continue to have difficult choices to make regarding the prioritization of capital improvement projects and maintenance projects. More information is provided in Chapter 3 *Funding*.

As all three-member agencies struggle to allocate funding resources, pavement management strategies are being used to maintain roadway pavement conditions at the lowest cost. All three agencies are in the process of developing or actively maintaining pavement management software. The software maintains an inventory of roadway conditions and schedules major and minor maintenance treatments to maximize the life span and condition of roadways. While this software is extremely useful to local agencies, the software does have a limitation. As the software aims to maintain roadway conditions, roadways that are no longer cost effective to maintain receive lower priority than new or recently constructed roadways. As a result, a balanced approach between maintaining better roads longer and repairing unsafe roadways must be achieved. More information is provided in Chapter 4 *Transportation System*.

The current transportation act, Fixing America's Surface Transportation Act, requires metropolitan planning organizations (MPOs) to establish a performance based planning approach to regional transportation planning. The transition to performance based planning includes the adoption of objectives to gauge progress. This plan includes the following thirteen objectives:

- **Reduce the number of transportation system fatalities**
- **Reduce the number of transportation system serious injuries**
- **Reduce the rate of transportation system fatalities**
- **Reduce the rate of transportation system serious injuries**
- **Improve the pavement condition of roadways in the CAMPO boundary**
- **Reduce the amount of roadways in poor or very poor condition**
- **Have no structurally deficient bridge decks in the CAMPO boundary**
- **Increase the number of ADA compliant transportation facilities**
- **Improve transit system efficiencies and accessibilities**
- **Maintain or improve travel times**
- **Improve travel times on major truck routes during peak hours**
- **Foster quality of life in the CAMPO boundary by increasing transportation choices and access to transportation services for all users**
- **Accommodate additional modes of transportation on existing transportation facilities**

In compliance with federal regulations and in coordination with the Nevada Department of Transportation and Nevada's three other MPOs, twenty-four performance measures have been established to track progress towards the plan's objectives. The introduction of measures into CAMPO's regional transportation plan will establish a baseline of information for future measures and will allow for the future evaluation of investment into the transportation system.





Future Demand

Over the next 25 years, demand on the transportation system will grow and evolve. In the short term, over the next four years, population growth for the Carson area is forecasted to be modest with an average growth rate of 1% between Carson City, Douglas County, and Lyon County. The Carson area is still recovering from the recession when the area experienced slight population declines. As Northern Nevada's economy recovers and strengthens, higher growth rates and demand on the Transportation System should be expected. Higher growth rates, such as 8%-10% that were experienced in the mid 2000's are not predicted in the short term, but are possible.

Figure ES.2 CAMPO Population Projections to 2040

	2015	2016	2017	2018	2019	2020	2025	2030	2035	2040
Carson City	54,694	55,168	55,945	56,823	57,661	58,272	61,933	65,594	69,254	72,915
Douglas County	48,347	48,220	48,171	48,190	48,230	48,072	47,767	47,462	47,157	46,852
Lyon County	53,652	54,229	55,404	56,768	58,112	58,688	63,597	68,506	73,415	78,324
Metropolitan Planning Area	84,204	85,046	85,896	86,755	87,623	88,499	93,013	97,758	102,745	107,986

Source: Nevada State Demographer: Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2033, 2035 and 2040 projections were estimated by CAMPO staff.

Population estimates anticipate a growing senior population that will necessitate investment in safety improvements to address seniors with changing needs, related to eyesight, hearing, and reaction times. Additionally, investment in public transportation and pedestrian and bicycle facilities will be important to provide an aging population with mobility and independence, along with improved integration and mobility for all system users.

Figure ES.3 Percentage of the Population 60 Years and Older

Member Agency	2010	2020	2030
Carson City	24%	29%	36%
Douglas County	30%	37%	39%
Lyon County	24%	27%	28%

Source: Nevada State Demographer Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2033

The land use in the CAMPO Area has experienced little change in recent years due to low development pressure. As Northern Nevada's economy strengthens, so will development pressures. The Nevada Department of Transportation is currently constructing two influential transportation projects in Northern Nevada that will have an effect on future land use and transportation patterns. Construction of the Carson City Freeway extension and the USA Parkway will improve access to employment for this entire region. Completion of the Carson City Freeway is anticipated in the spring of 2017, and the completion of the USA Parkway is anticipated in December 2017. Due to the shortened travel times from these improvements, additional traffic on the Highway 395 corridor between Douglas County and Carson City and on the Highway 50 corridor between Dayton and Carson City may be expected. To minimize congestion in these corridors, appropriately timed investment in access management, bottleneck removal, capacity building, and incident management coordination, are to be considered as needed.

Complete Streets

At a local level, a strategy to improve the mobility, accessibility, and integration of the transportation system will include investment in Complete Streets. Complete Streets are streets for everyone, designed and operated to enable safe access and comfortable accommodation for all users of all ages and abilities, including pedestrians, bicyclists, transit riders, and motorists of all types. National studies demonstrate Complete Streets provide a better quality of life. The majority of participants in a Carson area transportation system survey felt that the transportation system influences their quality of life. To incorporate Complete Streets into the Carson area transportation system, local and state agencies should take advantage of investment opportunities when choosing roadway maintenance projects, roadway construction and reconstruction projects, and utility projects affecting roadways. Opportunities may be found through coordination between agencies and within agencies.

Safety Trends

In January 2012, the Federal Highway Administration (FHWA) began promoting the implementation of proven safety countermeasures. Through research, these safety measures have shown great effectiveness in improving safety. Information on each countermeasure is available on the Federal Highway Administration website at the following link: http://safety.fhwa.dot.gov/provencountermeasures/.

Public Transportation

Public transportation provides improved mobility and access throughout the CAMPO Area. Presently, the principal benefit is safe and reliable transportation for the transit dependent population, a demographic that is anticipated to grow due to longer life spans and Nevada's attractive retirement atmosphere. Due to the dispersed pattern of residential, employment areas, and the region's mild traffic congestion, public transportation is not the preferred mode of travel. However, public transit provides an important complementary resource to active transportation and ride sharing users, allowing users to pair public transportation with other modes of travel. Public transportation provides access to jobs, community facilities, retail establishments, and healthcare facilities to individuals who cannot afford or are unable to drive a personal vehicle. Additionally, public transportation reduces traffic congestion and transportation emissions, providing a regional benefit.

The Future

The future of transportation will have a meaningful effect on society's safety, pollution levels, movement of goods, and productivity. Intelligent technology systems, smart cars, autonomous vehicles, unmanned aerial vehicles, and the hyperloop system are emerging technologies that will in some way impact the Carson area by the year 2040. Appropriately planning for these technologies and the influence they will have to our region is recommended. Vehicle crashes, vehicle emissions, stormwater pollution from transportation facilities, and unproductive travel times are all realities of the Carson area transportation system. Some of the emerging technologies might not exist in the Carson area in the next 25 years, but they will still have an impact on our region and our quality of life.

Intelligent Technology Systems (ITS)

ITS includes a variety of technological engineering. Examples of ITS include timing of traffic signals to reduce congestion during peak travel times, remote metering to identify traffic volumes, remote or automated system controls so the transportation system can react to changing conditions, and system communication to improve emergency response time or to inform drivers of approaching conditions. The primary benefits of ITS include creating a safer transportation system and reducing congestion. However, if autonomous vehicles continue to emerge, the infrastructure and software used in ITS may be mutually beneficial to the autonomous vehicle industry.

Smart cars

Smart cars are commonly considered small compact cars; however, the term smart car is evolving. While being efficient is typically one aspect, new technology is being incorporated for safety. Smart car technology can include crash avoidance, night-vision enhancements, and automated communication technology, to communicate with the transportation network to inform the driver or notify emergency services. Manufacturers are already offering some of these technologies, while others are still in development.

Autonomous vehicles

The autonomous vehicle is not a new concept; however, investment from manufacturers, research institutions, and governments has recently been growing. The State of Nevada has created public policy allowing the testing of autonomous vehicles on public roadways. Among other benefits, autonomous vehicles would provide increased mobility, safety, and higher productivity.

Unmanned Aerial Vehicles (UAV)

The technology of UAVs is being embraced by the State of Nevada. The use of UAVs in emergency response, infrastructure inspections, and product delivery is currently emerging.

Hyperloop System

The hyperloop system is a high-speed mode of travel, which could potentially reach a top speed of 760 miles per hour. The Hyperloop system involves building a full-length tube between destinations within which a transport pod carrying passengers or cargo is levitated by magnets and accelerated through a controlled environment.

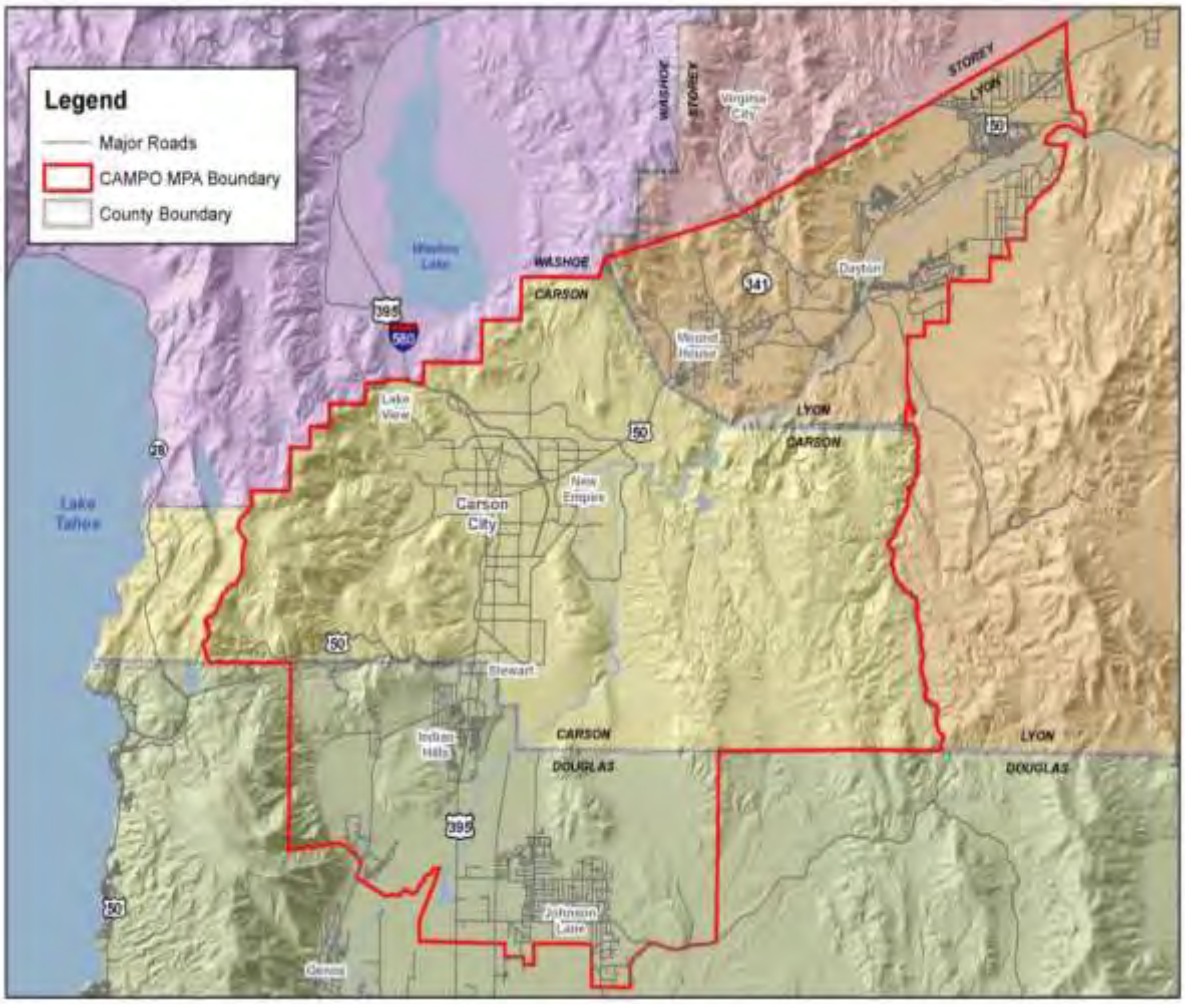
As these technologies emerge, transportation professionals will need to be mindful of how the transportation system will evolve. Appropriately planning for these technologies may help to maximize investment benefits by providing solutions for today and preparing for the future. There may be improvements to our transportation system that could accommodate or amplify the benefits of new technology. Planning for these transportation trends will help the Carson Area Metropolitan Planning Organization and its three member agencies successfully plan for the year 2040.

Chapter 1: Overview and Regulatory Framework

The Carson Area Metropolitan Planning Organization (CAMPO) is a federally recognized metropolitan planning organization (MPO), formed on February 26, 2003. Creation of the MPO was required since the Carson City urbanized area exceeded a population of 50,000. The CAMPO is the designated local decision-making body responsible for carrying out the metropolitan transportation planning process for the Carson City urbanized area.

The metropolitan planning area (MPA) boundary encompasses nearly all of Carson City (with the exception of the area within the Tahoe Basin) and portions of northern Douglas County and western Lyon County, including the Dayton Valley area. Map 1.0 depicts the MPA boundary.

Figure 1.0 CAMPO Boundary Map



CAMPO Roles and Responsibilities

The CAMPO is governed by a seven (7)-member board consisting of the five (5) members of the Carson City Regional Transportation Commission (RTC), one (1) member representing Douglas County, and one (1) member representing Lyon County. A representative from the Nevada Department of Transportation (NDOT) sits on the board serving as an ex officio, non-voting member. Carson City provides the staffing necessary to execute the daily functions and responsibilities of the MPO.

The primary responsibility of CAMPO is to ensure existing and future expenditures for transportation projects and programs are based on a continuing, cooperative and comprehensive (3-C) planning process. The CAMPO does not own nor operate the transportation systems they serve; rather it serves in the overall coordination and consensus-building role in planning and programming funds for projects and operations.

Among other state and federal requirements, CAMPO is required to develop a regional transportation plan (RTP) with a minimum 20-year planning horizon and a transportation improvement program (TIP) with a four-year horizon.

Federal Requirements

Federal regulations (23 CFR, §450.322) address the development and content of a regional transportation plan (also referred to as a metropolitan transportation plan).

In compliance with federal requirements, this 20-year transportation plan addresses the following subjects.

- Projected demand on the CAMPO transportation system
- Long and short range strategies to improve performance of the transportation system
- Evaluation of transportation facilities that serve national and regional transportation
- Proposed improvements with sufficient detail to develop cost estimates
- Discussion on environmental mitigation strategies to address impacts of the transportation plan on the environment
- Pedestrian and bicycle facilities
- Enhancement activities, as appropriate
- Financially constrained implementation plan

Transportation Legislation

On December 4, 2015, the President signed into law the Fixing America's Surface Transportation Act, or "FAST Act" - the first Federal law in over ten years to provide long-term funding certainty for surface transportation. The FAST Act authorizes $305 billion over fiscal years 2016 through 2020 for the Department of Transportation's highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology and statistics programs.

The previous transportation act was enacted in July 2012, and is known as the Moving Ahead for Progress in the 21st Century Act (MAP-21). This act authorized $105 billion for surface transportation programs in Federal fiscal years (FFY) 2013 and 2014. Between 2014 and December 2015, continuing resolutions extended MAP-21 funding.

Initiated with MAP-21 and continued with FAST, federal law now requires state departments of transportation and MPOs to establish and track performance measures. This legislation adopted seven national performance goals to guide investment into the country's transportation network. These national goals have been incorporated into the development of this plan and are referenced below:

MAP-21/FAST Act National Performance Goals

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduced project delivery delay

Federal Planning Priorities

The United States Department of Transportation encourages Metropolitan Planning Organizations (MPO) to incorporate three priorities into their transportation planning efforts. The priorities are termed MAP-21/FAST Act Implementation, Regional Models of Cooperation, and Ladders of Opportunity. The priorities are described below:

MAP-21/FAST Act Implementation

- Transition to Performance Based Planning and Programming
- Develop and implement a performance management approach to transportation planning and programming

Models of Regional Planning Cooperation

- Promote cooperation and coordination across MPO boundaries and State boundaries on transportation plans and programs, corridor studies, and regional projects
- Collaboration by sharing data collection, data storage and analysis, analytical tools, and performance based planning efforts

Ladders of Opportunity

- Improve access to essential services such as housing, employment, health care, schools/education, and recreation
- Identify transportation connectivity gaps to essential services

*Additional information can be found at the link below:
http://www.fhwa.dot.gov/planning/processes/metropolitan/mpo/fy_2016/index.cfm

Chapter 2: Goals, Objectives, and Performance Measures

This chapter contains adopted goals, objectives, and performance measures for this transportation plan. The purpose of these goals, objectives, and performance measures are to help guide and evaluate investment into the Carson rea transportation network. Public comment, previous goals from CAMPO's 2035 Regional Transportation Plan, and new federal legislation were leading factors in the development of the goals, objectives, and performance measures below:

Goals

- **Increase the safety of the transportation system for all users**
- **Maintain a sustainable regional transportation system**
- **Increase the mobility and reliability of the transportation system for all users**
- **Maintain and develop a transportation system that supports economic vitality**
- **Provide an integrated transportation system**

Objectives and Performance Measures

Initiated with the previous transportation bill, MAP-21, and continued with the FAST Act, federal law now requires MPOs to establish and track performance measures. Commonly referred to as performance based planning and programing, the established performance measures are intended to help assess the effectiveness of investment into the transportation network. The objectives and performance measures in this plan support one of the plan's five goals. Additionally, the objectives and performance measures have been developed through coordination with state and regional planning partners to allow for statewide consistency and comparison.

In addition to the establishment of performance measures, this plan provides baseline figures for future evaluation. The carefully selected objectives and performance measures were chosen based on data that is consistent and readily available. The objectives for this plan are believed to be realistic and measurable.

Goal: Increase the Safety of the Transportation System for All Users

Objective: Reduce the number of transportation system fatalities

- Performance Measure: Number (5-year rolling average) of fatal crashes in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of fatal crashes involving a bicyclist or pedestrian in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of fatal crashes involving trucks

Objective: Reduce the number of transportation system serious injuries

- Performance Measure: Number (5-year rolling average) of serious crashes (injuries classified as type A on the KABCO scale) in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of serious injuries involving a bicyclist or pedestrian in the CAMPO boundary

Objective: Reduce the rate of transportation system fatalities

- Performance Measure: Rate of fatalities calculated by the number of fatalities as a 5-year rolling average per 100 million VMT (vehicle miles traveled) in the CAMPO boundary

Objective: Reduce the rate of transportation system serious injuries

- Performance Measure: Rate of serious injuries classified as type A on the KABCO scale calculated by the number of crashes as a 5-year rolling average per 100 million VMT (vehicle miles traveled) in the CAMPO boundary

2014 Safety Performance Measures

- 1.6* - Number of Fatal Crashes
- 16.8* - Number of Serious Injury*** Crashes
- 0.2* - Number of Fatal Crashes involving a Bicyclist or Pedestrian
- 2.0* - Number of Serious Injury*** Crashes involving a Bicyclist or Pedestrian
- 0.28** - Rate of Fatal Crashes
- 2.94** - Rate of Serious Injury*** Crashes
- - Number of Fatal Crashes involving Trucks

*The number is expressed as a five year rolling average
**Rate is expressed as the number of crashes per 100 million vehicle miles traveled
***A serious injury is defined by the National Safety Council (NSC) as incapacitating

Goal: Maintain a Sustainable Regional Transportation System

Objective: Improve the pavement condition of roadways in the CAMPO boundary

- Performance Measure: Average PCI rating for collector and arterial roadways within the CAMPO boundary by jurisdiction (Carson City, Douglas County, and Lyon County)

Objective: Reduce the amount of roadways in poor or very poor condition

- Performance Measure: Percentage of roadways with a PCI rating of 55 or below in the CAMPO boundary by jurisdiction (Carson City, Douglas County, and Lyon County)

Objective: Have no structurally deficient bridge decks in the CAMPO boundary

- Performance Measure: Percentage of structurally deficient bridge decks with a roadway functional classification of 1-5, as approved by NDOT

Sustainability Performance Measures

0% of structurally deficient bridge decks (category 1-5 roadways) in the Carson Area Metropolitan Planning Organization boundary

- 62.9 – Carson City average PCI for collector and arterial roadways
- 56.0 – Douglas County average PCI for collector and arterial roadways
- TBD – Lyon County average PCI for collector and arterial roadways

- TBD % – Carson City percentage of roadways with a PCI of 55 or below
- TBD % – Douglas County percentage of roadways with a PCI of 55 or below
- TBD % – Lyon County percentage of roadways with a PCI of 55 or below

Goal: Increase the Mobility and Reliability of the Transportation System for All Users

Objective: Increase the number of ADA compliant transportation facilities

Performance Measure: The number of transportation facilities improved to ADA standards within the CAMPO boundary by jurisdiction

Objective: Improve transit system efficiencies and accessibilities

- Performance Measure: The number of passengers per revenue hour/mile/day for Jump Around Carson and RTC Intercity
- Performance Measure: The cost per revenue hour/mile/trip for Jump Around Carson and RTC Intercity
- Performance Measure: The number of passengers per day for Jump Around Carson and RTC Intercity
- Performance Measure: Monthly ridership for Jump Around Carson (fixed route and paratransit) and RTC Intercity
- Performance Measure: Farebox recovery rate for Jump Around Carson and RTC Intercity
- Performance Measure: On-time performance (departure from a time point between zero and five minutes is considered on time) for Jump Around Carson's fixed route and RTC Intercity

Objective: Maintain or improve travel times

- Performance Measure: Travel Demand Model Estimated Travel Times (see Chapter 4 for baseline numbers)

Fiscal Year 2015 Performance Measures

- 32 curb ramps and 1.3 miles of sidewalk improved to ADA standards in Carson City for the 2014/2015 fiscal year
- 2 intersections improved to ADA standards in Douglas County for the 2014/2015 fiscal year
- TBD transportation facilities improved to ADA standards in Lyon County for the 2014/2015 fiscal year

Figure 2.0 Transit Performance Measures

Fiscal Year 2015	Jump Around Carson (Fixed Route)	Jump Around Carson (Paratransit)	Intercity (Between Carson City and Reno)
Number of passengers per revenue hour	12.84	2.24	10.90
Number of passengers per revenue mile	1.00	0.26	0.35
Cost per revenue hour	$52.97	$43.80	$87.14*
Cost per trip	$4.13	$19.52	$7.90*
Cost per revenue mile	$4.11	$5.02	$2.75*
Number of passengers per revenue day	631.54	61.51	142.00
Monthly ridership	16,420	1,599	3,009
Farebox recovery rate	8.73%	8.35%	42.80%
On-time performance	96.50%	98.20%	56.00%

* Cost to Carson City Regional Transportation Commission

Goal: Maintain and Develop a Transportation System that Supports Economic Vitality

Objective: Improve travel times on major truck routes during peak hours

- Performance Measure: Travel times, during peak hours, from the travel demand model for U.S. Highway 395 and Highway 50

Objective: Foster quality of life in the CAMPO boundary by increasing transportation choices and access to transportation services for all users

- Performance Measure: Percentage of objectives met (measured with next plan)

Figure 3.0 Travel Time Performance Measures

Travel Times in Minutes between Metropolitan Planning Area Gateways		Year 2015	
From	To	AM	PM
U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	U.S. Hwy 50 East (Near Chaves Road)	30.2	39.4
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	23.1	30.4
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	16.8	18.7
U.S. Hwy 50 East (Near Chaves Road)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	35	33.6
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	48.2	53.6
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	41.9	41.9
U.S. Hwy 395 South (2000 feet south of Johnson Lane)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	26.4	26.4
	U.S. Hwy 50 East (Near Chaves Road)	46.6	55.2
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	16.1	15.3
U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	17.3	18.5
	U.S. Hwy 50 East (Near Chaves Road)	37.5	47.3
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	13.3	19.1





Goal: Provide an Integrated Transportation System

Objective: Accommodate additional modes of transportation on existing transportation facilities

- Performance Measure: Number of Complete Street projects constructed within the CAMPO boundary
- Performance Measure: Miles of bicycle lane added
- Performance Measure: Miles of sidewalk added
- Performance Measure: Miles of shared use path added

Fiscal Year 2015 Integrated Transportation System Performance Measures

- 0.0 Complete Street projects constructed
- 0.35 miles of bicycle lane added
- 0.25 miles of sidewalk added
- 0.0 miles of shared use path added

Chapter 3: Funding

The CAMPO transportation network of roads, bike lanes, sidewalks, signals, signs, and countless other transportation facilities provides mobility to its users, allowing for a high quality of life. A combination of local, regional, state, and federal funds maintain and improve this network; however, the current level of funding requires local and regional decision makers to prioritize investment into the transportation network. To sustain an effective transportation network, a careful balance between investing in maintenance projects and capital projects will need to be achieved. Capital projects include the construction or reconstruction of roadways, capacity improvements, safety improvements, or design improvements. To support the continued need for responsible investment, a goal of this plan is to maintain a sustainable regional transportation system, understanding that funding for the transportation network is limited.

All jurisdictions are required to have a balance budget, meaning budgeted expenses cannot exceed anticipated revenue. For the purpose of consistency, CAMPO, NDOT, and Nevada's other three MPOs developed the following financial assumptions for future revenues and expenditures. Revenue projections assume a conservative 2% annual growth rate. Expenditures used a 10-year rolling average of the Producer Price Index (PPI) to develop a 3.5% inflation rate for construction costs. It was agreed that historical cost data provides reasonable justification for cost estimates going forward.

The need for timely maintenance to transportation assets is critical, the longer maintenance is deferred the more expensive transportation improvement projects will become. Additionally, the longer maintenance is deferred, the faster roadway conditions will deteriorate. Both Carson City and Douglas County have begun working with the University of Reno's (UNR) Pavement Engineering Program to improve the timing of transportation investments. As identified through the partnership, there are cost effective times in the life of a roadway when certain maintenance treatments should be applied to maximize investment benefits. Due to the backlog of deferred maintenance, that member agencies are experiencing, and the need to address deteriorating unsafe roadways, the windows of opportunity for properly timed maintenance improvements are being missed.

Due to an inflation rate that out paces revenue growth, 3.5% and 2.0% respectively, levels of expenditures will need to be reduced to achieve balanced budgets.

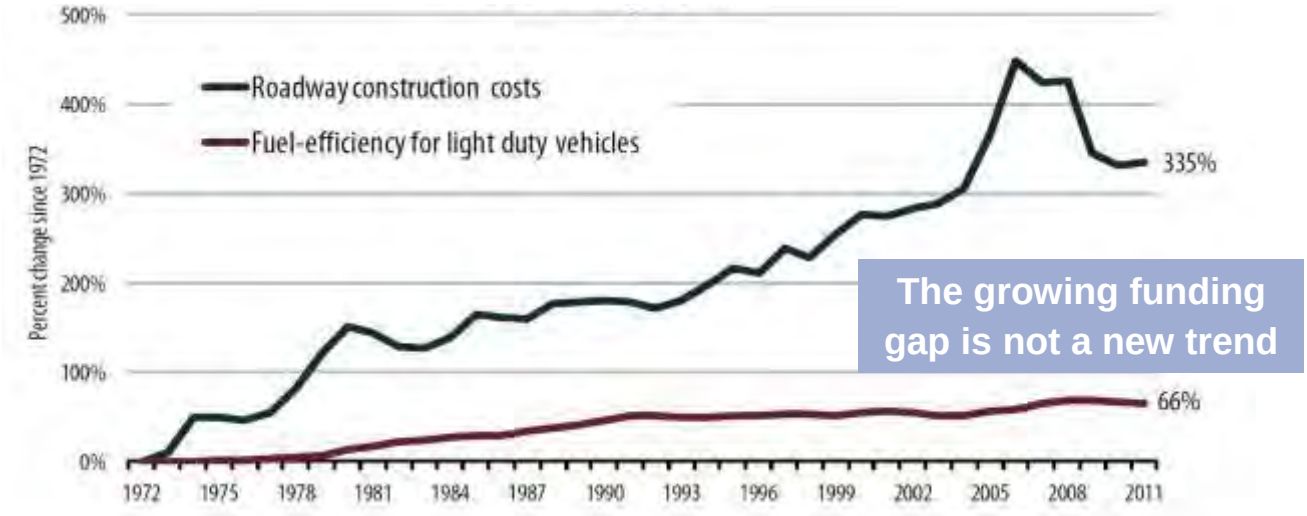
Motor Vehicle Fuel Revenue Indexing

Due to a growing concern in the gap between funding and costs, a 2015 Assembly Bill (AB191) has required all counties, except Washoe County which already has fuel revenue indexing, to place a question on the November 8, 2016 ballot, asking voters to approve an annual increase to certain motor vehicle fuels taxes for a ten-year period. This annual increase is known as *Motor Vehicle Fuel Indexing*. The annual increase would be tied to the rate of inflation to help revenue keep pace with transportation costs.

The growing gap between motor vehicle fuel tax revenue and transportation costs are primarily due to two reasons:

1. The decline in purchasing power, due to the fact fuel tax is at a fixed rate, which causes inflation to erode revenue
2. The decline in the amount of gasoline sold per mile driven due to improved vehicle fuel-efficiency and other factors

Figure 3.0 Construction Cost and Fuel-Efficiency Growth



Source: ITEP, A Federal Gas Tax for the Future, September 2013

The intent of Motor Fuel Revenue Indexing is to enable taxes paid at the pump to better support the costs of maintaining and improving our transportation infrastructure. Where approved, counties will receive approximately 65% of the revenue generated by the indexing to fund roadway improvements and the State will receive the remaining 35% to fund roadway improvements on state roads. The State must spend the revenue in the county where it was collected. If approved, the measure will remain in place for a 10-year period, when counties will have the option to renew the measure by putting it back on the ballot for another vote. The Federal gas tax has not been increased since 1993 and the State fuel tax has not been increased since 1992.

More information is located here: http://www.itep.org/itep_reports/2013/09/a-federal-gas-tax-for-the-future.php#.V2MZR2cm4fg.

Surface Transportation Program (STP) Funds

The Nevada Department of Transportation (NDOT) has recently agreed to provide Surface Transportation Program (STP) funds directly to CAMPO for the first time, and is expected to do so on an annual basis. The program provides flexible funding that may be used to preserve or improve the conditions and performance on any Federal-aid highway, including bridge and tunnel projects, pedestrian and bicycle infrastructure, or transit capital projects. As under the MAP-21 Transportation Act, the recent FAST Act directs the Federal Highway Administration (FHWA) to apportion STP funding to states, which then are responsible for apportioning an amount to areas in proportion to its urban population.

Based on the CAMPO's urban area population of 63,486, it is anticipated that $910,711 will be set aside for the CAMPO area, including Caron City, northern portions of Douglas County, and western portions of Lyon County, for 2017. The details of this arrangement are still being worked out, but this will mark a significant change for CAMPO since its inception over a decade ago. This reliable funding source will allow CAMPO member agencies to construct larger and more meaningful system improvements. STP funds are highly flexible in terms of what they can be used for and are a primary source of funding for MPOs across the country.

Financial Forecast

Revenue and Expenditures

This plan's financial forecast is based upon current equal levels of revenues and expenditures. Funding for transportation projects, capital improvements and maintenance, come from a variety of sources. With the exception of Surface Transportation Program funds and Federal Transit Administration (FTA) funds, the remainders of federal revenue sources are highly competitive. The State of Nevada does have funding available, but similar to federal dollars they are highly competitive. CAMPO staff and its member agencies aggressively compete for federal and state funds, however, due to project selection methods it is difficult to compete with Washoe and Clark counties with large populations and traffic volumes. Local funds make up a significant source of revenue for all three-member agencies. Local sources and funding levels differ between counties.

The total anticipated revenue for 2017 available for transportation improvements within the Carson Area is approximately 8.6 million dollars per year.

The anticipated revenue for this regional transportation plan are based on current revenue amounts budgeted by member agencies and the Nevada Department of Transportation.

Below is a list of funds that have been utilized for transportation improvements in the past by member agencies. More details on each fund is available in CAMPO's Transportation Improvement Program online at www.CarsonAreaMPO.com.

Federal Funds

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Highway Safety Improvement Program (HSIP)
- STP Set-aside, formerly Transportation Alternatives Program (TAP)
- FTA Section 5307 (Urbanized Area Formula Grants)
- FTA Section 5310 (Elderly Persons and Persons with Disabilities)
- FTA Section 5339 (Bus and Bus Facility Grants)
- TIGER Discretionary Grants
- Community Development Block Grant (CDBG)

State Funds

- State Highway Fund

Local Funds

- Carson City Regional Transportation Commission (RTC)
- Carson City Street Maintenance Fund (Motor Vehicle Fuel and Sales Tax)
- Carson City Quality of Life Initiative
- Carson City 1/8-cent Sales Tax
- Douglas County Regional Transportation Commission (RTC) Motor Vehicle Fuel Tax and Shared Revenue Tax
- Lyon County Regional Transportation Commission (RTC) Motor Vehicle Fuel Tax and Shared Revenue Tax

The following transportation improvement projects have been identified by CAMPO's member agencies and the Nevada Department of Transportation as financially feasible transportation improvements. The total cost of the planned improvements total approximately 68.1 million dollars.

Figure 3.1 Fiscally Constrained Transportation Improvements

Fiscally Constrained Transportation Improvements			
Anticipated Year of Improvements 2017-2025			
Agency	**Project Description**	**Limits**	**Improvement**
CC	Curry Street	Rhodes Street to Lake Glen Drive	Road enhancements to two lane Road
CC	Roop Street	Washington Street to Fifth Street	Widen to four lanes
CC	Saliman Road	Fairview to Colorado	Expansion - Widen to four lanes
CC	William Street Corridor	Carson Street to Mills Park	Reduce to one lane per direction
CC	S. Carson Street Corridor*	Stewart Street to Freeway Interchange	Reduce to two lanes per direction
CC	Sierra Vista Lane**	Pinion Hills to Mexican Dam	Road enhancements to two lane Road
NDOT	US 50 Drainage Improvements	Spooner Summit to Clear Creek Inter Change	Drainage Improvements
NDOT	I 580 Carson City Roadway Rehabilitation	William Street to I-580	Roadway Rehabilitation
Anticipated Year of Improvements 2026-2040			
Agency	**Project Description**	**Limits**	**Improvement**
NDOT	Full Interchange at Spooner Jct	CC Freeway at US 395/US 50 W	Construct full interchange
LC	New Bridge Over Carson River	Dayton Valley Road to Chaves Road	Bridge over Carson River connecting Dayton Valley Road to Chaves Road

* Additional funding is being sought and a corridor study is anticipated

** Grant funded project with 5% local match

To determine financial feasibility, the cost of the projects were totaled and allocated an annual cost. The annual cost is approximately 2.8 million dollars, which is within the annual anticipated revenue for the Carson Area of approximately 8.6 million dollars. The remaining funds, approximately 67%, are anticipated to be used for maintenance and operation expenditures.

The following transportation improvement projects have been identified by CAMPO's member agencies and the Nevada Department of Transportation as transportation improvements without available revenue. The total cost of the planned improvements total approximately 73.5 million dollars.

Figure 3.2 Proposed Transportation Projects in the Fiscally Unconstrained Plan

Fiscally Unconstrained Transportation Improvements			
Anticipated Time of Improvements 2017-2025			
Agency	**Project Description**	**Limits**	**Improvement**
DC	College Pkwy/Arrowhead Dr Connection	College Parkway to Arrowhead Drive	Construct two-lane extension
DC	Heybourne Road Extension	Stephanie Way to Johnson Lane	New two-lane road
CC	Hillview Dr Extension	Koontz Lane to Valley View Drive	Construct two-lane extension
DC	North Valley	Off Topsy Lane for new development	New two-lane road
CC	Ormsby Blvd. Extension	Ash Canyon Road to Winnie Lane	Construct two-lane extension
CC	Snyder Avenue	Carson Street- East to Appion Way	Realignment and traffic signal
CC	Vista Grande Boulevard	Topsy Lane to Jacks Valley Road	New two-lane road
Anticipated Time of Improvements 2026-2040			
Agency	**Project Description**	**Limits**	**Improvement**
CC	East Valley Road	Connection to Vicky Lane	New alignment
CC	Fifth Street	Saliman Rd. to Lompa Ranch Entrance	Widen to four Lanes
DC	Johnson Lane	U.S. 395 to Vicky Lane	Widen to four lanes
DC	Lompa Ranch N/S Connector	William Street to 5th Street	Construct two-lane extension
DC	Robinson Street	East into Lompa Ranch (N/S Connector)	Extension
CC	Stephanie Lane	U.S. 395 to Santa Barbara Drive	Widen to four lanes

Transit Expenditures and Revenues

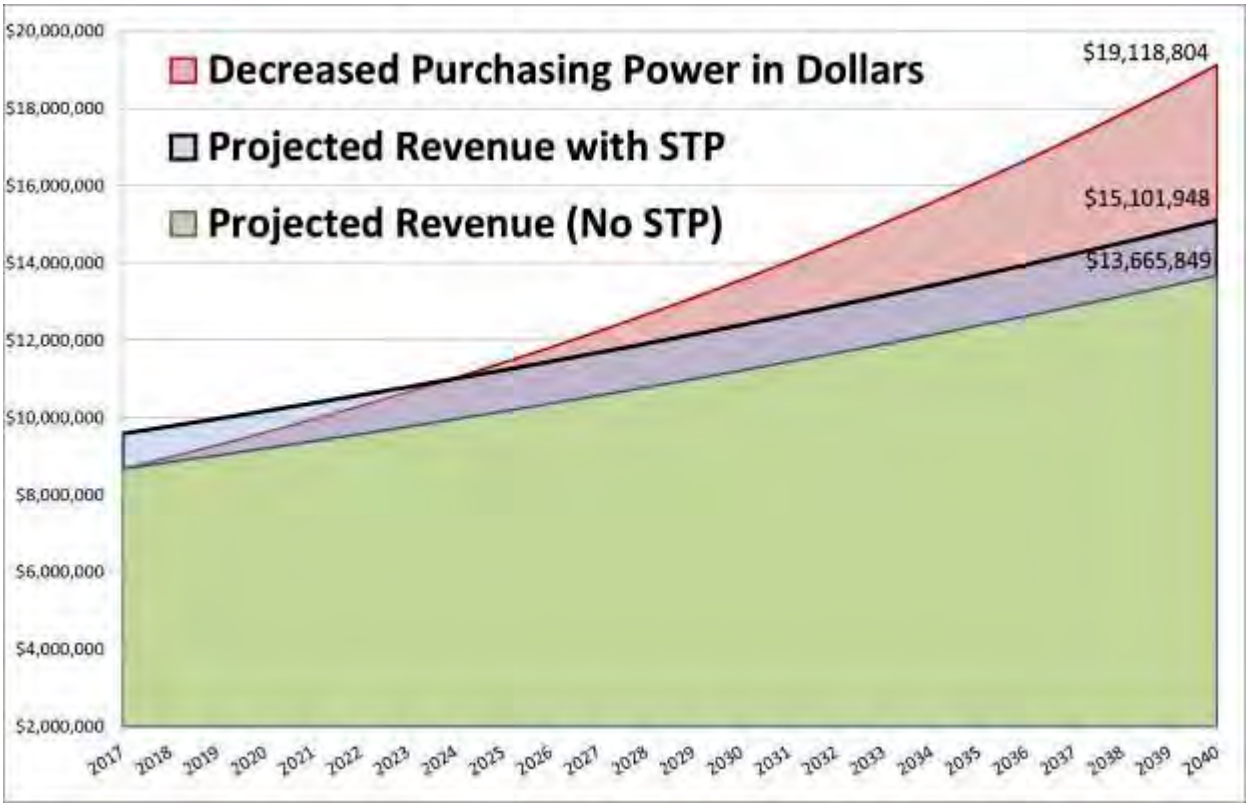
Due to the availability of Federal Transit Administration (FTA) Grants and limited local funding, transit expenditures are not anticipated to exceed available revenues. As a metropolitan planning organization, CAMPO is provided Federal funding through the FTA. FTA funding sources come in the form of grants that require local matching, typically, in a local match ratio of 50% or 20%. Transit operations and capital is dependent on these FTA funding sources. As long as local transit funding remains consistent, there should be sufficient local funds to leverage the necessary Federal grants to maintain current transit operations.

Conclusion

The need for timely maintenance to transportation assets is critical, the longer maintenance is deferred the more expensive transportation improvement projects will become. Additionally, the longer maintenance is deferred, the faster roadway conditions will deteriorate. Both Carson City and Douglas County have begun working with the University of Reno's (UNR) Pavement Engineering Program to improve the timing of transportation investments. As identified through the partnership, there are cost effective times in the life of a roadway when certain maintenance treatments should be applied to maximize investment benefits. Due to the backlog of deferred maintenance, that member agencies are experiencing, and the need to address deteriorating unsafe roadways, the windows of opportunity for properly timed maintenance improvements are being missed.

Due to an inflation rate that out paces revenue growth, 3.5% and 2.0% respectively, levels of expenditures will need to be reduced to achieve balanced budgets. Figure 3.3 demonstrates the decrease in purchasing power over time.

Figure 3.3 Decreased Purchasing Power



Chapter 4: Transportation System

The Carson area transportation system is of central importance to the region's economy and influential to the quality of life for people living and traveling in the Carson area. Only with a continued strategic investment into the region's transportation system will residents and the region's economy enjoy a sustainable transportation system. A successful investment strategy will be balanced, opportunity driven, supported by consensus, and continually evaluated. As required by the Federal government for use of federal funds, CAMPO is responsible for collecting data and tracking performance of investments. Performance measures designed to track progress toward adopted goals will allow CAMPO to evaluate regional investment.

Over the next 25 years, demand on the transportation system will grow and evolve. In the short term, over the next four years, population growth for the Carson area is forecasted to be modest with an average growth rate of 1% between Carson City, Douglas County, and Lyon County. The Carson area is still recovering from the recession when the area experienced slight population declines. As Northern Nevada's economy recovers and strengthens, higher growth rates and demand on the Transportation System should be expected. Higher growth rates, such as 8%-10% that were experienced in the mid 2000's are not predicted in the short term, but are possible.

Population estimates anticipate a growing senior population that will necessitate investment in safety improvements to address seniors with changing needs, related to eyesight, hearing, and reaction times. Additionally, investment in public transportation and pedestrian and bicycle facilities will be important to provide an aging population with mobility and independence, along with improved integration and mobility for all system users.

Construction of the Carson City Freeway extension and the USA Parkway will improve access to employment for this entire region. Completion of the Carson City Freeway is anticipated in the spring of 2017 and the completion of the USA Parkway is anticipated in December 2017. Both projects will affect the Carson area transportation system. Due to the shortened travel times from these improvements, additional traffic on the Highway 395 corridor between Douglas County and Carson City and on the Highway 50 corridor between Dayton and Carson City may be expected. To minimize congestion in these corridors, appropriately timed investment in access management, bottleneck removal, capacity building, and incident management coordination, are to be considered as needed.

At a local level, a strategy to improve the mobility, accessibility, and integration of the transportation system will include investment in Complete Streets. Complete Streets are streets for everyone, designed and operated to enable safe access and comfortable accommodation for all users of all ages and abilities; including pedestrians, bicyclists, transit riders, and motorists of all types. National studies demonstrate Complete Streets provide a better quality of life. Notably, the majority of participants in a Carson area transportation system survey felt that the transportation system influences their quality of life. To incorporate Complete Streets into the Carson area transportation system, local and state agencies should take advantage of investment opportunities when choosing roadway maintenance projects, roadway construction/reconstruction projects, and utility projects affecting roadways. Opportunities can be found through coordination between agencies and between intra agency departments. As local and state agencies perform deferred maintenance, utilization of pavement management software is encouraged to identify the most efficient investment opportunities.

Demand on the System

Population

The CAMPO area has a population of 83,370, comprised of the entire Carson City population of 55,274 and portions of Douglas and Lyon Counties, with 12,820 and 15,276 respectively. These population figures are from the 2010 census.

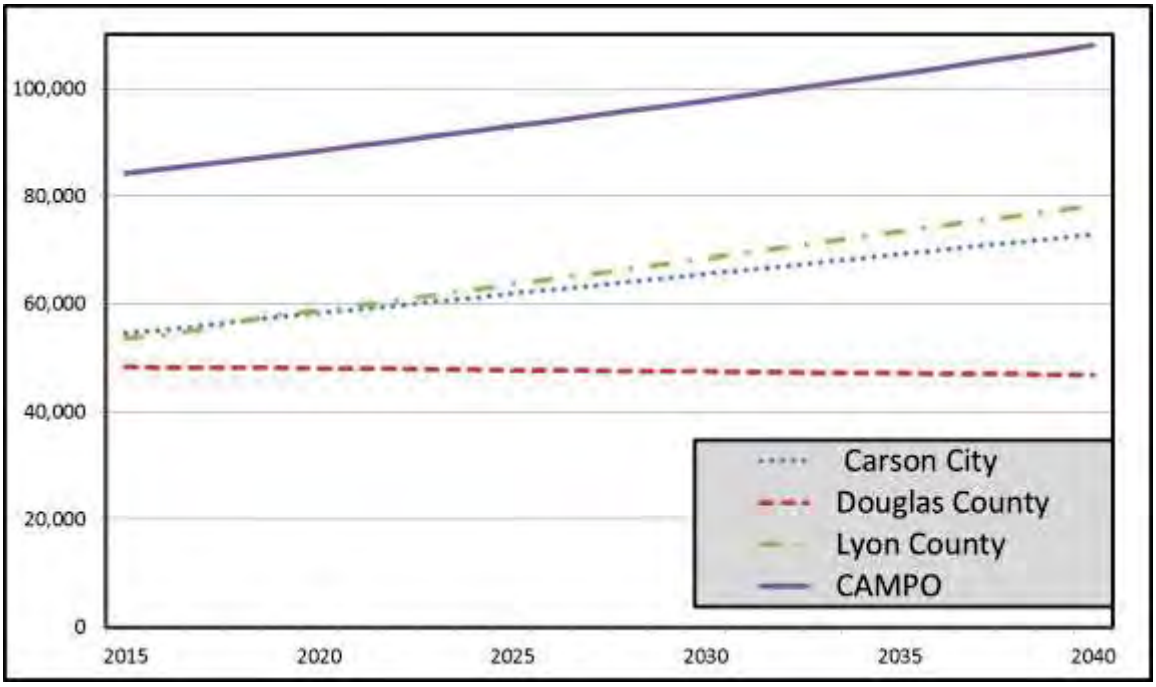
Figure 4.0 CAMPO 2010 Census Populations

CAMPO Members	Population within CAMPO	Percentage of Population
Carson City	55,274	66.3%
Douglas County	12,820	15.4%
Lyon County	15,276	18.3%
Total Population	83,370	

Source: 2010 Census

Since this plan is in the middle of a decennial census, population projections are derived from population estimates prepared by the Nevada State Demographer's Office. CAMPO population projections have assumed a 1% growth rate, which is the average growth rate between Carson City, Douglas County, and Lyon County. Population data used in this chapter is available in a report, prepared October 1, 2014, titled Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2033. The report is available at the following web address: http://nvdemography.org.

Figure 4.1 CAMPO Population Projections to 2040 Chart (Nevada State Demographer)



Source: Nevada State Demographer, Nevada County Age, Sex, Race, and Hispanic Origin Estimates and Projections 2000 to 2033, 2035 and 2040 projections estimated by CAMPO staff

Figure 4.2 CAMPO Population Projections to 2040 Table (Nevada State Demographer)

	2015	2016	2017	2018	2019	2020	2025	2030	2035	2040
Carson City	54,694	55,168	55,945	56,823	57,661	58,272	61,933	65,594	69,254	72,915
Douglas County	48,347	48,220	48,171	48,190	48,230	48,072	47,767	47,462	47,157	46,852
Lyon County	53,652	54,229	55,404	56,768	58,112	58,688	63,597	68,506	73,415	78,324
Metropolitan Planning Area	84,204	85,046	85,896	86,755	87,623	88,499	93,013	97,758	102,745	107,986

Source: Nevada State Demographer, Estimates and Projections 2000 to 2033

Seniors

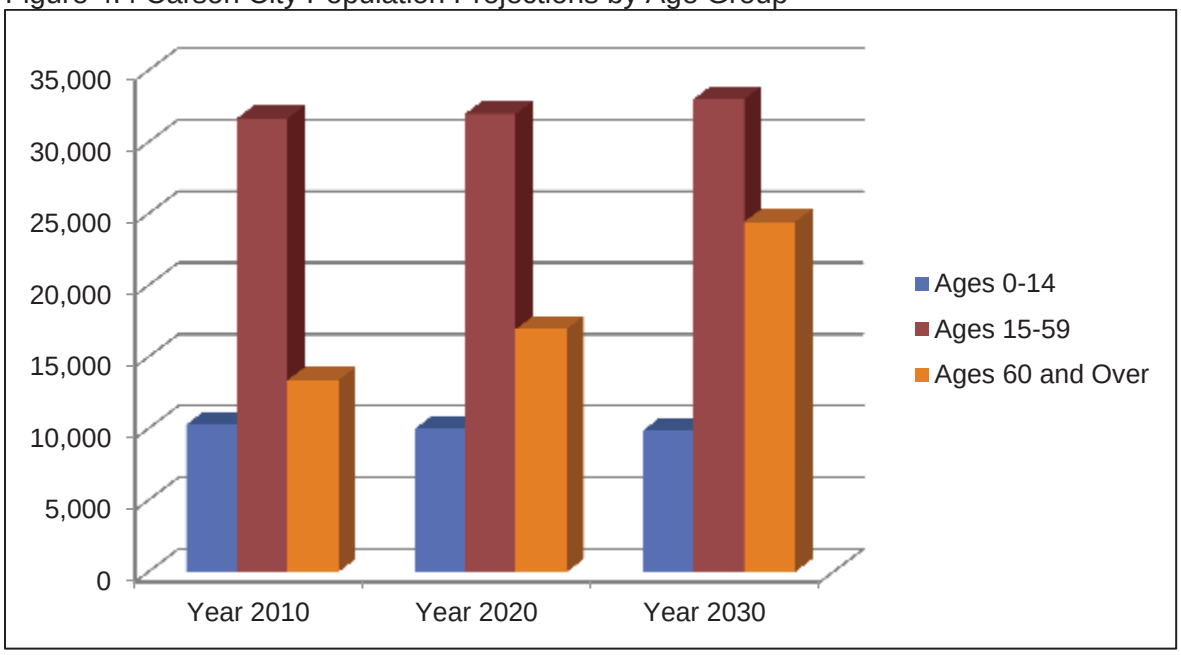
In the CAMPO area, seniors are anticipated to make up a larger percentage of the population than in the past. In Carson City, between 2010 and 2030, the population of people 60 years of age and older is anticipated to grow by 22%. In Douglas and Lyon Counties, this population cohort is anticipated to grow by, 36% and 62%, respectively.

Figure 4.3 Percentage of the Population 60 Years and Older

Member Agency	2010	2020	2030
Carson City	24%	29%	36%
Douglas County	30%	37%	39%
Lyon County	24%	27%	28%

This growing age group will necessitate changes to the transportation system to assist this age group in maintaining safe and independent mobility. The National Institute on Aging published an article in March of 2015, titled *Age Page: Older Drivers* (available link at: https://www.nia.nih.gov/health/publication/older-drivers), about safe driving for seniors. The article identified traits inherit to aging that have unsafe consequences to transportation system users. These traits are slower reaction time and reflexes, trouble hearing, dementia, and trouble seeing. Investment in safety measures that address these traits should be a priority.

Figure 4.4 Carson City Population Projections by Age Group



Land Use

Land use has a significant influence on transportation. The relationship between transportation and land use is complex, with current land use patterns influencing transportation patterns and transportation patterns influencing where people and businesses want to be located. This document does not propose any changes to existing land use, but aims to highlight how land use decisions influence the transportation network and ultimately the quality of life for Carson area citizens.

As member jurisdictions strive to increase transportation services with limited funds, the cost to maintain a growing network of roads, sidewalks, bike lanes, traffic signals, street lighting, and other amenities, continues to grow. Land use patterns that are less dense typically result in lower revenue and higher costs per square mile, making it difficult for local governments to maintain and enhance government services such as the transportation network. This commonly results in general funds being used to maintain and make necessary improvements to the transportation network. Less dense land use patterns also make other modes of transportation, such as mass transit, walking, and bicycling more difficult. However, dense land use patterns are not the answer to everything, nor would it appeal to everyone's quality of life standard.

Due to the recent recession, the land use in the CAMPO area has experienced little change due to low development pressure. As Northern Nevada's economy strengthens, so will development pressures. As elected and appointed officials deal with this development pressure, the following factors should be considered to help minimize the cost of aging infrastructure and a growing transportation network.

- Impact fee - An impact fee is a fee imposed by a local government on a new or proposed development project to pay for all or a portion of the costs of providing public services to new development. Use of impact fees must be justified and proportional to the impact of the development. For example, an impact fee for a one-bedroom apartment would be less than an impact fee for a 2,000 square foot home on a quarter acre. With respect to transportation, impact fees could help maintain local roads serving the development as well as regional collector and arterial roads that provide access to community and commercial uses.

- Transportation Network Connectivity – New projects should be designed to establish connectivity within the existing street network, developing connections to the existing roadways as well as pedestrian and bicycle facilities wherever possible. As new residential subdivisions continue to build curvilinear streets with subdivision walls, network connectivity will continue to be degraded. The curvilinear design typically involves traffic from many local roads funneling onto a wider road facility that encourages unsafe driver behavior, such as speeding. Additionally, this design results in congested traffic (bottlenecks) due to limited access to the surrounding road network. Improved connectivity allows for the distribution of traffic and builds resilience into the transportation network. Improved connectivity for pedestrians and bicycles creates opportunity for these modes of transportation by creating shorter distance to travel, allowing non-motorized users to access more businesses, schools, and community facilities.

Now, multiple land use developments are taking place within the CAMPO area. The following projects are anticipated to be influential to future land use and transportation patterns:

The **Tahoe Reno Industrial Center (TRIC)**, located in Storey County, is a 107,000-acre business park that encompasses a developable 30,000-acre industrial complex with pre-approved industrial and manufacturing uses. Important to CAMPO is the growth created as this park develops. The Carson area transportation system will experience higher demand from this use once USA Parkway is constructed. Also known as State Route 439, USA Parkway will provide access from U.S. Highway 50 to the industrial park as well as connection to Interstate 80. This roadway connection is anticipated to be completed by December 2017.

Figure 4.5 Map of TRIC

The **Carson City Freeway Extension** will add 2.9 miles of controlled access freeway from Fairview Drive to the signal at US 50/South Carson Street. The Freeway is designed for two lanes in each direction with provisions for future widening in the median. This project began in spring 2015. The construction duration is anticipated to last approximately 24 months (two construction seasons) and will consist of the following elements:

- A signalized intersection at US 50/South Carson Street
- Drainage facilities for roadway and offsite storm water runoff on the project, including drainage channels, a detention basin and box culverts
- Roadway earthwork and final grading from Fairview Drive Interchange to South Carson Street, including major excavation and embankment
- Roadway paving
- Landscaping
- Sound walls
- Signals, lighting, signing and pavement striping

Figure 4.6 Carson City Freeway Extension

*More information available at NDOT's Projects and Program website:
http://www.nevadadot.com/Projects_and_Programs/Road_Projects/

The **Schulz Ranch Residential Subdivision** is a recently approved project with 423 units. The subdivision is located in south Carson City, near Douglas County's northern edge. Primary access and traffic demand will be at Topsy Lane and U.S. 395, in Douglas County, and on Snyder Avenue off of Bigelow Drive or Center Drive in Carson City.

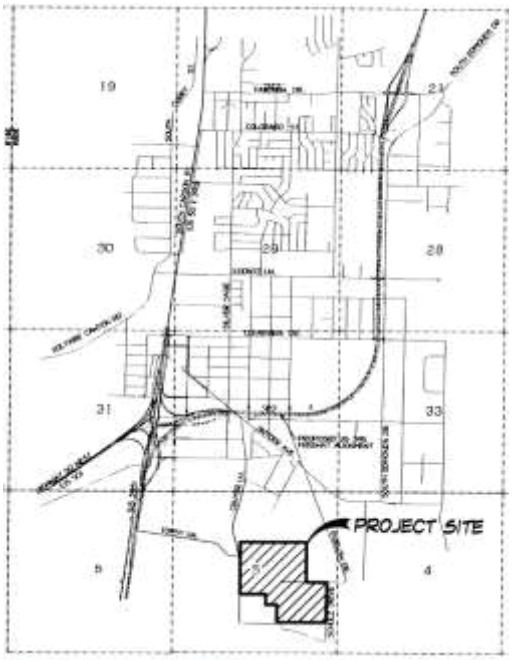


Figure 4.7 Schulz Ranch Residential

The Lompa Ranch North Specific Plan that includes development plans for 251 acres for a mix of commercial and residential uses. The project is anticipated to have approximately 2,500 single-family and multi-family units and 300,000 square feet of commercial. This project will exert demand on the transportation network at numerous locations.

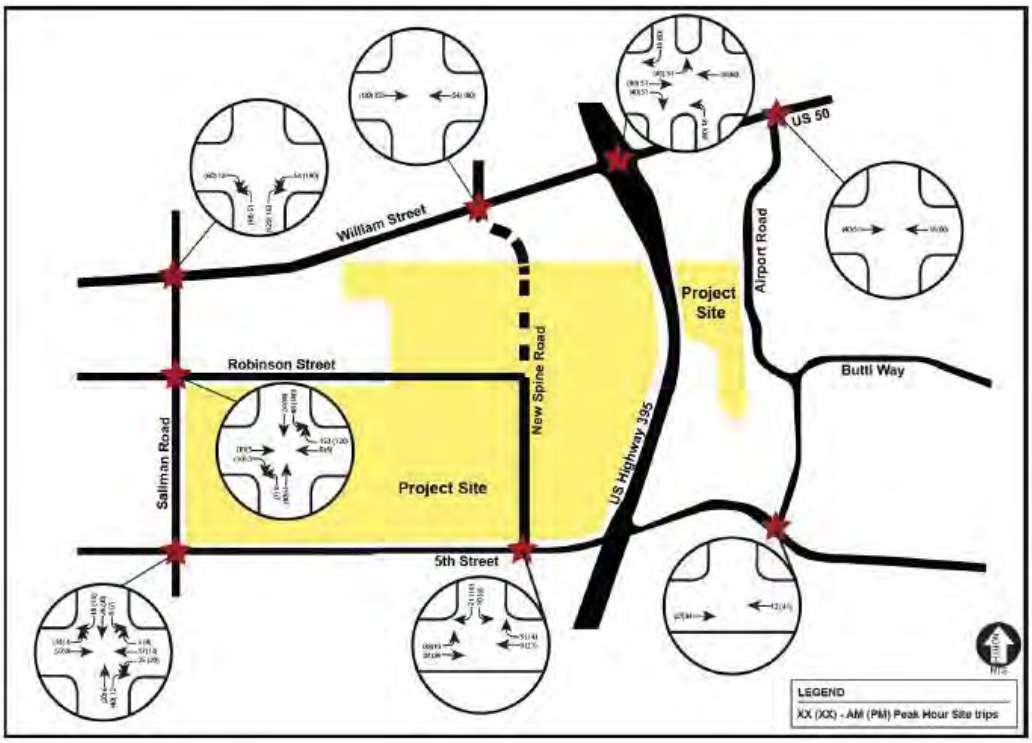


Figure 4.8 Lompa Ranch North Specific Plan Subdivision

Freight

The Carson area transportation system is responsible for the movement of goods in and through the region. Due to the absence of other transportation modes, truck traffic carries all of the freight in the Carson area. An effective transportation system provides for the efficient, reliable, and safe movement of truck traffic. While the amount of truck traffic in this region is small compared to larger metropolitan areas, truck traffic is responsible for a fair portion of the overall traffic, reaching 20% on major highways.

Freight traffic supports the Carson area regional economy in two notable ways. First, it provides time sensitive and non-time sensitive goods to local business and individual consumers, allowing for businesses to operate and individuals to shop without the burden of driving. Freight traffic associated with shopping from home is anticipated to grow in coming years. In a recent study by the U.S. Department of Transportation, freight volumes in the United States are anticipated to increase by 45 percent. The study noted increases in online shopping, and how home package deliveries are becoming a factor in congestion on local roads and highways.

The second way freight traffic supports the Carson area regional economy is by providing services, products, and accommodations to freight carriers. This economic benefit is highlighted in a statewide freight plan sponsored by the Nevada Department of Transportation (NDOT). This freight plan is in development and anticipated to be complete in the summer of 2016. Information on the development of this plan is available online at the following web address: http://www.nevadafreightplan.com/

In the CAMPO area, the travel demand model shows a low level of service for two fright corridors. These corridors are U.S. Highway 50 east of the Carson City Freeway and on U.S. Highway 395, south of the Carson City Freeway. Both corridors are noted in the State's freight plan as bottlenecks for freight traffic traveling on the CAMPO transportation network. At this time, with unknown demand from the Tahoe Regional Industrial Center east of CAMPO and unknown travel patterns resulting from the completion of the Carson City Freeway, CAMPO has recommended future corridor studies in anticipation of congestion at these existing bottlenecks. The following freight studies and project have been recommended to the NDOT:

- Capacity and Operations Corridor Study for U.S. Highway 395 - Johnson Lane to U.S. Highway 50 and I-580 intersection
- Capacity and Operations Corridor Study for U.S. Highway 50, between I-580 to CAMPO boundary
- I-580/U.S. Highway 395 interchange improvement – completion of the Freeway Phase 2B-4

Streets and Highways

The CAMPO road network is comprised of 505 lane miles of roadway with an estimated 571 million annual vehicle miles of travel (VMT) in 2014. Since 2010, the number of VMTs has increased by 25 percent and is projected to increase another 13 percent by 2025 and 27 percent by 2040, based on 2014 VMTs. As the age and usage of the road network increases, so does the need for investment. This section of the regional transportation plan includes data and analysis that can be used to help prioritize roadway investment. Included in this data are results from a travel demand model that CAMPO uses to forecast roadway usage and to identify congested areas of the network.

Travel Demand Model

Travel demand modeling is a type of software used as a tool to estimate future transportation demand. The modeling takes into account future population, economic forecasts and other variables, including land use patterns and estimates of future activity from local governments. Since the last Regional Transportation Plan in 2012, the CAMPO model has been updated with new traffic counts, including counts from the Nevada Department of Transportation and AirSage data. AirSage data is anonymous wireless signaling data used to improve travel demand modeling. Additional updates to the model include 2014 Nevada State Demographer population and employment estimates, including major employment developments such as the Tahoe Regional Industrial Center.

The model provides data for a baseline year of 2015 and forecasted data for years 2025 and 2040. For the forecasted years, the model assumes certain transportation projects are constructed and produces scenarios of how the proposed improvements, along with the forecasted growth influences traffic conditions. The model provides two types of measures for analysis, a level of service (LOS) and travel time estimates. The LOS measure, which is a long-standing performance measure, can be used to evaluate roadway sections and intersections. The second measure, travel time estimates, also known as travel time reliability, measures traffic delay due to congestion by determining the time is takes to travel from one location to another. Travel time reliability is significant to many transportation system users, whether they are vehicle drivers, transit riders, or freight shippers. Personal and business travelers value reliability because it allows them to make better use of their own time. Shippers and freight carriers require predictable travel times to remain competitive.

The following pages include results from CAMPO's travel demand model. A complete report is provided here: **http://carson.org/home/showdocument?id=50163** for reference.





Figure 4.9 Travel Times between CAMPO's Transportation Gateways

Travel Times in Minutes between Metropolitan Planning Area Gateways		Year 2015	
From	To	AM	PM
U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	U.S. Hwy 50 East (Near Chaves Road)	30.2	39.4
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	23.1	30.4
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	16.8	18.7
U.S. Hwy 50 East (Near Chaves Road)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	35	33.6
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	48.2	53.6
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	41.9	41.9
U.S. Hwy 395 South (2000 feet south of Johnson Lane)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	26.4	26.4
	U.S. Hwy 50 East (Near Chaves Road)	46.6	55.2
	U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	16.1	15.3
U.S. Hwy 50 West (2.7 miles west of U.S. Hwy 395)	U.S. Hwy 395 North (Carson City and Washoe County Line near Hobart Road)	17.3	18.5
	U.S. Hwy 50 East (Near Chaves Road)	37.5	47.3
	U.S. Hwy 395 South (2000 feet south of Johnson Lane)	13.3	19.1

In compliance with new federal regulations for performance based planning, the following objectives and performance measures have been incorporated into this plan. Figure 4.9 along with additional travel times provided within the travel demand model (available link at: http://carson.org/home/showdocument?id=50163), would be used to evaluate progress towards meeting the objectives below.

Objective: Maintain or improve travel times

Objective: Improve travel times on major truck routes during peak hours

Figures 4.11, 4.12, and 4.13 on the following pages graphically show the level of service for the years 2015, 2025, and 2040. Figure 4.11 shows existing conditions, Figure 4.12 and 4.13 show conditions in the 2025 and 2040 with the 10 financially feasible transportation projects noted in Chapter 3. The list of projects is duplicated below for quick reference.

Figure 4.10 Proposed Transportation Projects in the Fiscally Constrained Financial Plan

Proposed Projects in the Fiscally Constrained Plan					
Agency	Project Description	Project Limits	Improvements	2025	2040
NDOT	Carson City Freeway Extension	Fairview Drive to Spooner Junction	Construct 4-lane freeway	X	X
CC	Curry Street Improvement	Rhodes Street to Lake Glen Drive	Improved 2-lane roadway	X	X
CC	Roop Street Widening	Washington Street to Fifth Street	Widen to 4 lanes	X	X
CC	Saliman Road Widening	Fairview Drive to Colorado Street	Widen to 4 lanes	X	X
CC	Carson Street Road Diet	E William Street to E Fifth Street	Reduce to one lane per direction	X	X
CC	William Street Corridor Road Diet	Carson Street to Saliman Road	Reduce to one lane per direction	X	X
CC	N. Carson Street Corridor Improvements	William Street to N. Freeway Interchange	Corridor Improvements	X	X
CC	S. Carson Street Corridor Improvements	Fifth Street to S. Freeway Interchange	Reduce to two lanes per direction	X	X
NDOT	Full Interchange @ Spooner Jct	CC Freeway at US 395/US 50 W	Construct full interchange		X
LC	New Bridge Over Carson River	Dayton Valley Road to Chaves Road	Construct bridge over Carson River to connect Dayton Valley Rd to Chaves Rd		X

Figure 4.11 Existing 2015 Travel Demand Model Condition

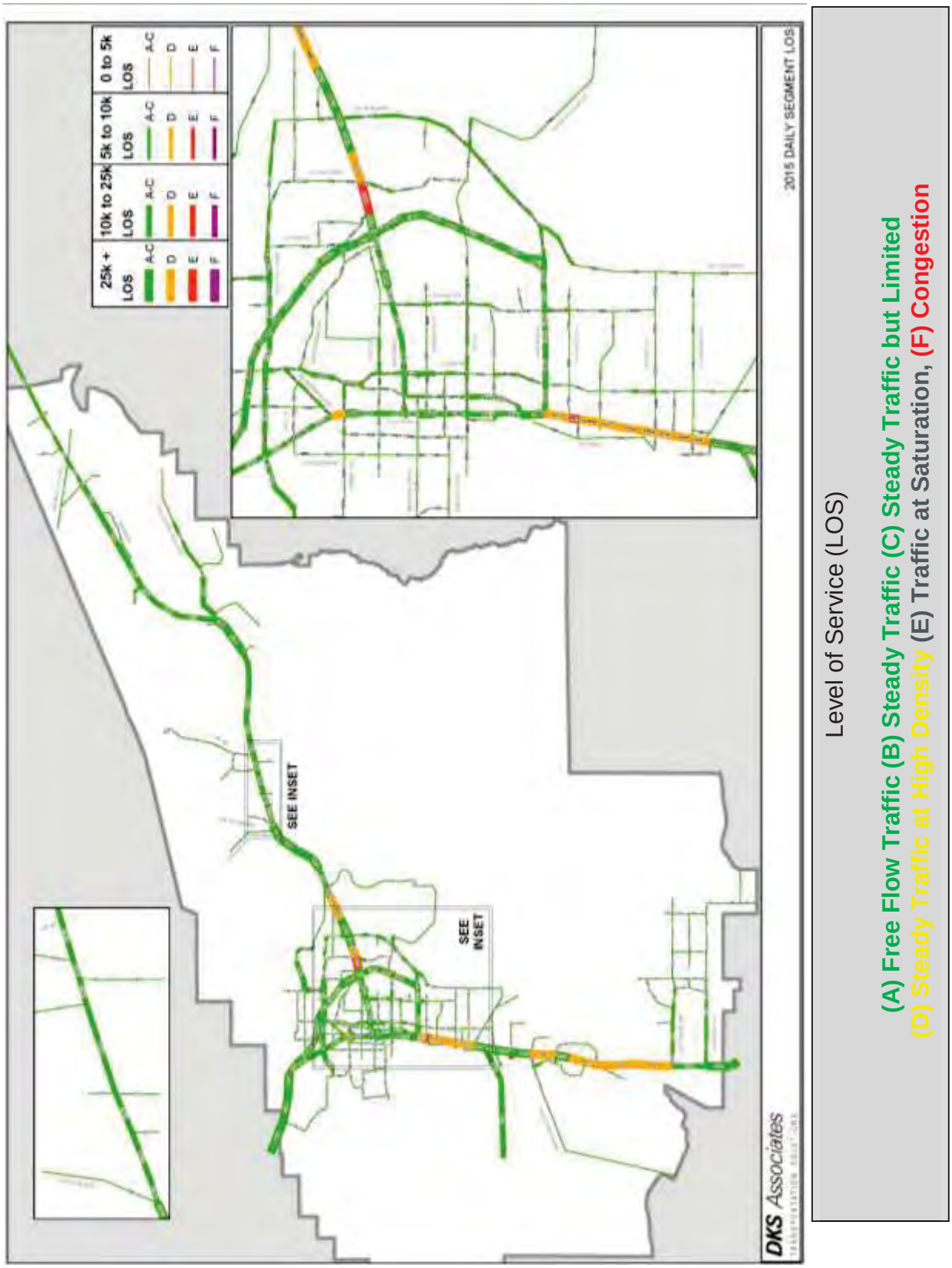


Figure 4.12 Projected 2025 Travel Demand Model Condition

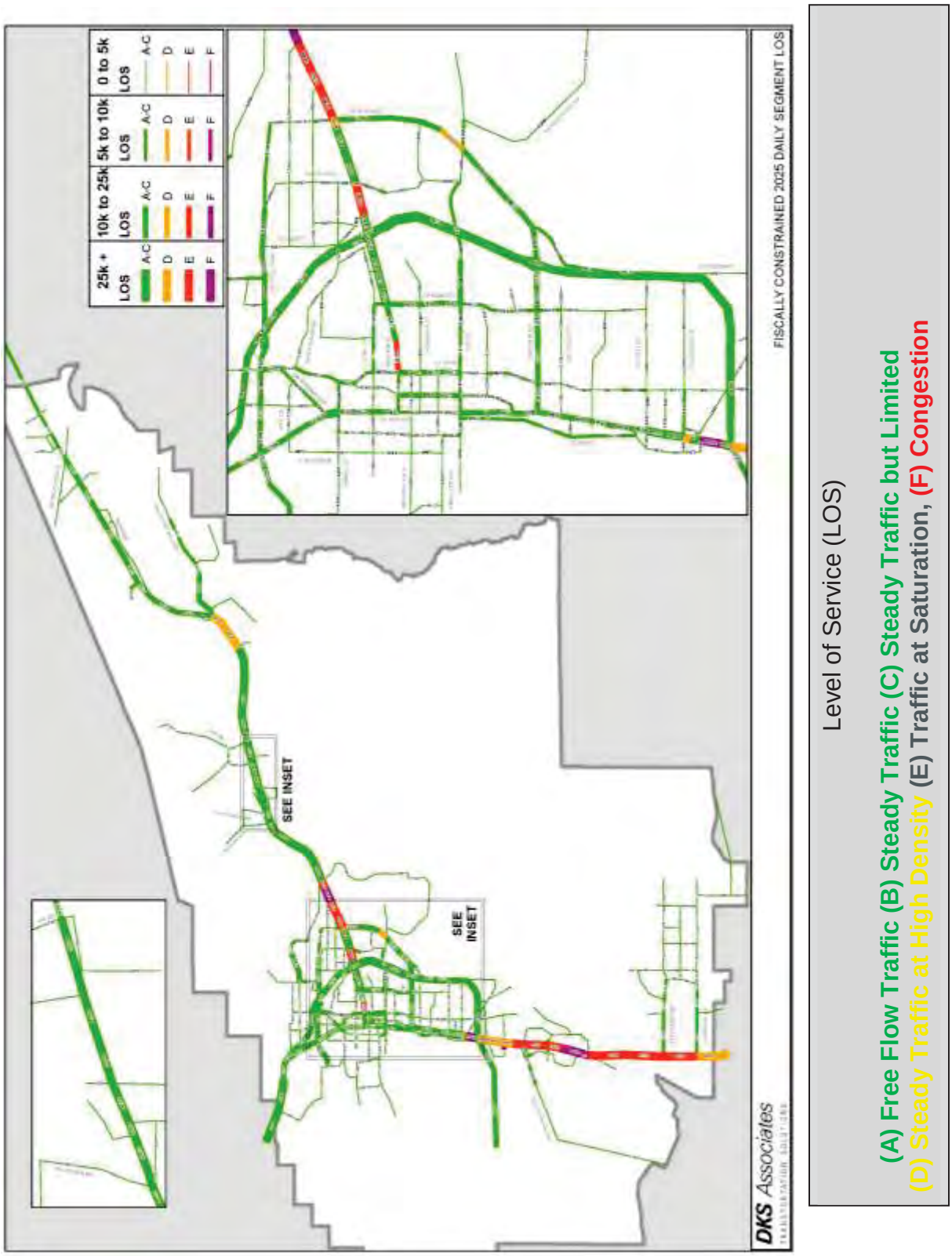
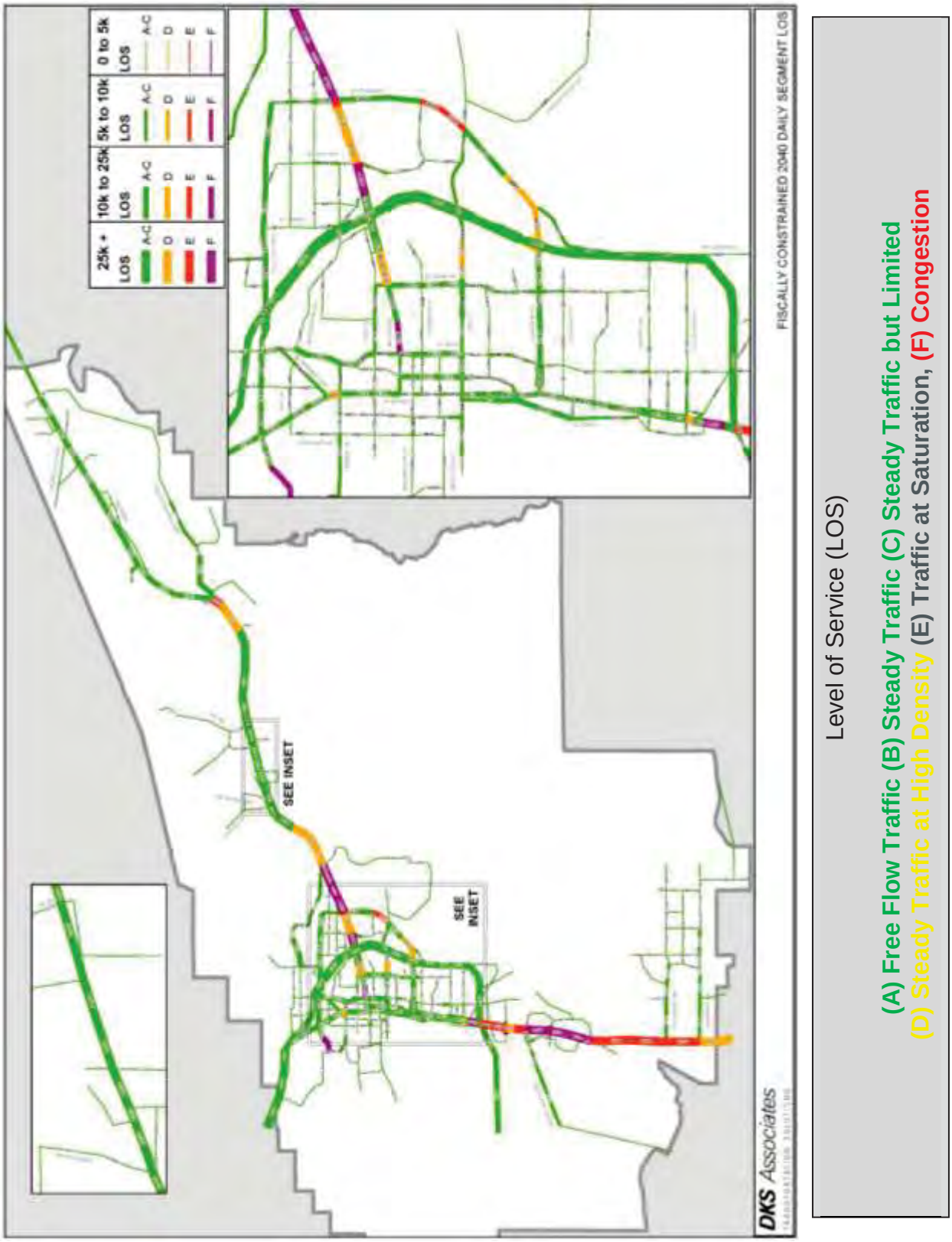


Figure 4.13 Projected 2040 Travel Demand Model Condition



Level of Service (LOS)

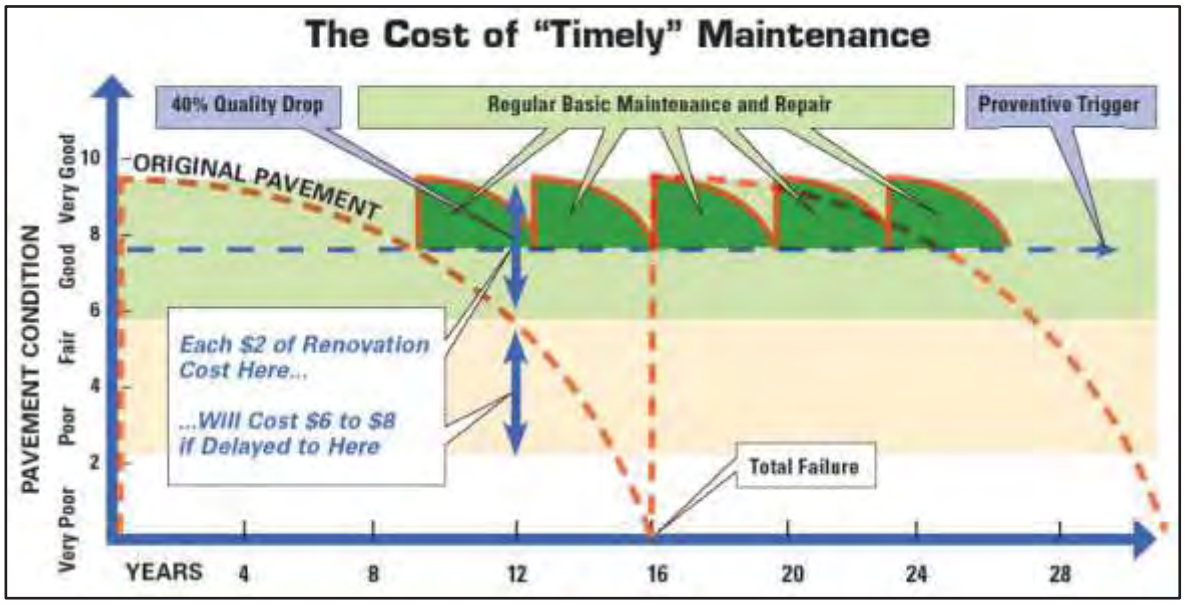
(A) Free Flow Traffic (B) Steady Traffic (C) Steady Traffic but Limited
(D) Steady Traffic at High Density (E) Traffic at Saturation, (F) Congestion

Pavement Management System

A Pavement Management System (PMS) is a planning and operations tool used to help prioritize and time roadway investment, such as preventative maintenance and renovation to roadways. A PMS collects, stores, organizes, and analyzes pavement condition information. It is far less expensive to maintain a road in good condition than to allow a road to deteriorate before repairing it (refer to Figure 4.14). Pavement Management places priority on maintaining good condition roads, which over the long-term will effectively provide a higher condition roadway at a lower cost.

Safety issues associated with roadway deterioration as well as the need to reconstruct certain roadways to current standards make it difficult for agencies to commit 100% to this strategy.

Figure 4.14 Graphic Example of Pavement Management Strategy



Each of the CAMPO member agencies have individual pavement management programs. Carson City and Douglas County are in the process of refining their existing management systems. Lyon County is in the process of developing a pavement management system and has contracted with a consultant to collect pavement data. Each agency measures the health of their roadways with a scale known as the Pavement Condition Index (PCI), which is a numerical value between 0 and 100, 100 representing the best possible condition. The number and types of distresses in a particular section of pavement determine the PCI value.

The Nevada Department of Transportation (NDOT) maintains pavement data on all Federal-aid eligible roads in the state; this includes interstate highways, State Routes, and sample data on selected arterials and collectors within the CAMPO area. As a federal requirement, the NDOT uses the International Roughness Index (IRI), which measures the "roughness" of the roadway surface. The International Roughness Index and Pavement Condition Index are similar but cannot be converted from one scale to another. The IRI was chosen as a performance measure, through transportation legislation, as a pavement condition indicator for the National Highway Performance Program (NHPP). NDOT's collection of IRI conditions within CAMPO area will satisfy federal IRI requirements for CAMPO.

Active Transportation

No transportation system is complete without Active Transportation. Active Transportation is any self-propelled, human-powered mode of transportation, such as walking or bicycling. An effective active transportation network should be user friendly and efficient. A utilized active transportation system can benefit the local economy, offer healthier lifestyles, and raise the region's quality of life.

As elected officials are forced to prioritize expenses, improvements for active transportation are often placed at the bottom. However, jurisdictions throughout the country are finding success in adding active transportation improvements by pairing pedestrian and bicycle improvements with routine maintenance projects as well as larger roadway improvement projects. The success lies with implementing small design changes to existing roadways to improve conditions. As the Carson area's senior population grows, active transportation improvements will be critical to allow for aging in place. This involves designing the built environment to be usable to the greatest extent possible by all people, regardless of special needs or age. Walkable communities are places where people can easily and safely walk to access goods, services and local amenities. They are places with a variety of transportation options and where pedestrian activity is encouraged.

Streets are a vital part of livable, attractive communities. Everyone, regardless of age, ability, income, race, or ethnicity, ought to have safe, comfortable, and convenient access to community destinations and public places–whether walking, driving, bicycling, or taking public transportation. However, many of our streets are designed only for cars. A nationwide movement launched by the National Complete Streets Coalition in 2004, Complete Streets integrates people and places in the planning, design, construction, operation, and maintenance of our transportation networks. Complete Streets promote the development and implementation of policies, professional practices to ensure streets are safe for people of all ages, and abilities, balance the needs of different transportation modes, and support local land uses, economies, cultures, and the natural environment.

In 2015, CAMPO produced an ADA Transition Plan for transportation facilities. The plan evaluated 26 signalized intersections, approximately 30 miles of sidewalk, and 41 transit stops. The plan prioritizes the intersections, sidewalk areas, and the transit stops on a 13 point scale, identifying high and low priority issues.

All three of CAMPO's member agencies have made progress in planning for bicycle users. In 2014, Douglas County, with efforts sponsored by the Nevada Department of Transportation (NDOT), adopted a countywide bicycle plan that identifies a bike network. Lyon County, with efforts from NDOT, has drafted a countywide bike plan and is nearing completion. In 2014, the League of American Bicyclists recognized Carson City with a bronze level Bike Friendly Community (BFC) award, joining more than 325 visionary communities from across the country. Bike network maps for all three of the member agencies are included in this document.

Complete Streets

The term Complete Streets refer to how streets are designed and operate to enable safe access and comfortable accommodation for all users of all ages and abilities; including pedestrians, bicyclists, transit riders, and motorists of all types. As supported in an article by Smart Growth America, Complete Streets support economic development and enhance the visual experience for users.

This article is included here: http://www.smartgrowthamerica.org/documents/cs/factsheets/cs-economic.pdf for reference.

In addition to accommodating motorists on the roadway, a Complete Streets design focuses on the needs of travelers outside that group, including younger or older people, those with disabilities, and those who travel by transit, bicycle, or on foot, and who have oftentimes been overlooked in the transportation planning process. Many areas in the Carson area lack safe places to walk or bicycle. Access to key community resources such as parks, shops, grocery stores, and schools, is often limited to automobile traffic.

The Complete Streets design is about safety and efficiency. Nationwide, people are injured or killed each year while walking or bicycling, and oftentimes the built environment is a contributing factor. Though the Carson area has historically had few accidents involving pedestrians and bicyclists, they have occurred. A goal of this plan is to increase the safety of all modes on the transportation system.

The Complete Streets design seeks to develop an integrated and connected network of streets that are safe and accessible for all people. This design makes active transportation such as walking and bicycling more convenient; provides increased access to employment centers, commerce, and educational institutions; and allows more options in traveling so transportation is less of a financial burden. These noted benefits are found to improve the quality of life in communities.

Figure 4.15 Graphic Example of a Complete Street Design Treatment

Source: The National Complete Streets Coalition – www.CompleteStreets.org

Existing conditions and future plans should be taken into consideration when evaluating a roadway for Complete Streets treatments. There are varying types of treatments that can accommodate a community's need and in some cases, a particular road treatment may not be necessary. For example, a wide shoulder may be more appropriate than a bike lane on a rural road or if there are no land uses that generate pedestrian traffic then a sidewalk may not be an appropriate treatment.

Americans with Disabilities Act (ADA)

The ADA is a civil rights law that mandates equal opportunity for individuals with disabilities. The ADA prohibits discrimination in access to jobs, public accommodations, government services, public transportation, and telecommunications. ADA requires all Programs, Services and Activities (PSAs) of public entities to provide equal access for individuals with disabilities. The Act applies to all facilities, including facilities built before and after 1990.

An objective of this plan is to increase the number of ADA compliant transportation facilities. Efforts toward achieving this objective will be measured by tracking the number of transportation facilities improved to ADA standards within the CAMPO boundary by jurisdiction.

Governmental agencies with 50 plus employees are required to perform self-evaluations of their current facilities (and infrastructure) regarding ADA access requirements. The agencies are then required to develop an ADA Transition Plan to address deficiencies. Plans are intended to achieve the following:

1. A list of obstacles to ADA compliance and the procedure for removing and/or accommodating these obstacles
2. A list of structural modifications that are needed
3. The timeline when these changes will be accomplished
4. Estimated costs of each change outlined in the plan
5. Identify the public officials responsible for implementation of the Transition Plan

In line with an objective from CAMPO's previous regional transportation plan, completed in 2015, Carson City conducted a comprehensive evaluation of its transportation related policies, programs, and a portion of their facilities along public rights-of-way to determine the extent to which individuals with disabilities may be restricted in their access to transportation facilities within Carson City. The self evaluation evaluated 26 signalized intersections, approximately 30 miles of sidewalk, and 41 transit stops. The plan prioritizes the intersections, sidewalk areas, and the transit stops on a 13 point scale, identifying high and low priority issues.

* The Carson City Transition Plan is available at the internet address below:
http://www.carson.org/modules/showdocument.aspx?documentid=44923

Bicycle Friendly Designation

In November 2014, the League of American Bicyclists recognized Carson City with a Bronze level Bicycle Friendly Community (BFC) award, joining more than 325 visionary communities from across the country. With the announcement, Carson City joins a leading group of communities, in all 50 states, that are transforming neighborhoods.

The BFC program helps communities evaluate quality of life, sustainability and transportation networks, while creating benchmarks to evaluate progress toward improving bicycle-friendliness. The Bronze level BFC award recognizes Carson City's commitment to improving conditions for bicycling through investment in bicycling promotion, education programs, infrastructure and pro-bicycling policies.

Provided with this award is a one page report card that rates Carson City on the 10 building blocks of a bicycle friendly community and outlines the steps needed to progress from a bronze to a silver award. The full report is included here: http://carson.org/home/showdocument?id=50165.

KEY STEPS TO SILVER

» Appoint an official Bicycle Advisory Committee to create a systematic method for ongoing citizen input into the development of important policies, plans, and projects.

» Increase the amount of high quality bicycle parking throughout the community.

» Continue to expand the on and off street bike network and to increase network connectivity. On roads with posted speed limits of more than 35 mph, it is recommended to provide protected bicycle infrastructure.

» Install a bicycle wayfinding system along touring routes.

» Make intersections safer and more comfortable for cyclists.

» Offer bicycling skills training opportunities for adults more frequently.

» Host a League Cycling Instructor (LCI) seminar or sponsor the certification tuition of interested cyclists to increase the number of certified bicycle safety instructors in your community.

» Promote cycling throughout the year by offering or supporting family-oriented community or social rides, and bicycle-themed festivals, parades or shows.

» Ensure that police officers are initially and repeatedly educated on traffic law as it applies to bicyclists and motorists.

» Update the Unified Pathways Master Plan. The overarching goal should be to encourage residents to bike more often for recreation and transportation.

Bicycle Plans

As a result of communities throughout Nevada steadily expanding their support for bicycling over the last few decades, NDOT formalized this growing support in the Nevada Statewide Bicycle Plan, completed in 2013.

The first strategy listed within the State Bicycle Plan is for NDOT to assist local jurisdictions with adopting local bicycle plans that are endorsed by the Nevada Bicycle and Pedestrian Advisory Board (NBPAB). In support of this strategy, NDOT financially sponsored and assisted in the development of bicycle plans outside of the State's four Metropolitan Planning Organizations (MPOs). This included bicycle plans for Douglas County and Lyon County. The Carson Area Metropolitan Planning Organization has incorporated these planning efforts in areas of overlap.

* The Nevada Statewide Bicycle Plan, Douglas County Bicycle Plan, and when adopted, the Lyon County Bicycle Plan is available at the following internet address:
http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/BikePed/Bicycle_Plans.aspx.

Planning maps of the bike networks, within the CAMPO planning area, for all three of the member agencies are provided for reference on the following pages, a list of the maps is provided below.

Bike Network Planning Maps

- Carson City Bike Facility Map (shows existing and proposed bike facilities)
    - Figure 4.16 – Northeast Carson City Bike Facility Map
    - Figure 4.17 – Southeast Carson City Bike Facility Map
    - Figure 4.18 – Southwest Carson City Bike Facility Map
    - Figure 4.19 – Northwest Carson City Bike Facility Map
- Carson City Bike Route Map (shows existing and proposed bike routes)
    - Figure 4.20 - Northeast
    - Figure 4.21 - Southeast
    - Figure 4.22 - Southwest
    - Figure 4.23 - Northwest
- Figure 4.24 - Douglas County Proposed Bike Network
- Figure 4.25 - Lyon County Proposed Bike Network

Figure 4.16 – Northeast Carson City Bike Facility Map

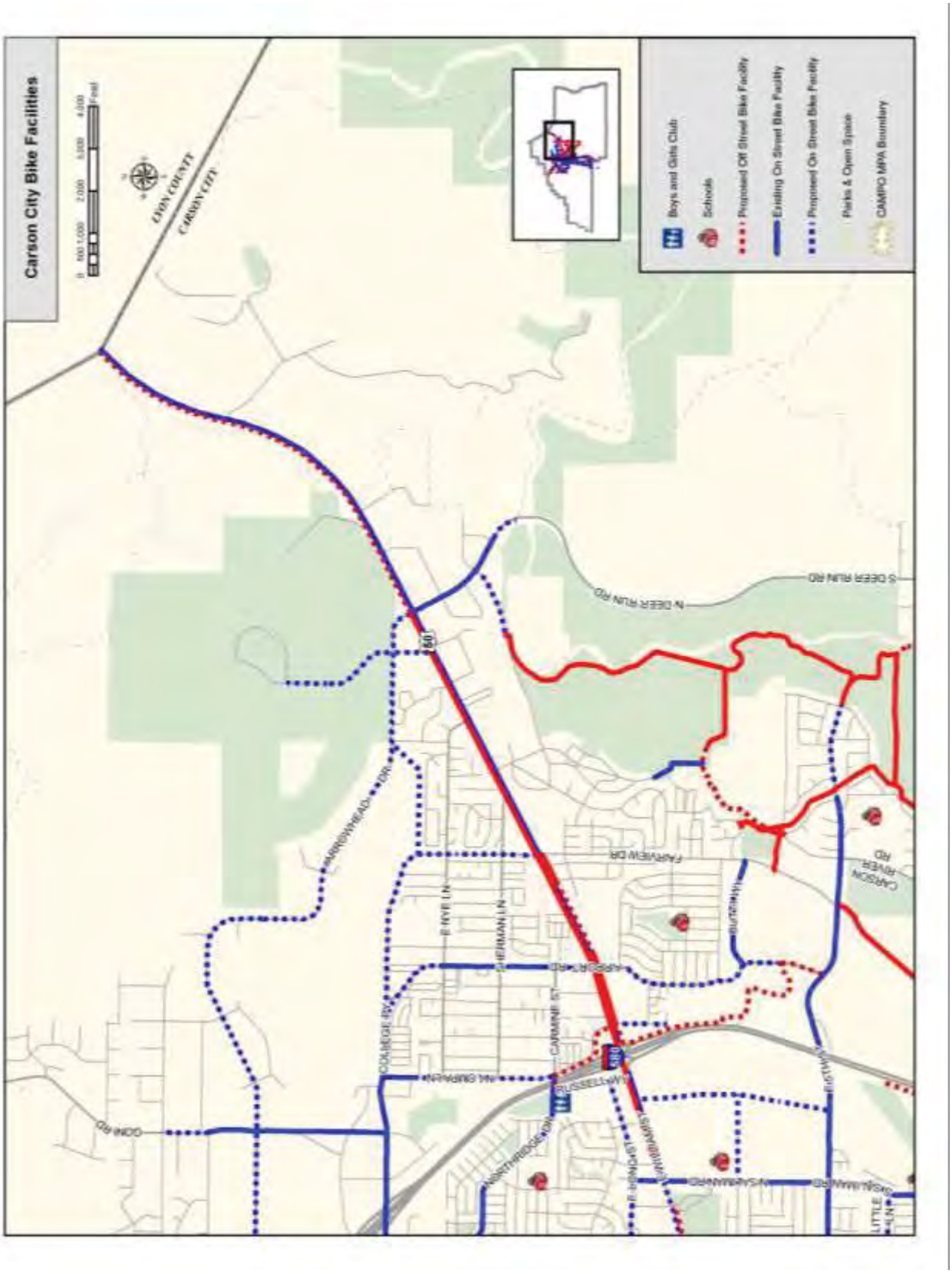


Figure 4.17 – Southeast Carson City Bike Facility Map

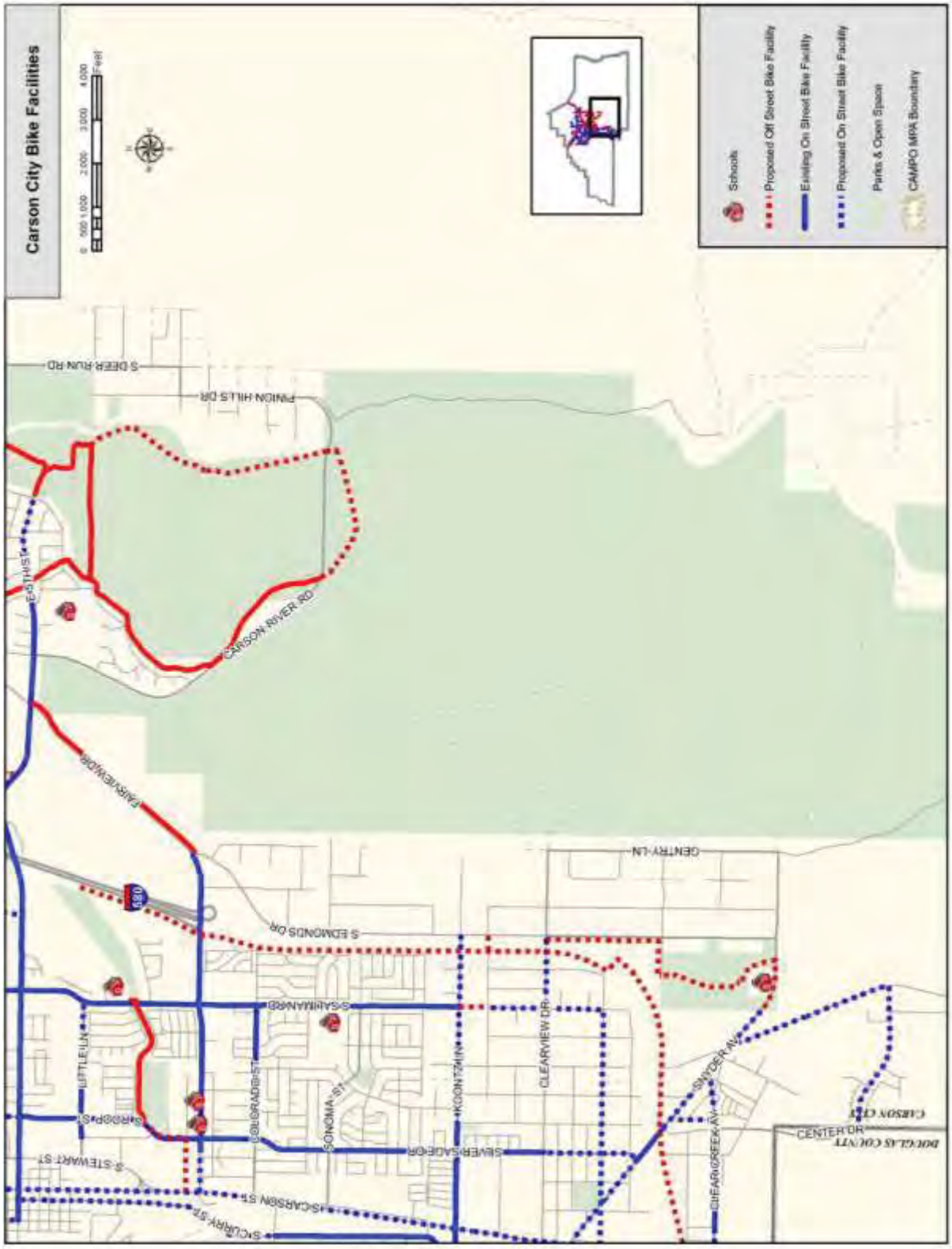


Figure 4.18 – Southwest Carson City Bike Facility Map

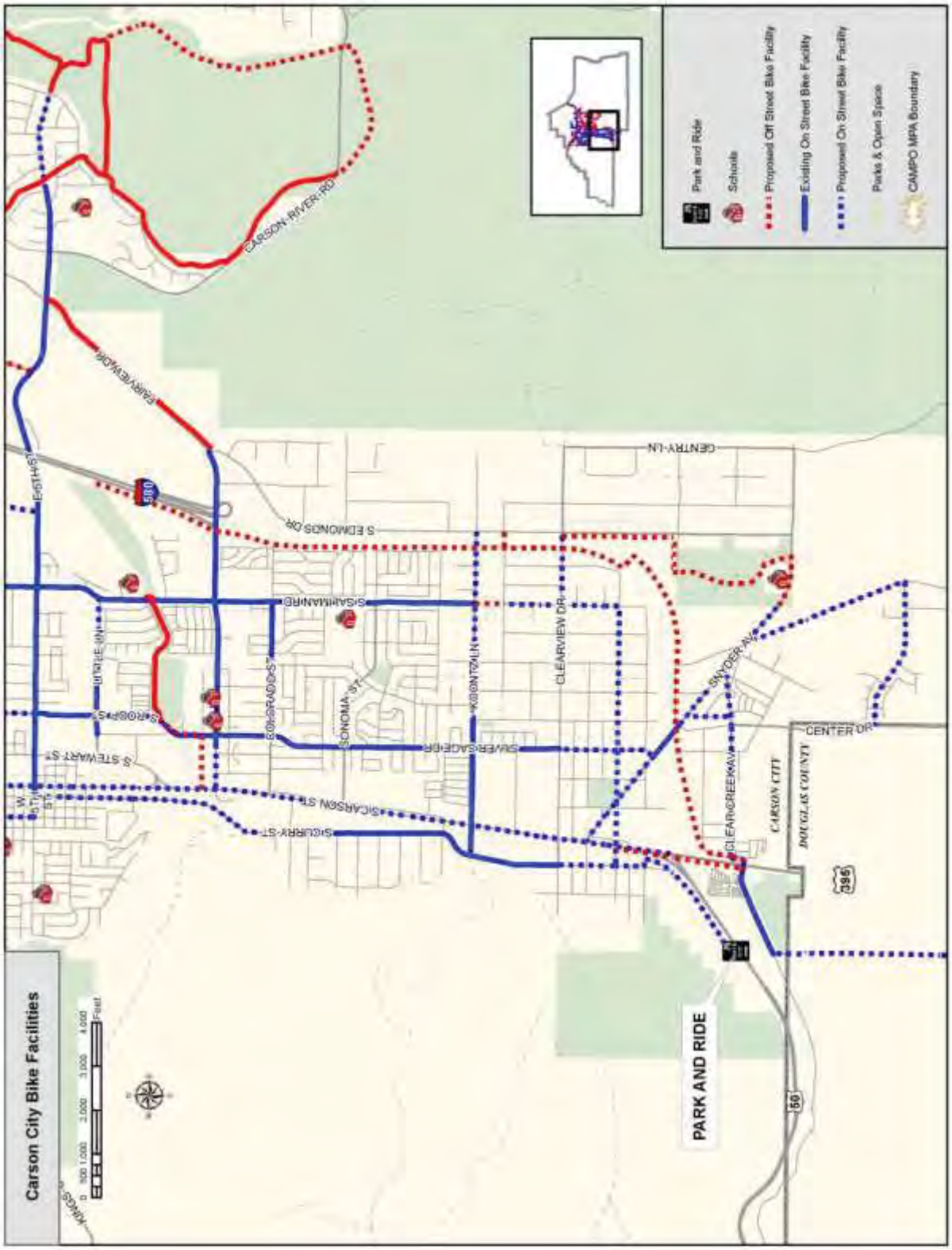


Figure 4.19 – Northwest Carson City Bike Facility Map

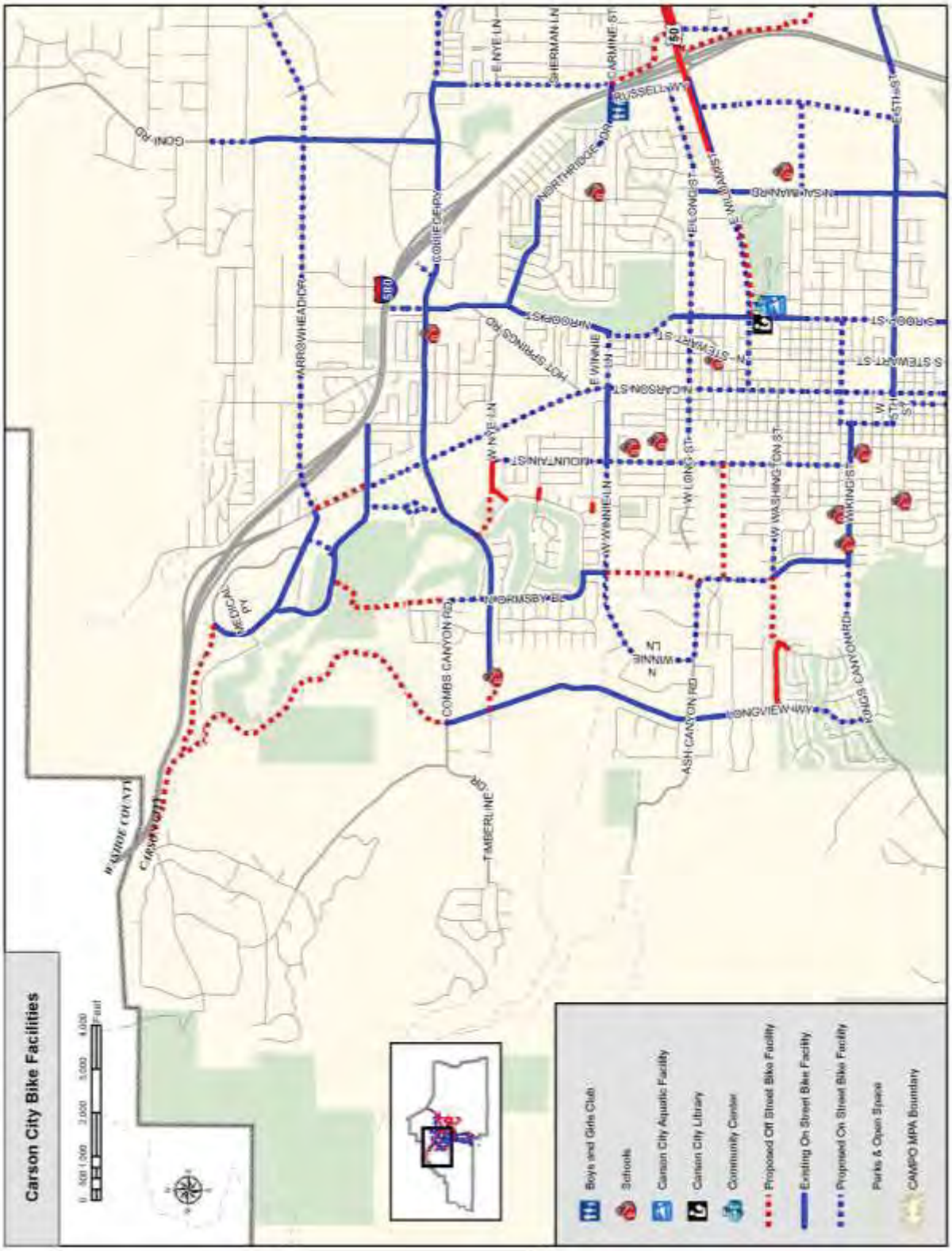


Figure 4.20 Northeast Carson City Bike Route Map

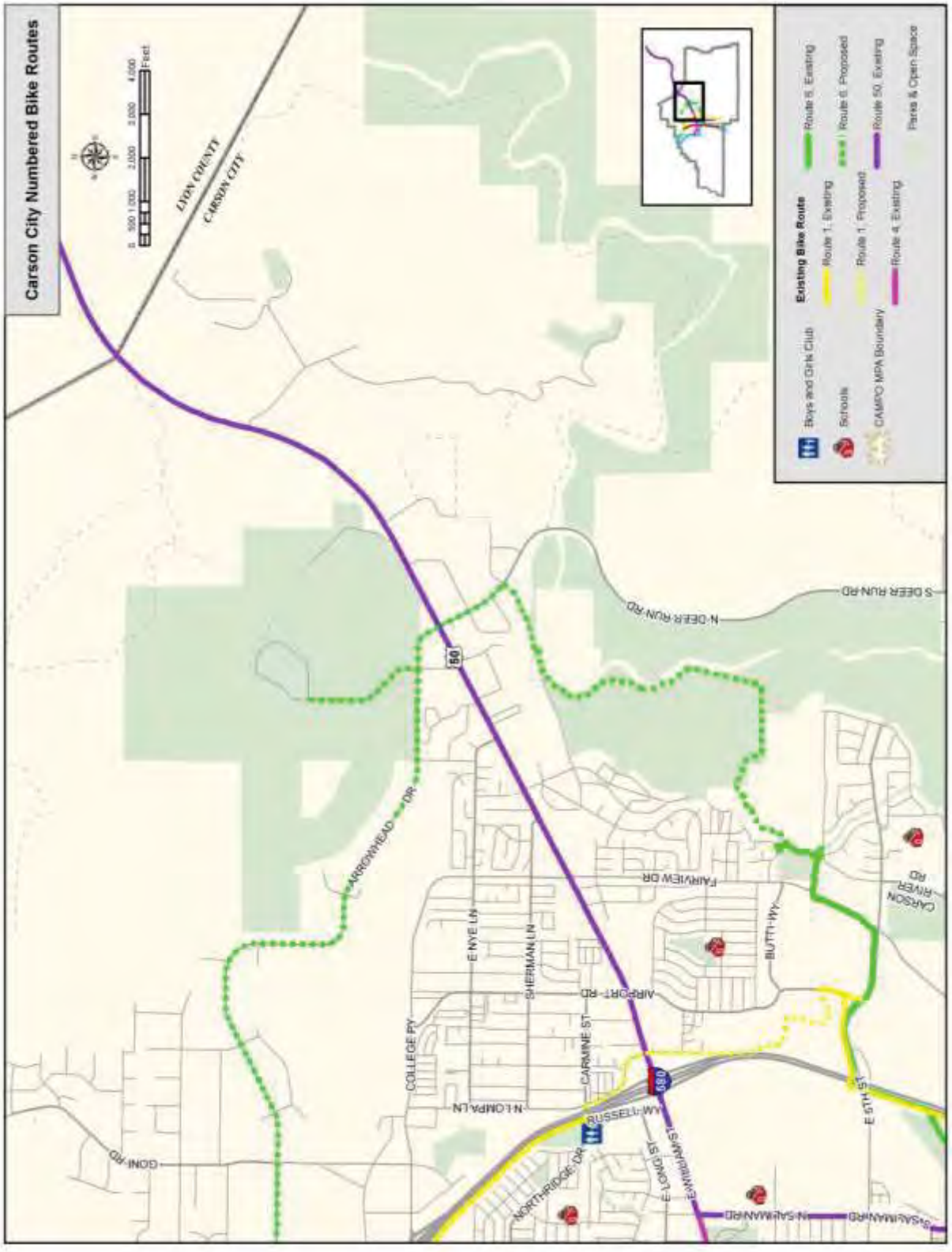


Figure 4.21 Southeast Carson City Bike Route Map

Figure 4.22 Southwest Carson City Bike Route Map

Figure 4.23 Northwest Carson City Bike Route Map

Figure 4.24 - Douglas County Proposed Bike Network

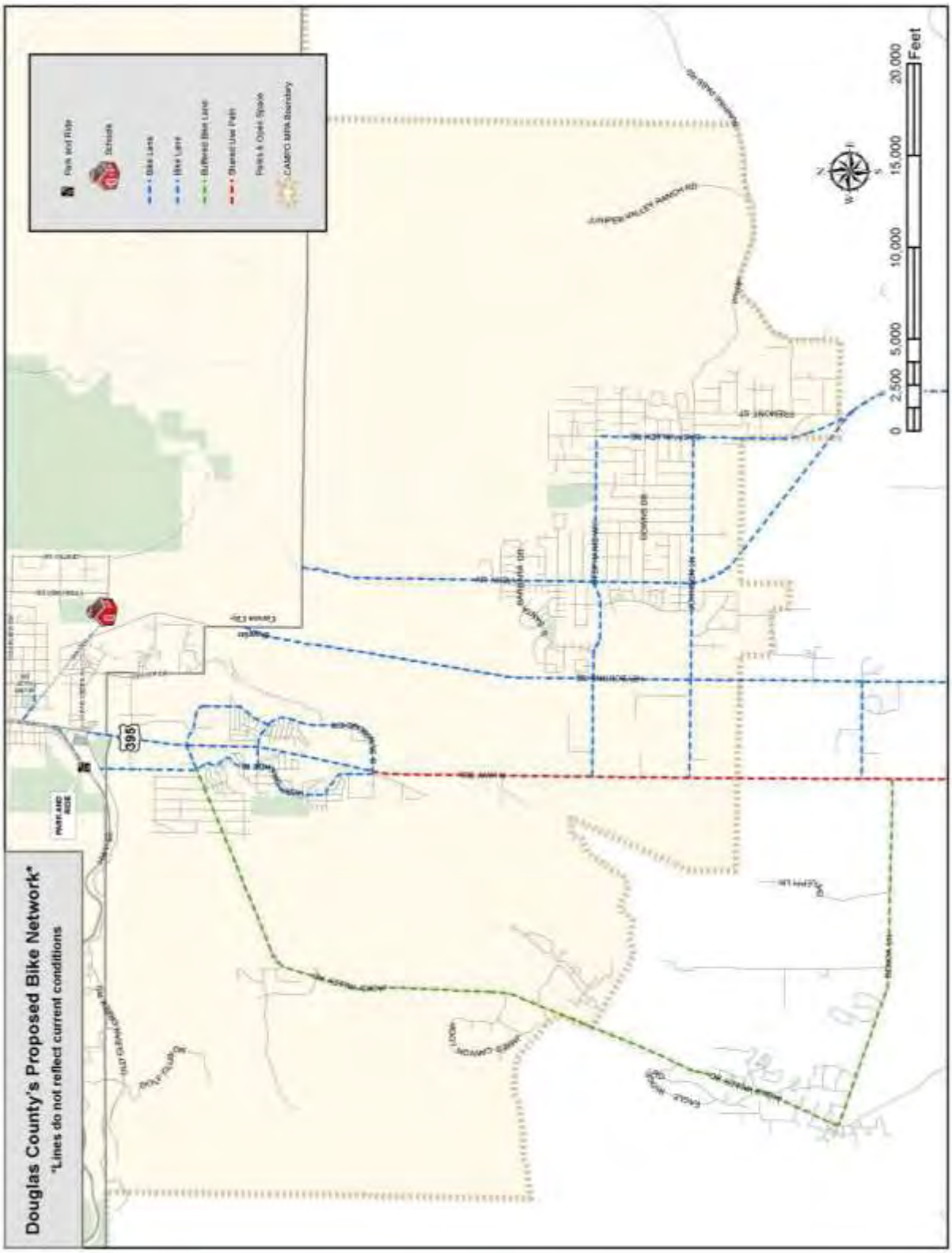
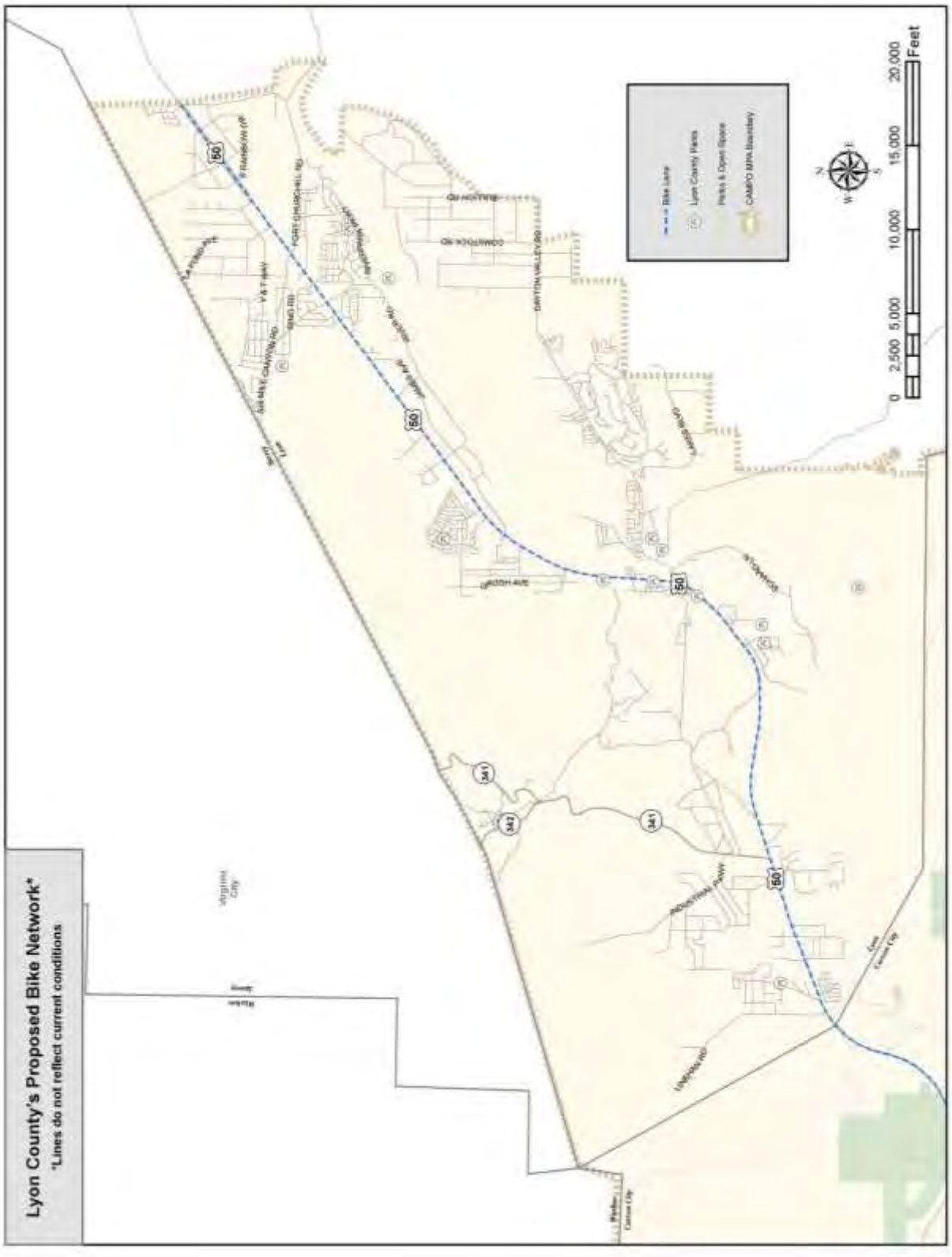


Figure 4.25 - Lyon County Proposed Bike Network



Public Transportation

Public transportation provides improved mobility and access throughout the Carson Area. Presently, the principal benefit is safe and reliable transportation for the transit dependent population, a demographic that is anticipated to grow due to longer life spans and Nevada's attractive retirement atmosphere. Due to the dispersed pattern of residential, employment areas, and the region's mild traffic congestion, public transportation is not the preferred mode of travel. However, public transit provides an important complementary resource to active transportation and ride sharing users, allowing users to pair public transportation with other modes of travel. Public transportation provides access to jobs, community facilities, retail establishments, and healthcare facilities to individuals who cannot afford or are unable to drive a personal vehicle. Additionally, public transportation reduces traffic congestion and transportation emissions, providing a regional benefit.

In the Carson Area, public transportation (shared transportation available to the public for a fee) options are bus services and ride hailing services. Bus service providers include four public and two private sources and are listed below. Ride hailing services within the Carson area include Capital Cabs Company and UBER.

- Jump Around Carson (JAC), administered by the Carson City Regional Transportation Commission (RTC), is the primary provider for the Carson City area
- RTC Intercity, an intercity bus service between Carson City and Reno, operated by RTC of Washoe County with funding from Carson City RTC
- Douglas Area Rural Transit (DART), a dial a ride service for seniors and disabled riders, operated by Douglas County
- BlueGo, with bus services between Lake Tahoe, Carson City, and Douglas County operated by the Tahoe Transportation District
- Carson Valley Airporter, operated by Amador Coach Line, is a private company that provides bus services from Douglas County and Carson City to the Reno Tahoe Airport
- Silverado Mainline, operated through a public-private partnership between the Nevada Department of Transportation and Silverado Mainline, provides daily services between Las Vegas and Reno, includes a stop in Carson City.

The Federal Transit Administration (FTA) provides grant funding that requires local match, to CAMPO and the other transit providers. Without these federal grant funds, public transportation would not be financially feasible. The utilization of these federal grant funds supports needed public transportation and brings millions of dollars to the local and regional economy.

As healthcare services, employment areas, and other destinations continue to straddle jurisdictional lines, transit providers will need to help riders navigate from one transit service to another, allowing riders to transfer throughout the region seamlessly.

Public transportation supports a goal of this plan, which is to increase the mobility and reliability of the transportation system for all users. In compliance with new federal regulations on performance based planning, this plan establishes the following objective and performance measures for the two transit services receiving Federal Transit Administration (FTA) grant funding through CAMPO.

Objective: Improve transit system efficiencies and accessibilities

- Performance Measure: The number of passengers per revenue hour/mile/day for Jump Around Carson and RTC Intercity
- Performance Measure: The cost per revenue hour/mile/trip for Jump Around Carson and RTC Intercity
- Performance Measure: The number of passengers per day for Jump Around Carson and RTC Intercity
- Performance Measure: Monthly ridership for Jump Around Carson (fixed route and paratransit) and RTC Intercity
- Performance Measure: Farebox recovery rate for Jump Around Carson and RTC Intercity
- Performance Measure: On-time performance (departure from a time point between zero and five minutes is considered on time) for Jump Around Carson's fixed routes and RTC Intercity route.

Figure 4.26 Fiscal Year 2015 Performance Measures

Fiscal Year 2015	Jump Around Carson (Fixed Route)	Jump Around Carson (Paratransit)	Intercity (Between Carson City and Reno)
Number of passengers per revenue hour	12.84	2.24	10.90
Number of passengers per revenue mile	1.00	0.26	0.35
Cost per revenue hour	$52.97	$43.80	$87.14*
Cost per trip	$4.13	$19.52	$7.90*
Cost per revenue mile	$4.11	$5.02	$2.75*
Number of passengers per revenue day	631.54	61.51	142.00
Monthly ridership	16,420	1,599	3,009
Farebox recovery rate	8.73%	8.35%	42.80%
On-time performance	96.50%	98.20%	56.00%

* Cost to Carson City Regional Transportation Commission

Jump Around Carson (JAC)

Carson City Regional Transportation Commission operates Jump Around Carson (JAC), a public bus service. Governed by the Carson City Regional Transportation Commission (RTC), JAC provides four fixed routes that meet at a transfer station hourly. 62% of the Carson City population is within a quarter mile of one of the fixed routes.

Hours of Operation are Monday through Friday, 6:30 a.m. to 7:30 p.m., and Saturday 8:30 a.m. to 4:30 p.m. Each route operates on 60-minute headway from the Downtown Transfer Plaza, which facilitates transfers to the entire service area. Fares are $1.00 for adults and $0.50 for children ages 5-18, seniors 60 and over and persons with disabilities. Children under age five ride free.

With use of Federal Transit Administration funds for fixed route bus services, JAC is required to provide complementary paratransit service. JAC Assist, an ADA paratransit service, provides curb-to-curb transportation for eligible persons with disabilities who cannot use the fixed route bus service. JAC Assist operates during the same days and hours as the fixed route system. Fares are $2.00 per one-way trip with an origin and destination within ¾ mile of any fixed route. As a matter of local policy, paratransit service is provided an additional ¼-mile (total of 1 mile from any fixed route) for a fare of $4.00 per one-way trip with an origin or destination within this non-ADA zone.

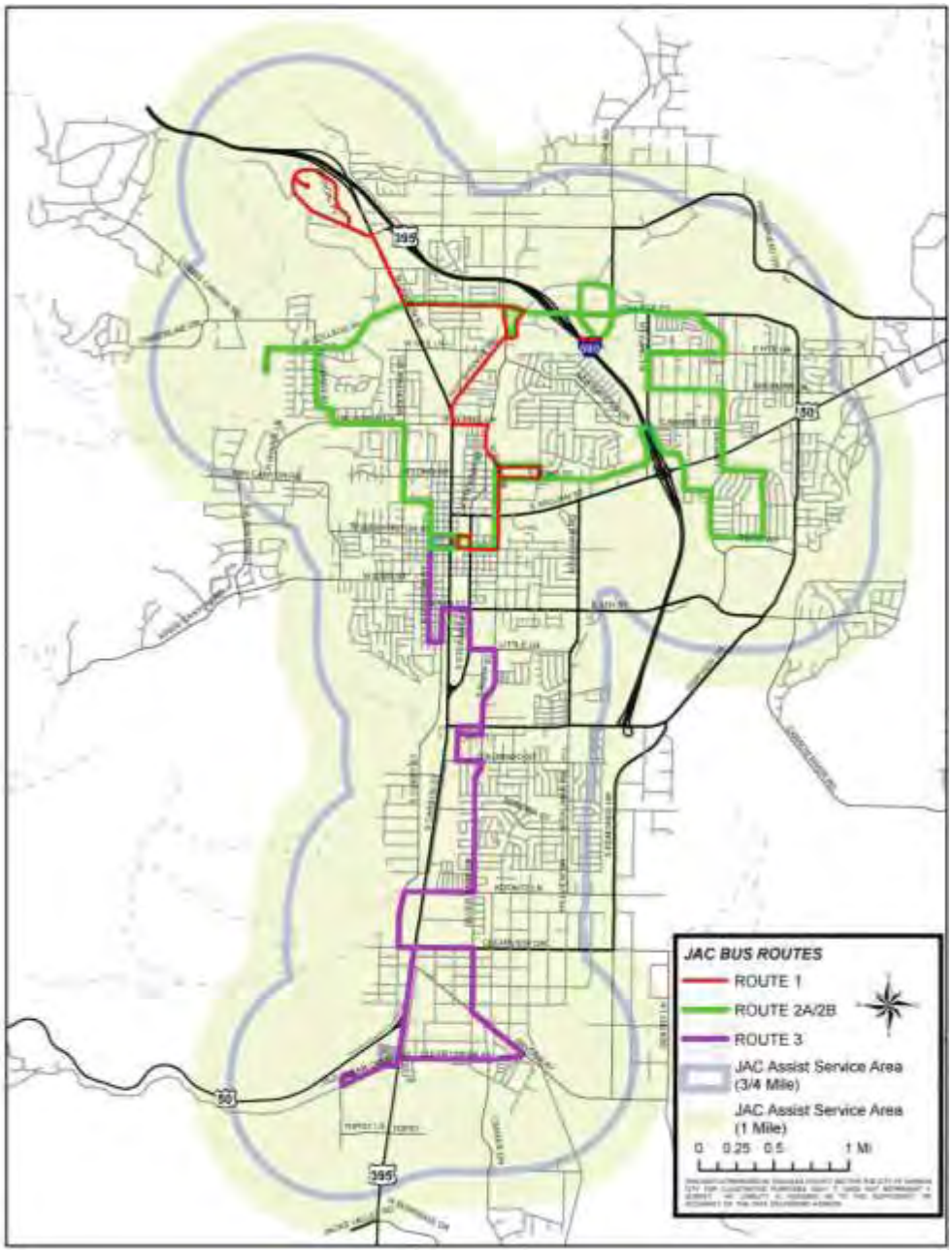
Future expansion of JAC operations is evaluated in the Carson City Transit Development Plan. The plan is a short range-planning document for fiscal years 2014-2018. The document evaluates the existing system, potential improvements to the system, and provides options to expand the system while maximizing benefit to riders and the community. Future expansion options would require additional local resources to leverage more federal funds.

* The Carson City Transit Development Plan is available on the Jump Around Carson webpage:
www.ridejac.com

Figure 4.27 shows JAC's four fixed routes and the JAC Assist Service Area for paratransit. The paratransit service area is represented by the shaded buffer area around JAC's fixed routes. The four fixed routes are listed below:

- Route 1 – North Carson Area
- Route 2A – North Town West/East Carson Area (clockwise)
- Route 2B – North Town East/West Carson Area (counter-clockwise)
- Route 3 – South Carson Area

Figure 4.27 JAC and JAC Assist Service Area



RTC INTERCITY

In partnership, the Carson City RTC and the RTC of Washoe County provide intercity bus service between Carson City and Reno Monday through Friday. The service offers reclining seats, individual climate control, storage space for small personal items, and free Wi-Fi. Passengers are able to transfer between JAC, BlueGo, and RTC Ride (Washoe County's bus system) at no additional cost. This service provides approximately 10,000 plus rides to students enrolled in the University of Nevada Reno and the Truckee Meadows Community College. Total annual ridership is estimated at 36,000.

BLUE GO

Operated by the Tahoe Transportation District, BlueGo operates a commuter bus service between South Lake Tahoe, Carson City and the Carson Valley known as the Lake & Valley Express. The Lake & Valley Express operates mainly Monday through Friday, with a reduced schedule on weekends. Passengers are able to transfer between JAC buses and Douglas Area Rural Transit (DART) buses. BlueGO also operates a fixed route service, the seasonal Nifty 50 Trolley, and seasonal ski shuttles that serve the greater South Lake Tahoe area.

Operated by Douglas County, Douglas Area Rural Transit (DART) is primarily a dial-a-ride curb-to-curb bus service for senior and disabled riders. The dial-a-ride service area includes the Johnson Lane and Indian Hills residential areas, which are both located within the CAMPO boundary. While transfer agreements are not in place, DART riders are able to transfer onto other regional bus services to reach their destination. DART operates a small public fixed route service called DART Express within the Minden/Gardnerville area (outside of the CAMPO boundary). DART Express bus stops are planned around existing BlueGo stops, which provide access to Carson City and South Lake Tahoe.

The Carson Valley Airporter is a privately run bus service providing one way and roundtrip transportation from Douglas County and Carson City to the Reno Airport. Amador Stage Lines provide this service. The service performs daily stops at the following locations:

- Gardnerville Community Center in Douglas County
- Carson Valley Inn in Douglas County
- Holiday Inn Express in Minden in Douglas County
- Courtyard by Marriott in Carson City
- Carson City at the Downtown Transfer Plaza (intersection of Robinson & Plaza Streets)
- Hampton Inn in Carson City
- Reno National Bowling Center
- Reno-Tahoe International Airport

Chapter 5: Safety

CAMPO is committed to creating a safer transportation network for all users and modes of transportation. The cause of crashes typically includes multiple factors, such as driver error, roadway conditions, and roadway design. The Carson Area transportation network is over a hundred years old and is in need of safety improvements. Prioritizing network improvements is difficult, especially with limited resources. Additionally, transportation improvements can have significant impacts on local land use, which includes homes and businesses, making the selection of improvements more difficult.

In January 2012, the Federal Highway Administration (FHWA) began promoting the implementation of proven safety countermeasures. Through research, these safety measures have shown great effectiveness in improving safety throughout the country. These safety measures address access management, design elements for non-motorized users, intersection design, roadway treatments, and traffic signal visibility. All three-member agencies of CAMPO, to some degree, have begun to implement these proven safety measures. These proven safety trends are discussed in detail within this chapter.

To help local decision makers and transportation professionals prioritize improvements and gauge the effectiveness of safety improvements, national safety performance measures have been established. Consistent with federal regulations, this chapter establishes objectives and performance measures to track progress toward creating a safer transportation system. Four objectives and seven performance measures are incorporated into this plan for future comparison. The objectives and 2014 performance measures are listed below:

Objective: Reduce the number of transportation system fatalities

Objective: Reduce the number of transportation system serious injuries

Objective: Reduce the rate of transportation system fatalities

Objective: Reduce the rate of transportation system serious injuries

2014 Safety Performance Measures

- 1.6* - Number of Fatal Crashes
- 16.8* - Number of Serious Injury*** Crashes
- 0.2* - Number of Fatal Crashes involving a Bicyclist or Pedestrian
- 2.0* - Number of Serious Injury*** Crashes involving a Bicyclist or Pedestrian
- 0.28** - Rate of Fatal Crashes
- 2.94** - Rate of Serious Injury*** Crashes
- 0.0 - Number of Fatal Crashes involving Trucks

*The number is expressed as a five year rolling average
**Rate is expressed as the number of crashes per 100 million vehicle miles traveled
***A serious injury is defined by the National Safety Council (NSC) as incapacitating

Safety Trends

In January 2012, the Federal Highway Administration (FHWA) began promoting the implementation of proven safety countermeasures. Through research, these safety measures have shown great effectiveness in improving safety.

Information on each countermeasure is available on FHWA's website at the following link: http://safety.fhwa.dot.gov/provencountermeasures/. Dollar signs are below each icon to give the reader a sense of cost for each type of treatment. Please note the cost of implementation can vary significantly from project to project.

A brief description of each countermeasure is provided below:

Roundabouts

A roundabout is a type of circular intersection or junction in which road traffic flows almost continuously in one direction around a central island. Compared to stop signs, traffic signals, and earlier forms of roundabouts, modern roundabouts reduce the likelihood and severity of collisions by reducing traffic speeds and minimizing T-bone and head-on collisions.

Corridor Access Management

Access management is a set of techniques that State and local governments use to control access to highways, major arterials, and other roadways.

Backplates with Retroreflective Borders

Backplates are added to a traffic signal indication to improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background.

Longitudinal Rumble Strips and Stripes on Two-Lane Roads

Longitudinal rumble strips are milled or raised elements on the pavement intended to alert inattentive drivers through vibration and sound that their vehicles have left the travel lane. Rumble strips are not recommended where bicyclists use shoulders unless there is a minimum clear path of four feet in which a bicycle may safely operate and there is a 12-foot longitudinal gap in the rumble strip every 60 feet.

Enhanced Delineation and Friction for Horizontal Curves

Enhanced delineation or friction to a roadway curve includes adding signs and markings to help drivers safely negotiate curves or pavement surface treatment that improves roadway friction keeping vehicles on the roadway.

Safety Edge$_{SM}$

The Safety Edge$_{SM}$ is a proven technology that shapes the edge of a paved roadway at approximately 30 degrees from the pavement cross slope during the paving process. The Safety Edge$_{SM}$ eliminates tire scrubbing, a phenomenon that contributes to losing control of a vehicle.

Medians and Pedestrian Crossing Islands in Urban and Suburban Areas

Pedestrian or median crossing islands—also known as center islands, refuge islands, or median slow points—are raised islands placed on a street at intersections or midblock locations to separate crossing pedestrians from motor vehicles.

Pedestrian Hybrid Beacon

The pedestrian hybrid beacon (also known as the High intensity Activated crossWalK (or HAWK)) is a pedestrian-activated warning device located on the roadside or on mast arms over midblock pedestrian crossings. The beacon head consists of two red lenses above a single yellow lens. The beacon head is “dark” until the pedestrian desires to cross the street.

Road Diet

A ***road diet***, also called a lane reduction or ***road*** rechannelization, is a technique in transportation planning whereby the number of travel lanes and/or effective width of the ***road*** are reduced to achieve systemic improvements.

Safety Performance

In compliance with new performance based planning requirements, this plan establishes seven performance measures that will create a baseline for future comparison and will evaluate regional progress toward achieving the plan's safety objectives. These performance measures are requirements of the previous transportation bill Moving Ahead for Progress in the 21st Century (MAP-21) and of the recently approved transportation act, Fixing America's Surface Transportation (FAST) Act. The Nevada Department of Transportation and Nevada's four metropolitan planning organizations (MPO) have agreed to specific language of the performance measures to allow for comparison throughout the state and among MPOs. Additionally, use of the Fatality Analysis Reporting System (FARS) data will be used to ensure consistency over time and accurate comparison. The performance measures are listed below:

- Performance Measure: Rate of serious injuries classified as type A on the KABCO scale calculated by the number of crashes as a 5-year moving average per 100 million VMT (vehicle miles traveled) in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of serious crashes (injuries classified as type A on the KABCO scale) in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of serious injuries involving a bicyclist or pedestrian in the CAMPO boundary
- Performance Measure: Rate of fatalities calculated by the number of fatalities as a 5-year moving average per 100 million VMT (vehicle miles traveled) in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of fatal crashes in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of fatal crashes involving a bicyclist or pedestrian in the CAMPO boundary
- Performance Measure: Number (5-year rolling average) of fatal crashes involving trucks in the CAMPO boundary

Performance Measure Reporting

FARS is a nationwide census providing the National Highway Traffic Safety Administration (NHTSA), Congress, and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. In an effort to smooth out the annual data and identify trends, the performance measures use a five-year rolling average to track the number of crashes. With NDOT's assistance, the following vehicle miles traveled (VMT) have been estimated for the CAMPO Planning Area, and were used for the two performance measures expressing rate per 100 million miles of VMTs.

Figure 5.0 Annual Vehicle Miles Traveled in the CAMPO Planning Area

Year	Vehicle Miles Traveled
2010	458,370,939
2011	470,558,752
2012	487,520,736
2013	487,200,339
2014	571,234,641

Source: Nevada Department of Transportation

Figure 5.1 Safety Performance Measures

Calender Year	Number* of Fatal Crashes	Rate** of Fatal Crashes	Number of Serious Injury Crashes	Rate of Serious*** Injury Crashes	Number of Fatals Crashes involving Bicyclist or Pedestrian	Number of Serious Injury Crashes involving Bicyclist or Pedestrian	Number of Fatal Crashes involving Trucks
2010	2.2	0.48	13.0	2.84	0.60	1.4	0
2011	2.2	0.47	14.6	3.10	0.40	1.4	0
2012	2.2	0.45	14.2	2.91	0.40	0.8	0
2013	2.0	0.41	14.8	3.04	0.60	1.0	0
2014	1.6	0.28	16.8	2.94	0.20	2.0	0

* The number is expressd as a five year rolling average

** Rate is expressed as the number of crashes per 100 million vehicle miles traveled

*** A serious injury is defined by the National Safety Council (NSC) as incapacitating

Crash Maps

Crash maps have been created with all available crash data. The data is from 2006 to the present, however, due to the legal matters associated with crashes data can lag. The maps have been created to allow for a spatial analysis of crashes in the CAMPO Planning Area. Due to the multiple factors that cause crashes, it is difficult to use maps to identify a problem or a deficiency in the roadway. Additionally, and specific to the CAMPO area, due to the changing transportation network, specifically the construction of the Carson City Freeway, past problem areas that have seen reductions in congestion may no longer be a problem.

Maps of vehicle crashes and crashes involving bikes or pedestrians are provided for reference. A list of the maps is provided below:

- Figure 5.2 Carson City Vehicle Crashes 2006 - 2015
- Figure 5.3 Carson City North Vehicle Crashes 2006 - 2015
- Figure 5.4 Carson City South Vehicle Crashes 2006 - 2015
- Figure 5.5 Portion of Douglas County within the CAMPO Area Vehicle Crashes 2006 - 2015
- Figure 5.6 Portion of Lyon County within the CAMPO Area Vehicle Crashes 2006 - 2015
- Figure 5.7 Portion of Douglas County within the CAMPO Area Crashes involving a Bike or Pedestrian 2006-2015
- Figure 5.8 North Carson City Crashes involving a Bike or Pedestrian 2006-2015
- Figure 5.9 South Carson City Crashes involving a Bike or Pedestrian 2006-2015
- Figure 5.10 Carson City Density Map 2006-2015

Figure 5.2 Carson City Vehicle Crashes 2006 - 2015

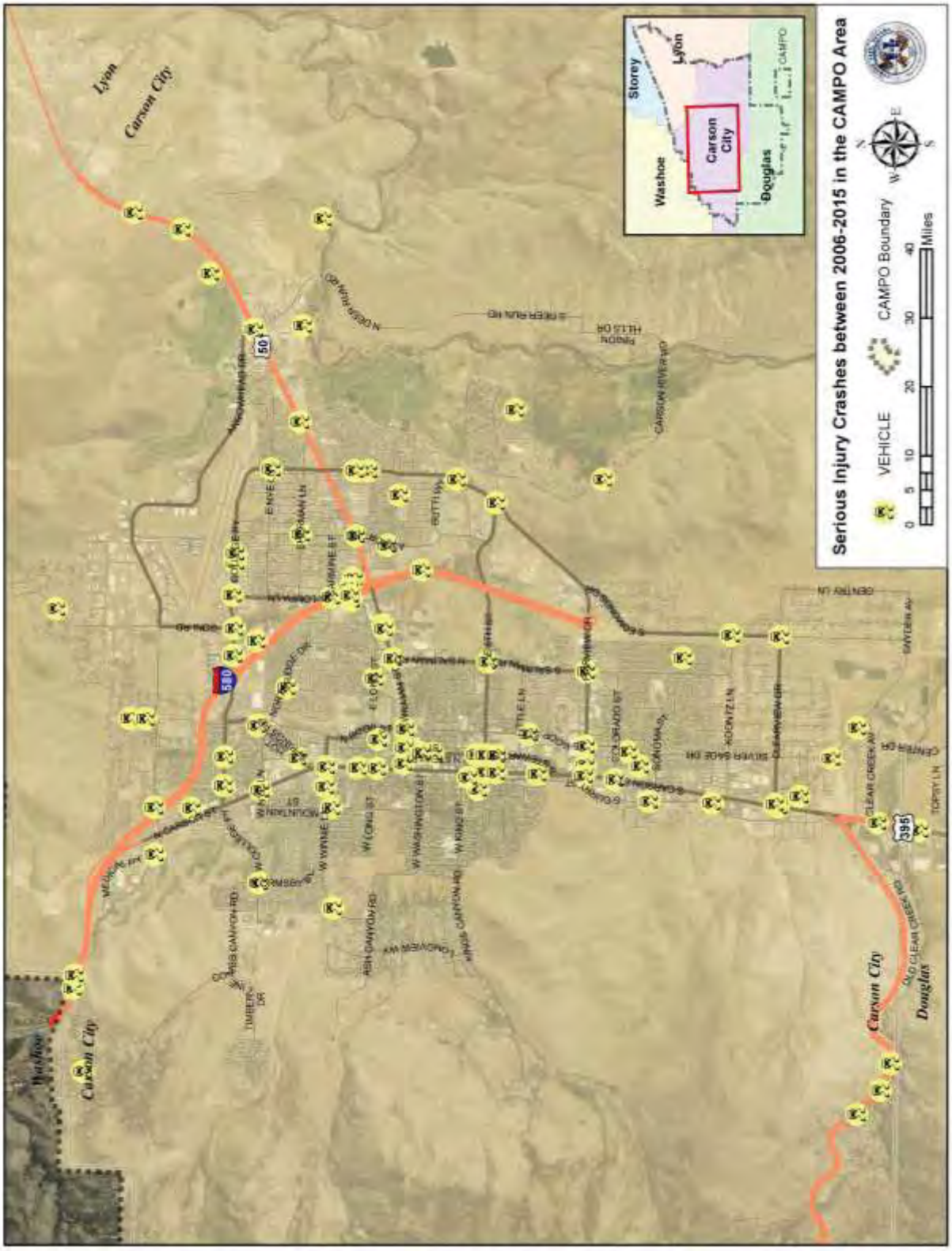


Figure 5.3 Carson City North Vehicle Crashes 2006 - 2015

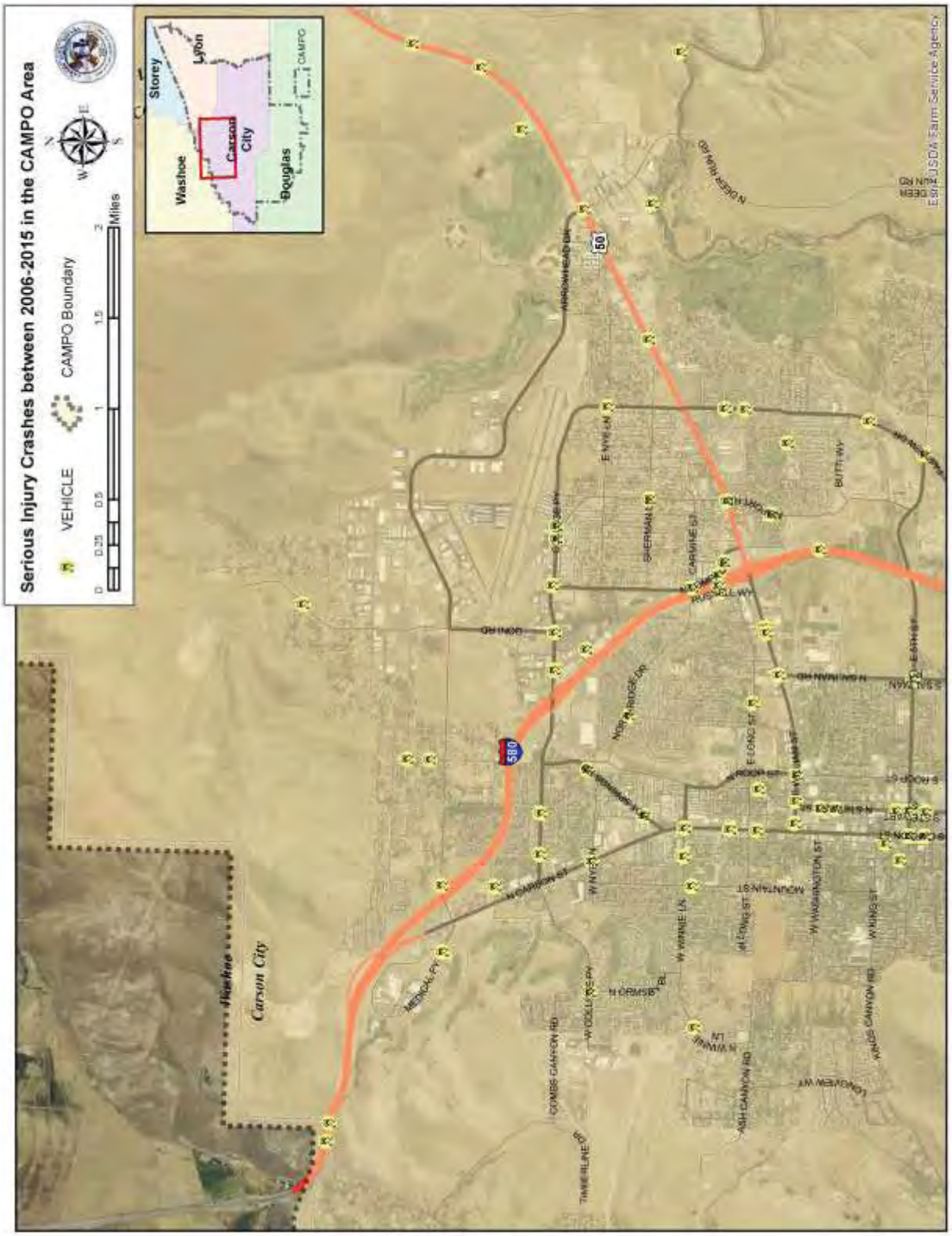


Figure 5.4 Carson City South Vehicle Crashes 2006 - 2015

Figure 5.5 Portion of Douglas County within the CAMPO Area Vehicle Crashes 2006 - 2015

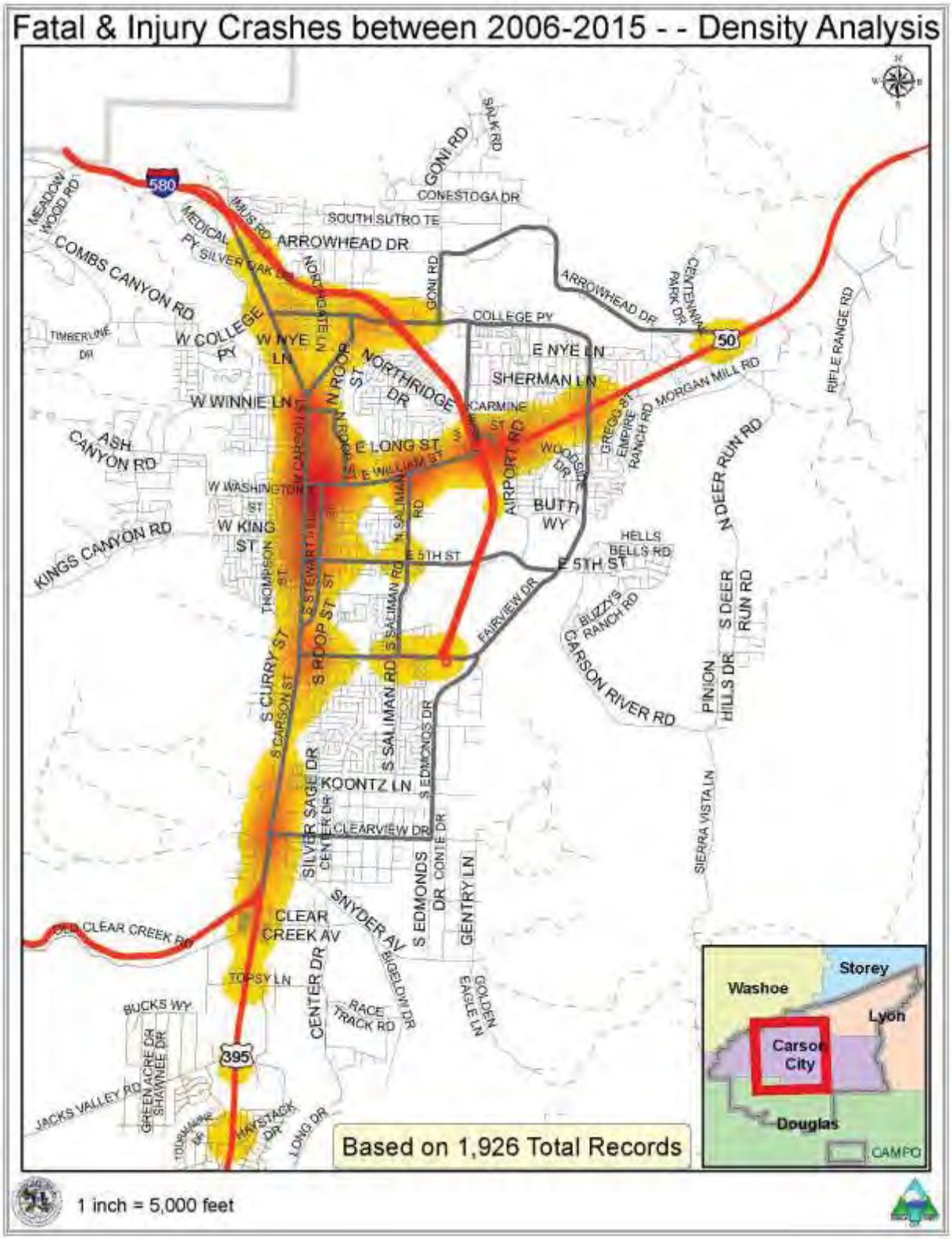
Figure 5.6 Portion of Lyon County within the CAMPO Area Vehicle Crashes 2006 - 2015

Figure 5.7 Portion of Douglas County within the CAMPO Area Crashes involving a Bike or Pedestrian 2006-2015

Figure 5.8 North Carson City Crashes involving a Bike or Pedestrian 2006-2015

Figure 5.9 South Carson City Crashes involving a Bike or Pedestrian 2006-2015

Figure 5.10 Carson City Density Map 2006-2015



Federal and State Programs

In 2010, the Nevada Department of Transportation (NDOT) adopted a Zero Fatalities goal. This goal is consistent with the national Toward Zero Deaths strategy sponsored by the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), and other national agencies and associations.

NDOT is in the process of updating a **Strategic Highway Safety Plan** (SHSP). The current plan, dated 2011-2015, noted highway traffic crashes as one of the nation's leading causes of death. The plan identified five Critical Emphasis Areas (CEAs) that were associated with a relatively high number of fatalities. The five CEAs are impaired driving, lane departures, seat belts, pedestrians, and intersections.

* The 2016-2020 Strategic Highway Safety Plan is available at the following link: https://nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Traffic_Safety_Engineering/Nevada_Strategic_Highway_Safety_Plan.aspx

Chapter 6: Transportation System Resiliency

This chapter provides information on how climate change and extreme weather events can affect the transportation system. This transportation plan does not create any regional or local laws, but rather rasies awarness of how climate change and severe weather events will affect regional transportation.

In response to federal direction, transportation plans are expected to identify the risks of climate change and extreme weather events to current and planned transportation systems. Climate change and extreme weather events present significant and growing risks to the safety, reliability, effectiveness, and sustainability of the Nation's transportation infrastructure and operations.

The impacts of a changing climate (such as higher temperatures and changes in seasonal precipitation) and extreme weather events (such as intensity of rain events) are affecting the lifecycle of transportation systems. For example, inland flooding from unusually heavy downpours can disrupt traffic, damage culverts, and reduce service life. High heat can degrade materials, resulting in shorter replacement cycles and higher maintenance costs.

While transportation infrastructure is designed to handle a broad range of impacts based on historic climate, preparing for climate change and extreme weather events is critical to protecting the integrity of the transportation system and the sound investment of taxpayer dollars.

This Chapter is created in response to Executive Order 13653 of November 1, 2013, a presidential order to prepare the Nation for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience:
https://www.federalregister.gov/

In following with Excutive Order 13653, the Federal Highway Administration (FHWA) has issued Order 5520, a directive to establish the FHWA policy on preparedness and resilience to climate change and extreme weather events. This directive further serves to implement relevant provisions of title 23 of the United States Code (U.S.C).
https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm#par1

Asset Sensitivity

At the requset of the Federal Highway Administration (FHWA), a Sensitivity Matrix was developed to help agenices identify which assets are at risk and from what climate stressors. The matrix was developed by the International Finance Corporation (IFC). The complete matrix can be found at http://www.fhwa.dot.gov/environment/climate_change/adaptation/tools/. The following stressors are considered to be possible for the Carson Area:

Increased Temperatures and Extreme Heat

Impact on Infrastructure

Paved Roads (Surface and Subsurface) - Sustained high temperatures can cause asphalt concrete pavement to soften resulting in rutting and shoving. Concrete pavement can heave at the joints. When high heat is accompanied by drought conditions, asphalt concrete pavement can crack making it more vulnerable to water when it does rain. Asphalt binder is designed to withstand temperatures up to a certain threshold. Incremental temperature increases up until that point is not likely to cause much damage. Thresholds vary depending on pavement design. Pavement binder may exhibit sensitivity beginning at 108°F, particularly if combined with truck traffic. Although aggregate is not sensitive to temperature, it can influence the sensitivity of the overall hot mix asphalt paving. For example, more aggregate that is angular may help to prevent rutting, which can result from high temperatures. During extreme heat spells when the temperature can remain above 100°F, with relatively little cooling at night, the pavement can soften. Areas with high truck traffic (particularly areas where trucks stop) can experience shoving during heat spells. Damage can be particularly bad in areas where trucks stopped, since the force of stopped "shoved" the soft pavement and caused damage. During a heat wave in July 2000, three lanes on Interstate 80 in the San Francisco Bay Area buckled due to thermal expansion, shutting down the freeway.

Unpaved Roads – No documented relationship.

Impact on Service, Access, Maintenance, and Operations

Stormwater Drainage (Culverts, Side Drains, etc.) - No documented relationship.

Signals and Signs - No documented relationship.

Road Work and Maintenance, Driver Safety, and Traffic and Service - High temperatures can increase health and safety risk as well as engine and equipment heat stress for road maintenance, truck operations, bus operations, private vehicles, and public vehicles. Risk of an accident increases with increasing extreme heat conditions (most likely due to slowed reaction time or loss of concentration or alertness). The largest increase was found to be in the category of single-vehicle accidents. Health and safety risk as well as possible engine/equipment heat stress begins at around 85°F, but the situation becomes more critical at 105-110°F. Restrictions limiting the number of hours that road crew maintenance can work begin at 85°F. At 110°F, operations are generally restricted.

Drought

Impact on Infrastructure

Paved Roads (Surface and Subsurface) - Droughts can contribute to cracking and splitting of pavements. As the ground beneath the roadway dries beyond normal ground moisture levels, droughts can cause pavement to crack as the ground shrinks beneath the asphalt.

Unpaved Roads – On gravel roads, dusty conditions occur when a disturbed road surface has dried out. Soil fines can actually shrink due to moisture loss, which, in turn, loosens and weakens the soil surface. A gravel road surface may lose one inch of material per year from dusting. Lack of moisture will encourage washboard formation and prolonged dry weather can aggravate the problem. This is because the crust that forms on the surface of a good gravel road will tend to loosen in dry weather. This allows the stone and sand-sized particles of gravel to "float" and the material can easily align itself into the washboard pattern under traffic.

Impact on Service, Access, Maintenance, and Operations

Stormwater Drainage (Culverts, Side Drains, etc.) - Sedimentation in culverts can occur during periods of low flow.

Certain culvert installations may encounter sedimentation problems. The most common of these are multibarrel installations and culverts built with depressions at the entrance. Culverts with more than one barrel may be necessary for wide shallow streams and for low fills. It is well documented that one or more of the barrels will accumulate sediment, particularly the inner barrel in a curved stream alignment. It is desirable for these installations to be straight and aligned with the upstream channel. Culverts built with an upstream depression possess a barrel slope, which is less than that of the natural channel.

Signals and Signs - No documented relationship.

Road Work and Maintenance, Driver Safety, and Traffic and Service - Dry conditions leading to the movement of dust from gravel roads can cause off-site damage, be a health hazard to humans, wildlife and plant life, or become a traffic safety hazard.

Wildfires

Impact on Infrastructure

Paved Roads (Surface and Subsurface) – Typical asphalt mixtures have the potential to ignite during tunnel fires. Experimental study found that samples of typical road surface asphalts ignited between 480 and 530°C. Further investigation observed some degradation of the asphalt at temperatures as low as 300°C. Even without igniting the bituminous mixtures, high temperatures can lead to excessive softening of pavements. For concrete, aggregates begin to expand by 600°C. This results in internal stresses that initiate the disintegration of the concrete. Concrete pavements are non-combustible and more resistant to fire than bituminous mixtures, but can still experience expansion at around 600°C.

Debris flows following wildfires can flood and damage roads.

Unpaved Roads – Debris flows following wildfires can flood and damage roads.

Impact on Service, Access, Maintenance, and Operations

Stormwater Drainage (Culverts, Side Drains, etc.) - Wildfires can denude hillslopes of vegetation and change soil properties that affect watershed hydrology and sediment-transport processes. Even small post-wildfire rainstorms can increase overland runoff that erodes soil, rock, ash, and vegetative debris from hillslopes. This increased runoff concentrates in stream channels and entrains the sediment that can lead to the generation of destructive debris flows. Post-fire debris flows can exert great impulsive loads on objects in their paths, block drainage ways, and damage structures.

Signals and Signs – No documented relationship.

Road Work and Maintenance, Driver Safety, and Traffic and Service - Smoke from fires fueled by drought caused low enough visibility to close highways and airborne dust has been a factor in major traffic accidents. There can be road closures due to fire threats or reduced visibility from smoke. Generally only a problem when visibility is under ¼ miles; low visibility can affect all sectors of surface transportation.

Precipitation-Driven Inland Flooding

Impact on Infrastructure

Paved Roads (Surface and Subsurface) – Flooding at waterway crossings (where water has velocity) can cause pavement and embankment failure, which begins when the water is high enough to flow over the roadway surface. Heavy precipitation and flooding can erode paved road surface. Over time, precipitation can worsen existing pavement damage (for example, from cracking due to temperature impacts). During heavy precipitation events, rain can leak in under the pavement and damage the subgrade, which is very sensitive to moisture levels. The sensitivity of pavements depends on the type of pavement design. Thin bituminous pavements are more sensitive to water than other types, if moisture breaches the subgrade from the pavement shoulder; it deforms the subgrade, which is then subjected to high stress loads during traffic. Some of the common damage from moisture includes: surface defects, surface deformations, and cracking. If the pavement is completely submerged, the water may begin to infiltrate the subgrade. If this happens multiple times, it will damage the pavement, particularly if the road has high traffic loads as well. Paved roads begin to experience damage at around a 50-100 year storm.

Unpaved Roads – Heavy precipitation events often wash out unpaved roads. While unpaved roads are more susceptible to damage during flooding events, they are cheaper to fix. Unpaved surface is more sensitive than paved roads to low levels of damage resulting from flooding.

Impact on Service, Access, Maintenance, and Operations

Stormwater Drainage (Culverts, Side Drains, etc.) - Heavy precipitation events can cause debris accumulation, sedimentation, erosion, scour, piping, and conduit structural damage. Damage generally does not occur until around a 50-100 year storm.

Signals and Signs – Even light rain slows traffic and decreases the capacity of a road to handle traffic. Rain increases safety risk on the road by impairing visibility, mobility, and increasing the likelihood of hydroplaning. Under very light rain conditions, road capacity may be reduced by 1-3%. Under light rain conditions, capacity may be reduced by 5-10%. Similarly, measured roadway speed decreases 1-2% under very light rain, 2-4% under light rain, and 4-7% under heavy rain.

Road Work and Maintenance, Driver Safety, and Traffic and Service - No documented relationship.

Wind

Impact on Infrastructure

Paved Roads (Surface and Subsurface) – Minimal Impact

Unpaved Roads – Minimal Impact

Impact on Service, Access, Maintenance, and Operations

Stormwater Drainage (Culverts, Side Drains, etc.) - Wind damages trees, buildings, and other structures. Debris from this destruction can clog the stormwater drainage system, resulting in flooding impacts to the surrounding area.

Signals and Signs - Winds can blow over highway, street, and road signs. If street signs (such as stop signs) are not buried deeply in strong soils, they may not comply with design standards and may fail at (much) lower wind speeds.

Road Work and Maintenance, Driver Safety, and Traffic and Service - High winds cause safety risks and travel delays, a loss of visibility, impaired mobility, loss of communications and power, freight/cargo damage risk, increased risk of collisions/spills of hazardous cargo, and transport schedule delays.

Winds become dangerous to road maintenance, truck operations, and other road users at around 39 mph and are very dangerous at 74 mph. The American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) wind load provisions assume that no traffic will be present on a bridge when wind speed exceeds 56 mph.

Highway operations experience the following impacts during conditions with winds of above 74 mph: safety risks, loss of life, loss of visibility, loss of traction, loss of communications and power, and road damage. Milder impacts may also be experienced at winds less than 74 mph.

Changes in Freeze/Thaw

Impact on Infrastructure

Paved Roads (Surface and Subsurface) - Changes in freeze thaw affect different types of paving in different ways. There are many complexities to the way that asphalt cement is blended, and some asphalt binders respond better to freeze thaw cycles than others. Additionally, the volume and spacing of air voids in the aggregate mix has an effect on how susceptible an asphalt roadway is to freeze/thaw. The basic challenge with freeze/thaw cycles and concrete and asphalt is that water on the roadway seeps into cracks that are caused by normal wear and tear from cars, and during freeze and thaw cycles, the water freezes, which increases pressure underneath the pavement surface, and then melts as the temperatures warm. When the water freezes and pressure increases, the asphalt in particular rises up into a small bubble. As the temperature warms and the ice melts, the asphalt "bubble" is unsupported, and cars driving over it cause it to weaken and collapse into the hole beneath it. This is what is known as a pothole. This same phenomenon also causes additional surface cracks, deformations, and wheel ruts.

One threshold that can be used to look at this relationship is the number of freeze/thaw cycles. One study looked at the effect that 0, 6, 12, 18, and 24 days of freeze thaw cycles have on the engineering properties of asphalt concrete. The researchers found that as the number of day's increases, asphalt cement has an exponentially lower Marshall Stability value. Marshall Stability measures the maximum load sustained by the asphalt material.

Unpaved Roads – No documented relationship.

Impact on Service, Access, Maintenance, and Operations

Signals and Signs - No documented relationship.

Road Work and Maintenance, Driver Safety, and Traffic and Service - Potholes, cracks, and rutting in the road surface result in increased maintenance costs and present a safety risk to drivers. During the colder months in some parts of the world, frozen subgrades in the roadway can provide a more solid road foundation for heavy vehicles. However, as the thaws begin, or as the number of cycles increases, the road surface becomes more susceptible to cracking and potholes. The number of new potholes after a winter season (particularly one with many freeze/thaw cycles) can number into the tens of thousands per year in a large city. The City of Tulsa, for example, made over 70,000 temporary pothole repairs in 2010.

Winter Storms

Impact on Infrastructure

Paved Roads (Surface and Subsurface) - Some of the challenges from winter storms lie in increased freeze/thaw cycles as discussed above.

Unpaved Roads - Snow and/or ice accumulation on gravel or dirt roads is more challenging to manage and clean up than on paved roads. Furthermore, as snow and ice melt, especially on gravel roadways, car wheels can push gravel and dirt out of their most functional formations, which requires maintenance. However, gravel and dirt roads while frozen hold up relatively well to vehicular traffic.

Impact on Service, Access, Maintenance, and Operations

Signals and Signs - The majority of the winter storm impacts on roadways are related to roadway service. Winter storms bring heavy snowfall or freezing rain, and are often accompanied by strong winds. These impacts affect operational infrastructure, rather than the road surface. High winds and heavy precipitation can cause power outages that render traffic lights and overhead streetlights useless.

Road Work and Maintenance, Driver Safety, and Traffic and Service - The snowfall, wind, and reduced visibility brought by winter storms have a significant effect on roadway operations and roadway use. In particular, winter storms affect driver behavior, vehicle capacity, crash risk, and agencies' capabilities to perform emergency maintenance and other responsibilities. Several studies have looked at the effect that winter storms have on travel time and traffic speed, and have found that winter storms result in significant reductions in traffic speed and increases in traffic delay. Another major challenge related to winter storms is the increase in precipitation and decrease in visibility that can affect driver safety. Drivers have less control over their vehicles during winter storms (due to slick roadways, windy conditions, and reduced visibility), which increases crash risk. Finally, winter weather presents a significant cost to transportation agencies. FHWA's highway statistics publication shows each year, state and local transportation agencies spend $2.3 billion on snow and ice removal, accounting for 20% of their annual transportation budgets.

Chapter 7: The Planning Process

Development of the CAMPO 2040 Regional Transportation Plan involved public presentations to the CAMPO Board, two public planning meetings, two Bicycle and Pedestrian Advisory Workgroup meetings, and an online survey. CAMPO staff employed new strategies in an effort to increase public participation. The survey and associated advertisements proved to be beneficial in achieving a higher level of public participation.

Planning Meetings for the Regional Transportation Plan

The CAMPO staff used three types of meetings to solicit comments regarding the regional transportation plan. Public planning meetings, held at the Carson City Community Center, were held as an informal open house meeting, intended for the public for staff to present information and to solicit comments and questions. The second type of meeting was the monthly CAMPO Board meetings. These meetings were used to present information to the CAMPO Board and to the public. The third type of meeting was CAMPO's quarterly Bicycle and Pedestrian Advisory Workgroup, comprised of regional stakeholders aimed at coordinating bike and pedestrian efforts. A summary of these meetings is provided below:

Public Planning Meetings (Open house format)

- October 20, 2015, 4:00 to 6:00 pm – Public planning kick off meeting to introduce the development of the Regional Transportation Plan and solicit public comment
- February 25, 2016, 4:30 to 6:30 pm – Public planning meeting to present results from the online survey, travel demand model and crash data analysis. Additionally, bike map exhibits were displayed. Public comment and questions were solicited.

CAMPO Monthly Meetings

- October 14, 2015 – Staff updated CAMPO Board on plan development and introduced survey
- March 9, 2016 – Staff updated the CAMPO Board on the status of the plan and presented results from the travel demand model and the analysis of crash data.

Bicycle and Pedestrian Advisory Workgroup Meeting

- November 23, 2015 – provided stakeholders an overview of the Regional Transportation Plan and solicited comments
- February 22, 2016 – provided stakeholders draft bike maps and solicited comments
- May 16, 2016 – presented final bike network maps and provided information on the status of the plan

The online survey helped to identify concerns and priorities for the Carson Area transportation system. The following bullets are notable highlights from the survey. Complete results from the survey are include later in this chapter

- Over 72% reported being very or somewhat concerned with cracks or potholes in the roadway
- Over 64% reported being very or somewhat concerned with sidewalks in poor condition
- Over 76% reported being very or somewhat concerned with driver behavior
- Of the seven options for spending money (Question 9) "repair existing roads" got the most allocation – 34%

Online Survey

Survey Promotion

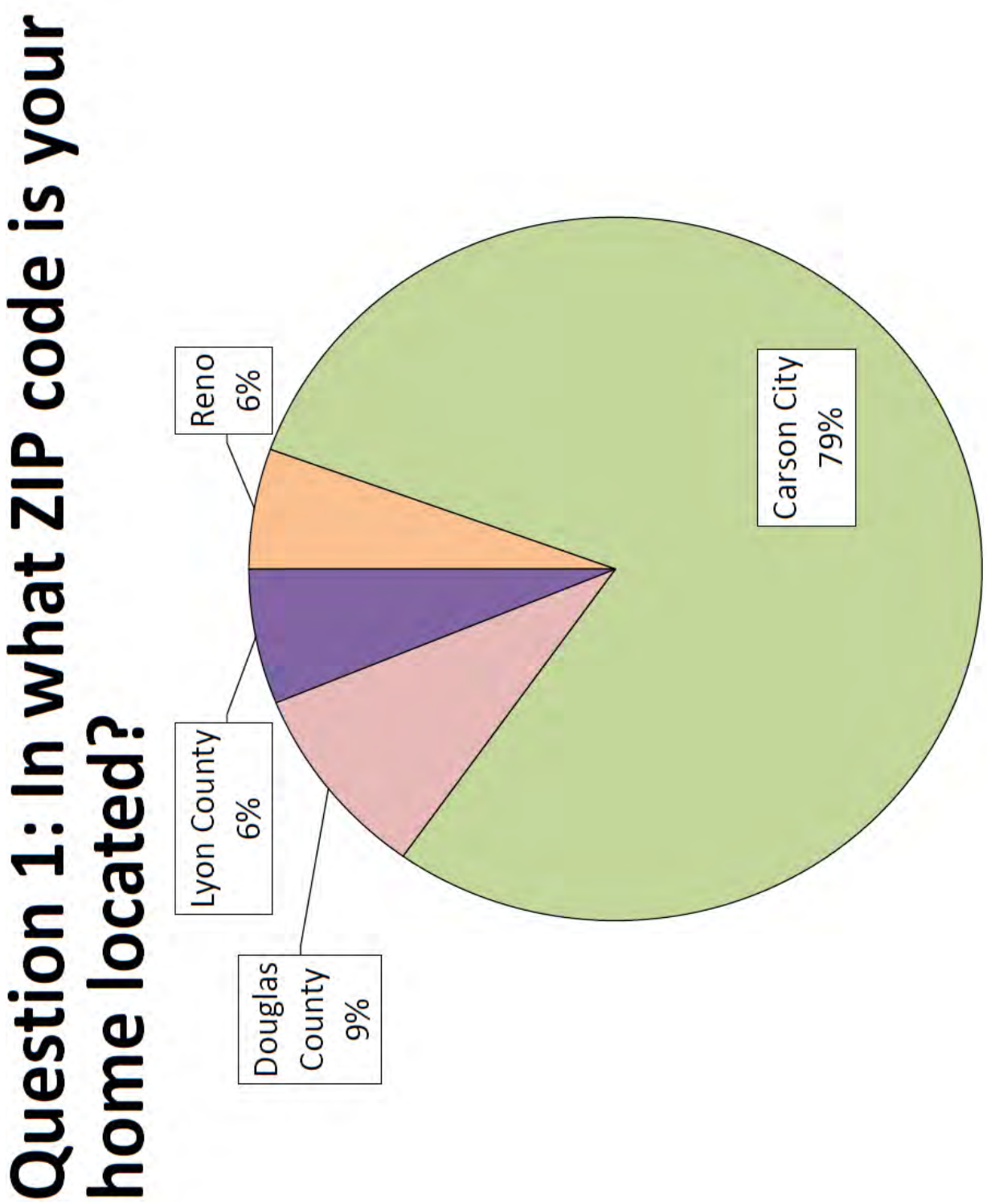
CAMPO conducted a short online survey to identify regional transportation concerns and priorities to help in the development of this 20 plus year regional transportation plan. The survey was opened on October 6, 2015, and was closed December 21, 2015. The survey included 11 questions and 153 responses were collected. Staff advertised the survey in the Nevada Appeal and Record Courier (local newspapers), CarsonNOW (a local online news site), on the Carson Proud Facebook page (a local organization aiming to get residents involved), and on the CAMPO website. The following advertisements were used for the online survey:

Carson Proud

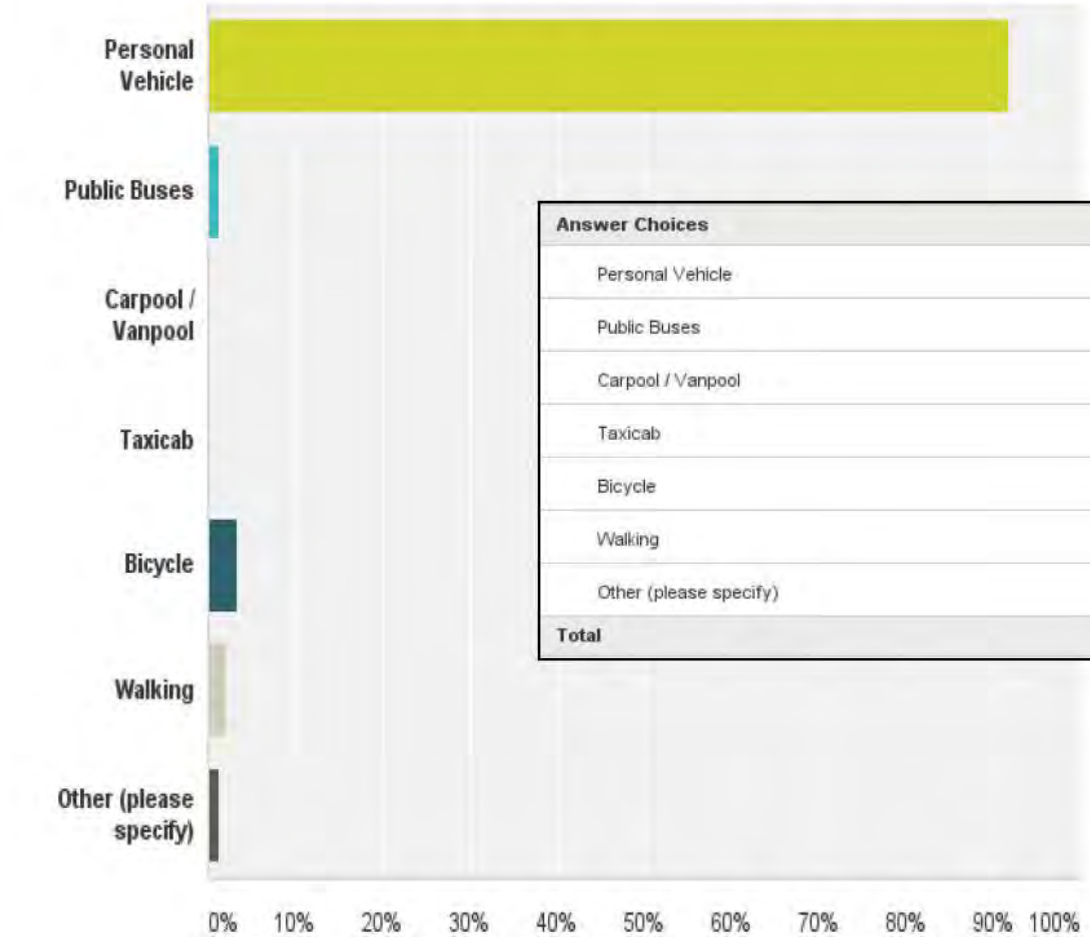
CarsonNOW.org

Nevada Appeal

Survey Results

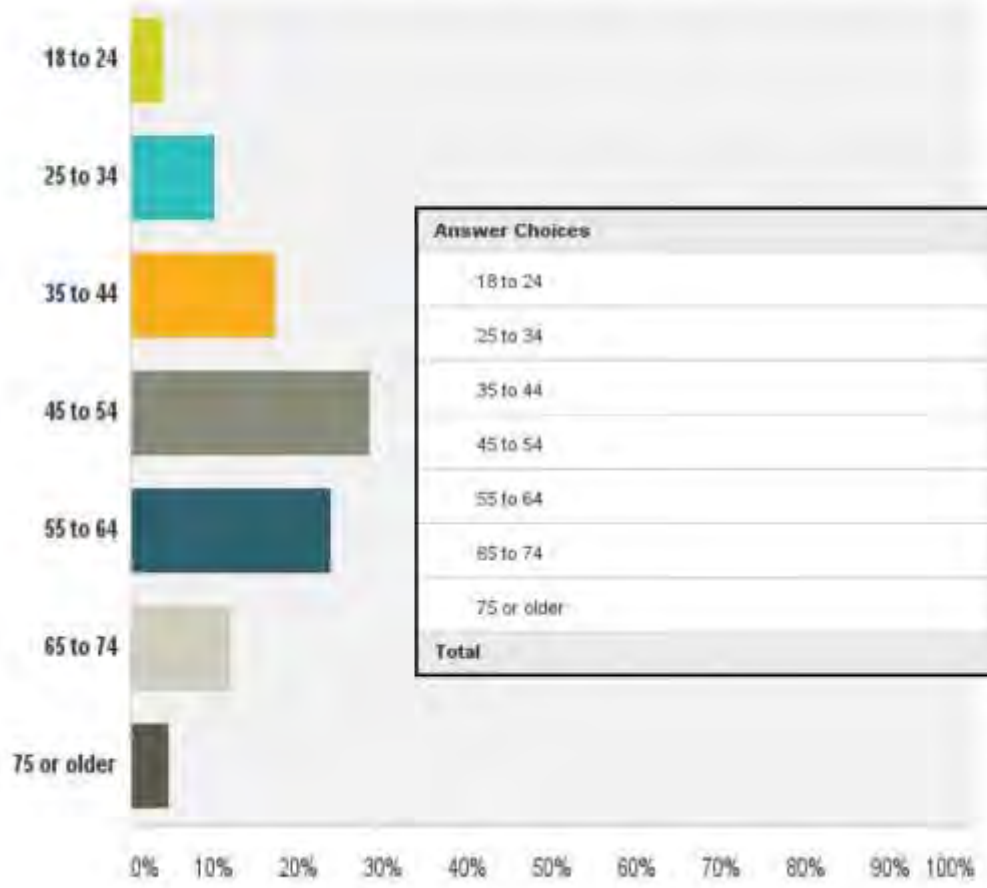


Question 2: What is your primary mode of transportation?

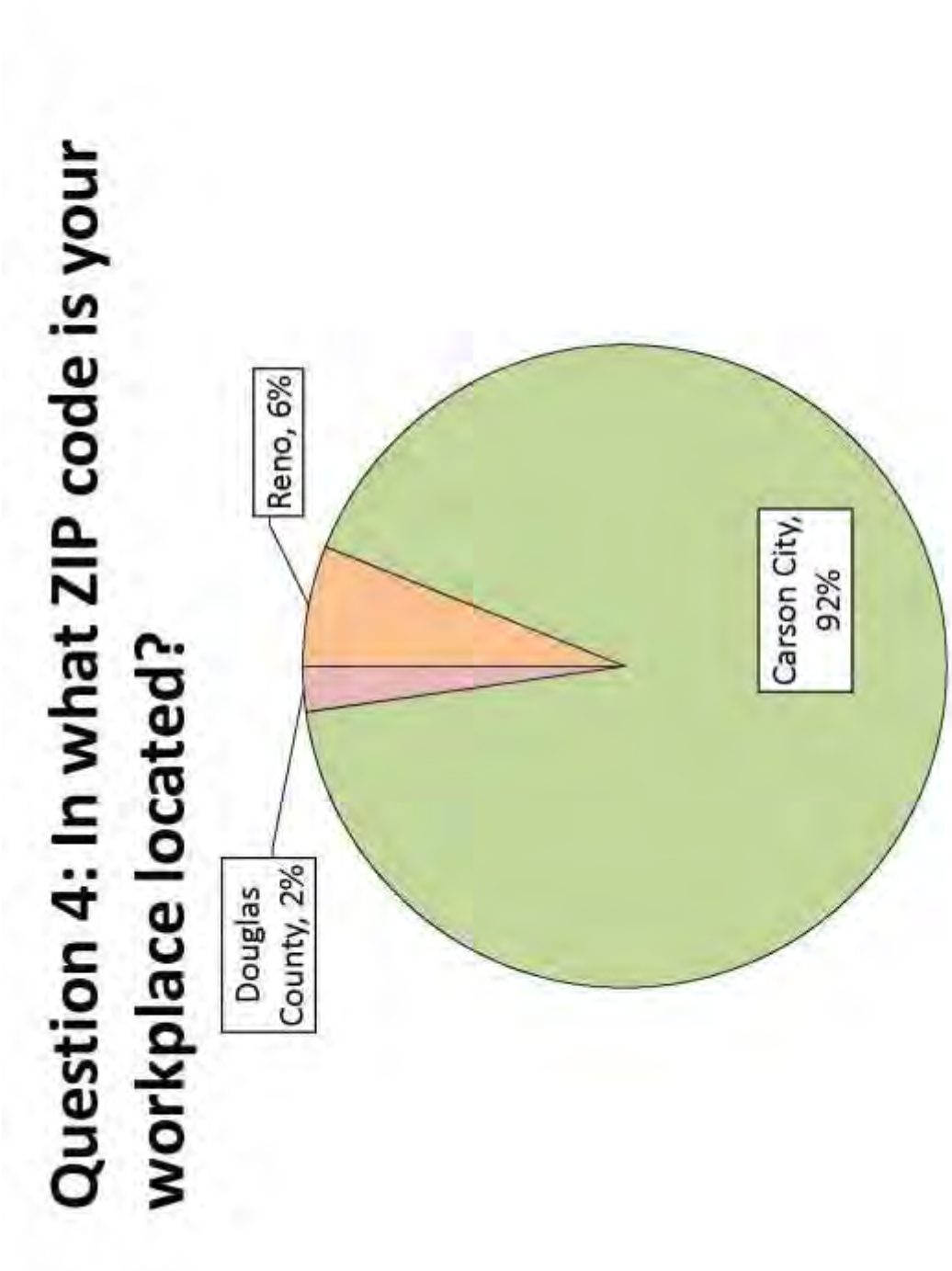


Answer Choices	Responses	
Personal Vehicle	91.95%	137
Public Buses	1.34%	2
Carpool / Vanpool	0.00%	0
Taxicab	0.00%	0
Bicycle	3.36%	5
Walking	2.01%	3
Other (please specify)	1.34%	2
Total		149

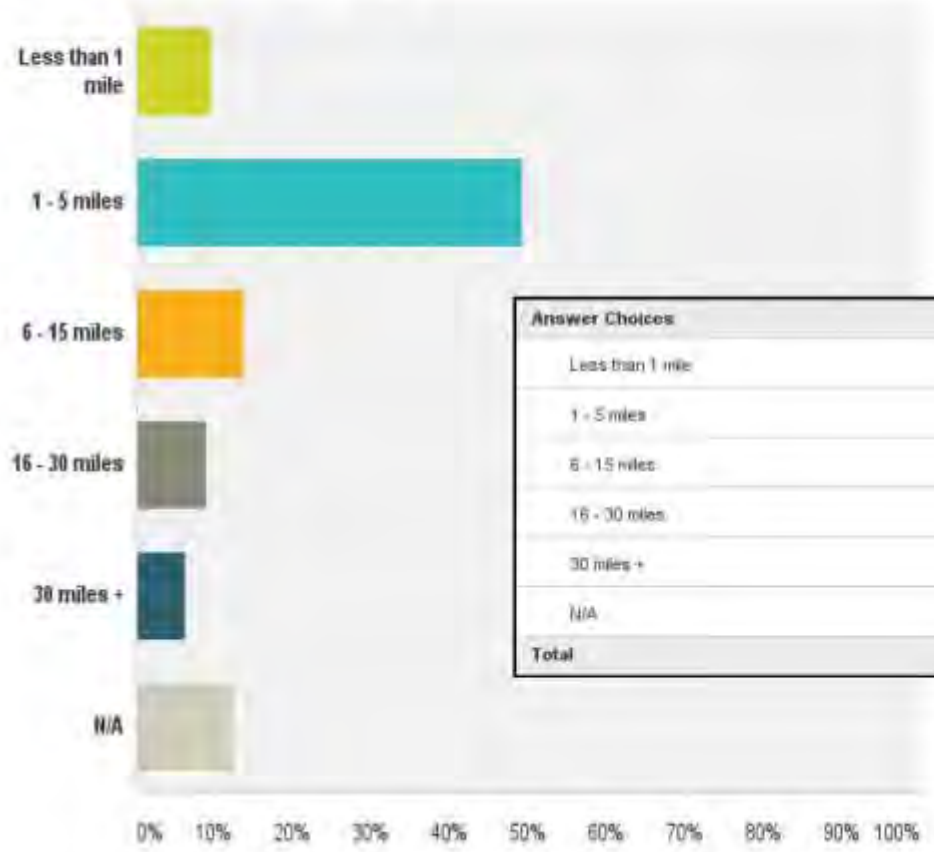
Question 3: What is your age?



Answer Choices	Responses	
18 to 24	3.97%	6
25 to 34	9.93%	15
35 to 44	17.22%	26
45 to 54	28.48%	43
55 to 64	23.84%	36
65 to 74	11.92%	18
75 or older	4.64%	7
Total		151


Question 4: In what ZIP code is your workplace located?
Reno, 6%
Carson City, 92%
Douglas County, 2%

Question 5: How far is your commute to work/school?

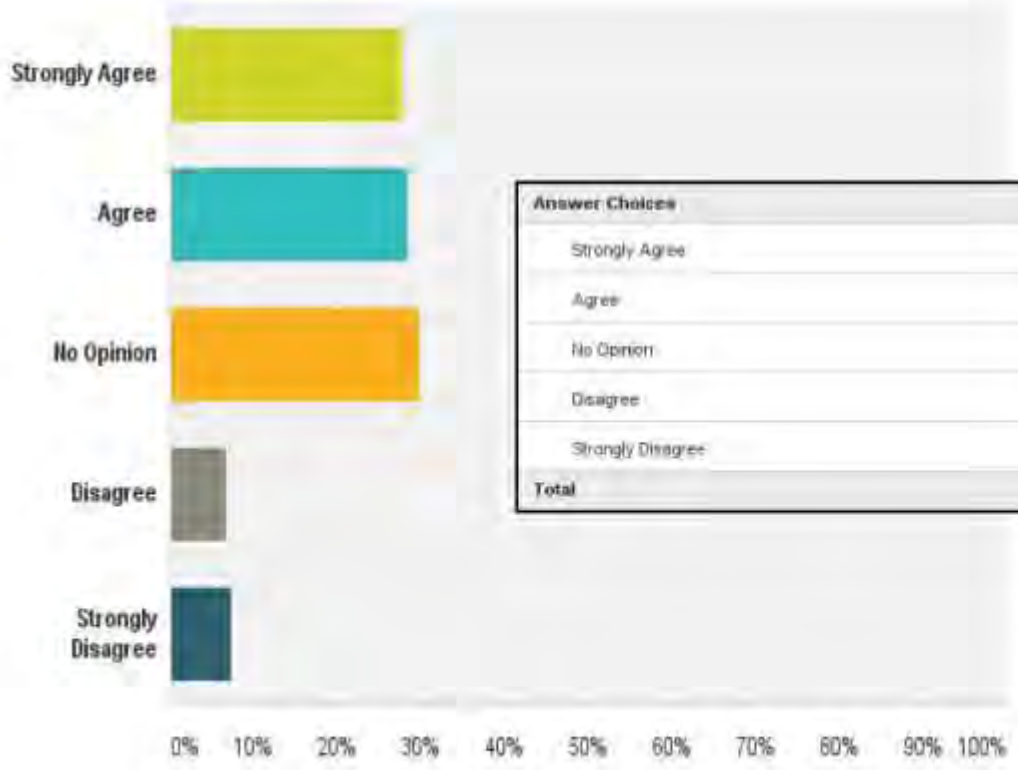


Answer Choices	Responses	
Less than 1 mile	9.59%	14
1 - 5 miles	49.32%	72
6 - 15 miles	13.70%	20
16 - 30 miles	8.90%	13
30 miles +	6.16%	9
N/A	12.33%	18
Total		146

Question 6: How frequently do you ride a public bus?

Answer Choices	Responses	
Daily	0.66%	1
Weekly	1.97%	3
Monthly	3.29%	5
Infrequently	18.42%	28
Never	75.66%	115
Total		152

Question 7: Do you feel that the local and regional transportation system impacts your quality of life?

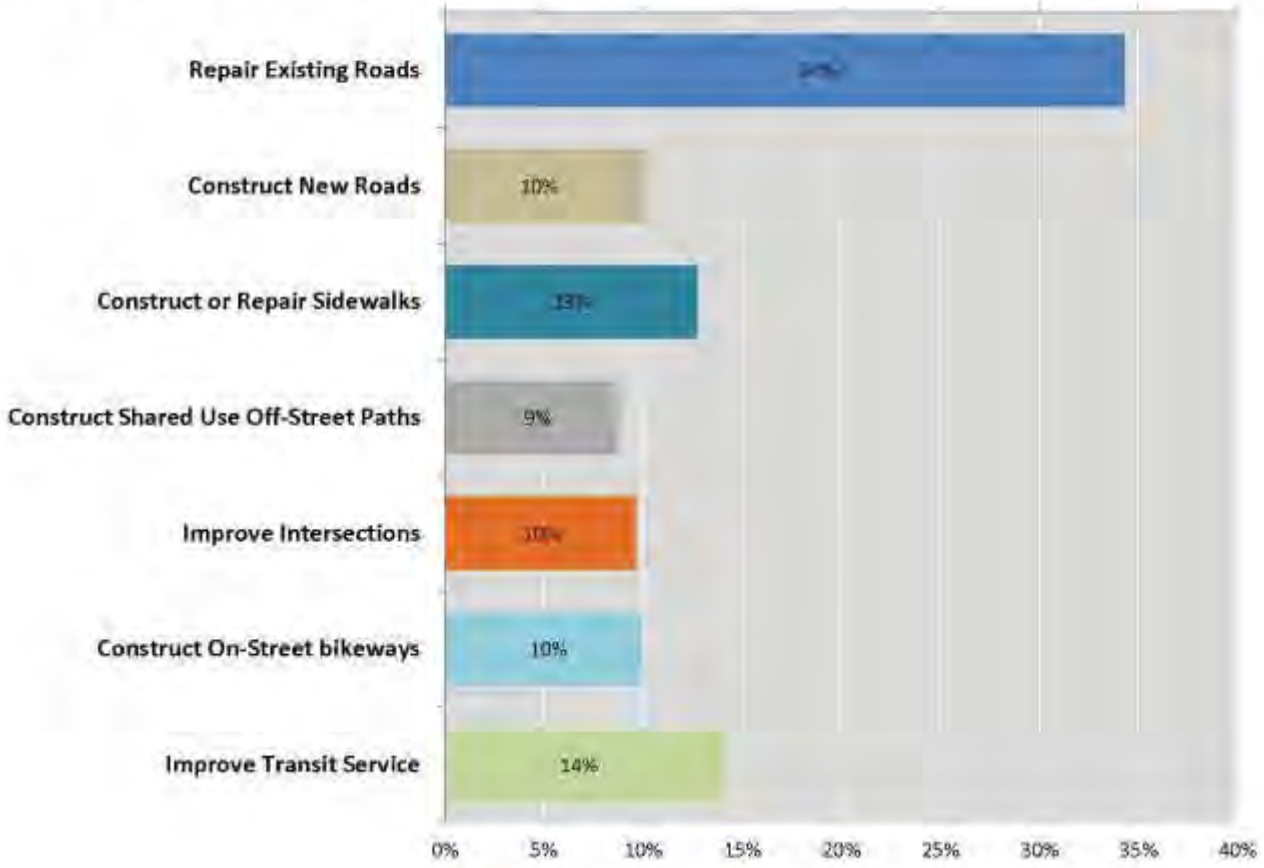


Answer Choices	Responses	
Strongly Agree	27.81%	42
Agree	28.48%	43
No Opinion	29.80%	45
Disagree	6.62%	10
Strongly Disagree	7.28%	11
Total		151

Question 8: When traveling in the Carson City area, which transportation issues concern you the most?

Topics of Concern	Very Concerning	Somewhat Concerning	Not Very Concerning	Not at all Concerning
Driver Behavior	43%	33%	20%	5%
Cracks or potholes in the roadway	33%	39%	22%	5%
Roadway pavement is too rough	19%	34%	41%	6%
Traffic congestion	23%	31%	35%	11%
Poor street lighting	29%	33%	27%	12%
Traffic signal timing	34%	34%	23%	9%
Impaired vision due to landscaping or signage	22%	35%	33%	9%
Too much truck traffic	12%	24%	49%	16%
Unattractive roadways	13%	25%	41%	22%
Bus routes are too far away	21%	14%	35%	30%
Bus service not frequent enough	21%	14%	35%	30%
Lack of sidewalks	28%	33%	23%	16%
Sidewalks in poor condition	32%	32%	24%	12%
Lack of bike lanes	36%	28%	17%	18%
Lack of off-road paths	26%	29%	22%	23%

Question 9: What percentage of transportation resources would you allocate to the following transportation strategies?



Question 10: In your opinion, what is the most important improvement that can be made to the Carson City area transportation system in the next five years (short term)?

<u>Recurring themes from written responses</u>:

- Complete Freeway
- Roadway repair
- Lighting
- Improve connectivity for bikers and walkers
- Sidewalk repair
- Expand bus service
- Leave downtown alone
- Pedestrian safety
- Improve traffic signals
- Improve crosswalk





Question 11: In your opinion, what is the most important improvement that can be made to the Carson City area transportation system in the next 10 to 20 years (long term)?

Recurring themes from written responses :

- Complete Freeway with overpass
- Maintain existing roadways
- Improve transit, mainly to employment centers
- More shared use paths

Chapter 8: Transportation Technologies

The future of transportation will have a meaningful effect on society's safety, pollution levels, movement of goods, and productivity. Intelligent technology systems, smart cars, autonomous vehicles, unmanned aerial vehicles, and the hyperloop system are emerging technologies that will in some way impact the Carson area by the year 2040. Appropriately planning for these technologies and the influence they will have to our region is recommended.

Vehicle crashes, vehicle emissions, stormwater pollution from transportation facilities, and unproductive travel times are all realities of the Carson area transportation system. Some of the emerging technologies might not exist in the Carson area in the next 25 years, but they will still have an impact on our region and our quality of life.

Intelligent Technology Systems (ITS)

ITS includes a variety of technological engineering. Examples of ITS include timing of traffic signals to reduce congestion during peak travel times, remote metering to identify traffic volumes, remote or automated system controls so the transportation system can react to changing conditions, and system communication to improve emergency response time or to inform drivers of approaching conditions.

The primary benefits of ITS include creating a safer transportation system and reducing congestion. However, if autonomous vehicles continue to emerge, the infrastructure and software used in ITS may be mutually beneficial to the autonomous vehicle industry.

More information is located here: http://www.its.dot.gov/strategicplan/ or http://www.govtech.com/transportation/How-Transportation-Technologies-Will-Change-Everything-.html.

Smart cars

Smart cars are commonly considered small compact cars; however, the term smart car is evolving. While being efficient is typically one aspect, new technology is being incorporated for safety. Smart car technology can include crash avoidance, night-vision enhancements, and automated communication technology, to communicate with the transportation network to inform the driver or notify emergency services. Manufacturers are already offering some of these technologies, while others are still in development.

More information is located here: http://www.foxnews.com/tech/2013/11/27/five-future-transportation-technologies-that-will-actually-happen.html.

Autonomous vehicles

The autonomous vehicle is not a new concept; however, investment from manufacturers, research institutions, and governments has recently been growing. The State of Nevada has created public policy allowing the testing of autonomous vehicles on public roadways. The implications of autonomous vehicles to the transportation system, our economy, and our quality of life may be significant.

The key findings from a publication on autonomous vehicles are provided below:

Benefits of Autonomous Vehicles

- Without driver error, fewer vehicle crashes will result
- The mobility of the young, the elderly, and the disabled will be increased
- Traffic flow could be more efficient and congestion decreased
- Vehicle occupants could spend travel time engaged in other activities, so the costs of travel time and congestion are reduced
- Fuel efficiency can be increased and alternative energy sources facilitated
- Because such vehicles won't need proximate urban parking, space used for parking could be repurposed

Possible Drawbacks to Autonomous Vehicles

- Because the technology would decrease the cost of driving, congestion might increase, rather than decrease
- Occupations and economies based on public transit, crash repair, and automobile insurance might suffer as the technology makes certain aspects of these occupations obsolete

More information is located here: http://www.rand.org/pubs/research_reports/RR443-2.html.

Unmanned Aerial Vehicles (UAV)

The technology of UAVs is being embraced by the State of Nevada. The use of UAVs in emergency response, infrastructure inspections, and product delivery is currently emerging. As this industry develops, transportation professionals will need to be mindful of this technology and its impact to the transportation system.

More information is located here: http://www.nevadabusiness.com/2015/10/unmanned-aerial-vehicles-cultivating-a-new-industry-in-nevada/.

Hyperloop System

The hyperloop system is a high-speed mode of travel, which could potentially reach a top speed of 760 miles per hour. The Hyperloop system involves building a full-length tube between destinations within which a transport pod carrying passengers or cargo is levitated by magnets and accelerated through a controlled environment. The system is intended to be carbon-free and powered by renewable energy.

There are several companies looking to bring the Hyperloop into reality. One company has chosen the Apex Industrial Park in the city of North Las Vegas, Nevada, as the location for initial testing.

More information is located here: http://www.cnbc.com/2015/12/09/hyperloop-technologies-choose-nevada-to-test-superfast-transport-system.html.

As these technologies emerge, transportation professionals will need to be mindful of how the transportation system will evolve. Appropriately planning for these technologies may help to maximize investment benefits by providing solutions for today and preparing for the future. As these technologies develop, there may be improvements to our transportation system that could accommodate or amplify the benefits of new technology.

Autonomous vehicles and the hyperloop system both have the potential to shape a region's population, land use pattern, and traffic pattern. Being mindful of the success and timing of these transportation trends will help the Carson Area Metropolitan Planning Organization and its three member agencies successfully plan for the year 2040.