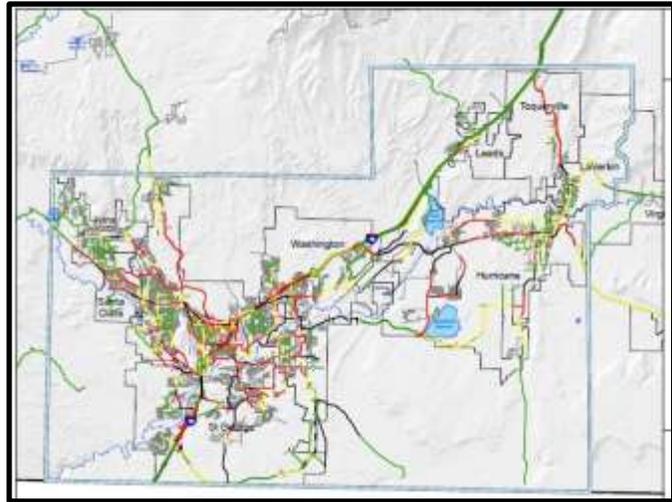


## Chapter 6 – Existing and Proposed Transportation Facilities

### Methodology

As discussed in Chapter 4, the Dixie MPO’s CUBE modeling platform was used to analyze future traffic demand. The CUBE Model applied mathematical forecasting formulas to population, land use, socio-economic, trip generation, trip distribution, and mode choice data.

These forecasts were then imposed on the existing transportation networks. Then projects were conceptualized to relieve traffic congestion “hotspots” in each phase of the plan. Phase One includes the years 2015-2024. The associated project list was created to relieve the traffic demands of 2024. Phase Two includes 2025-2034 with a similar project list to relieve congestion under 2034 forecasts, and Phase Three includes the projects needed in 2035-2040.



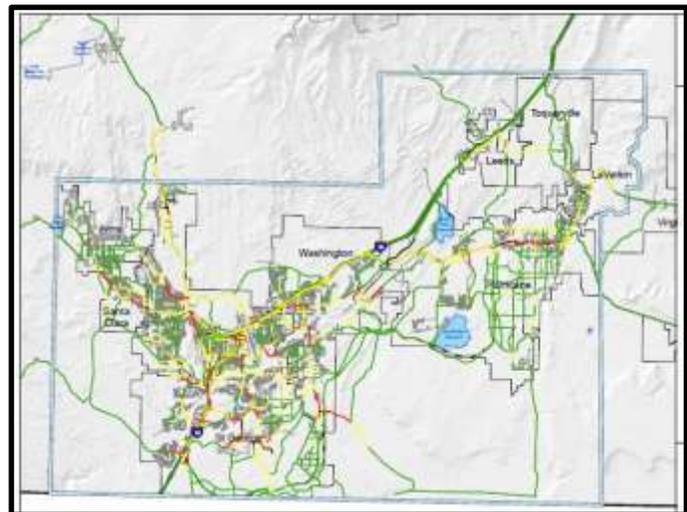
2040 Traffic Congestion No-Build Map (See Appendix A)

### Current Network

An inventory of the current MPO road network is best noted through use of the Traffic Congestion 2040 - No-Build map (Map 6 in Appendix A). The roads illustrated in red and black indicate areas of concern for traffic congestion in 2040. If no additional projects are built, the traffic demand in 2040 would exceed current roadway capacities on roads depicted in black. And similarly traffic demand on roads depicted in red would be at full capacity.

### Future Network

The Traffic Congestion 2040 - Build map (Map 7 in Appendix A) shows areas concern for traffic congestion in the year 2040 assuming that the projects in this plan are all built at that time. Similarly the traffic demand in 2040 would exceed current roadway capacities on roads depicted in black. And similarly traffic demand on roads depicted in red would be at full capacity.



2040 Traffic Congestion Build Map (See Appendix A)

### Projects and Phasing

The next several pages list a variety of transportation projects identified using the methodology outlined in chapters 2-5 above. Projects range from highway widening to bridge and overpass construction, as well as proposed new corridors. Additionally listed are UDOT projects of interest that may lie outside the MPO boundaries, but are vital connections in serving the overall traffic demand of the area (See Map 1 Projects and Phasing Map in Appendix A).

## Regional Transportation Plan -- Projects & Phasing -- 2015 - 2040

Proj. #	Route	Category	City	Project Description	Project Concept	Estimated Cost in 2015 dollars
<b>Phase One (2015-2024)</b>						
1	3184	Regional	I	Old Highway 91 , Kayenta Parkway to Pioneer Parkway (3-Lane Section)	Reconstruction	\$2,900,000
2		Regional	I	Red Mountain Blvd. (200 East) , Old Highway 91 to Center Street	Reconstruction	\$2,300,000
3		Regional	SC	Red Mountain Drive , Pioneer Parkway to Western Corridor	New Construction	\$1,843,000
4		Regional	I	Snow Canyon State Park Access Road	Reconstruction	\$400,000
5	Old 91	Regional	I	Santa Clara Drive , Swiss Village to 200 E	Reconstruction	\$4,200,000
6		Regional	SG	Plantations Drive , construct from Sunbrook Drive to Dixie Drive	New Construction	\$10,000,000
7	SR-8	State	UDOT	Sunset Blvd , widen to 6-lanes past Valley View Dr	Minor Widen/Striping	\$500,000
8		Regional	SG	Indian Hills Drive widen to 3 lanes	Widen/Reconstruct	\$3,476,000
9	SR-18	State	UDOT	Bluff Street & Sunset Grade Separated Intersection	New Construction	\$20,000,000
10	SR-18	State	UDOT	Bluff Street & St. George Blvd Intersection Improvements & SR-18 Widening	Widen/Reconstruct	\$38,300,000
11		Regional	SG	Airport Road from old airport to Black ridge Drive	New Construction	\$1,250,000
12	SR-18	State	UDOT	SR-18 , St. George Blvd. to Main Street	Widen/Reconstruct	\$16,800,000
13		Regional	SG	Astragulus Dr from So. Pkwy Exit 1 to So. Pkwy Exit 3	New Construction	\$10,080,000
14	I-15	State	UDOT	I-15 Brigham Road to Dixie Drive, Southbound Widening	Widening	\$25,000,000
15		Regional	SG	100 South , Widen from 700 East to Bluff St	Re-Striping	\$250,000
16		Regional	SG	700 South , Widen from 700 East to Bluff St	Re-Striping	\$250,000
17	SR-34	State	UDOT	St. George Blvd. Widening from 900 East to 1000 East	Widening	\$2,500,000
18		Regional	SG	400 South Trail & Underpass , DSC 700 East to DSC Health Science Building	New Construction	\$2,500,000
19		Regional	SG	River Road , Widening/intersection improvements, Blvd. to 700 S	Widening	\$5,000,000
20		Regional	SG	River Road , Widening/intersection improvements, Riverside Dr to Bundy Ln	Widening	\$5,000,000
21		Regional	SG	River Road , widen to 5-lane section from Ft. Pierce Drive to Brigham Road	Widen/Reconstruct	\$3,500,000

22	I-15	State	UDOT	I-15 MP8-10 Aux lanes and Mall Drive Underpass	Widen/Reconstruct	\$57,000,000
23		Regional	SG	Commerce Drive - extend road from 1630 East to Price City Hills Road	New Construction	\$4,176,000
24		Regional	SG	Horseman Park Road - extend road from River Road to Price City Hills Road	Widen/Reconstruct	\$7,000,000
25		Regional	SG	Red Hills Parkway (SG, W), 2000 East to Green Springs	Widen/Reconstruct	\$3,600,000
26		Regional	SG	Little Valley Road , extend road to Price City Hills Road and widen	New Construction	\$3,000,000
27		Regional	SG	Price City Hills Road Phase 1 - construct new road from 2450 South to River Road	New Construction	\$19,440,000
28		Regional	SG	450 N from 2450 E to 2860 E	New Construction	\$1,080,000
29	I-15	State	UDOT	I-15 MP 10 Thru Turns at Green Springs	Reconstruction	\$2,700,000
30		Regional	W	Green Springs and Telegraph Intersection Improvements	Widen/Reconstruct	\$2,200,000
31		Regional	SG	3000 East from 1550 South to 2450 South - 5 Lane Road	Widen/Reconstruct	\$300,000
32		Regional	W	Wal-Mart / Home Depot Connection between Washington & St. George	New Construction	\$922,000
33		Regional	SG	2450 South - extend & improve road to Crimson Ridge Dr	New Construction	\$3,000,000
34		Regional	W	3650 South from Washington City Limit to Southern Corridor	New Construction	\$5,353,000
35		Regional	W	Merrill Road Extend to Washington Fields Rd	Widen/Reconstruct	\$2,433,000
36	I-15	State	UDOT	I-15 Milepost 11 Interchange	New Construction	\$30,000,000
37		Regional	W	Washington Fields Road , Lost Ridge Dr. to 3650 South (Phase IV A & B)	Widen/Reconstruct	\$5,960,000
38		Regional	SG	Airport Parkway from North Airport Access to Airport Loop Road	New Construction	\$5,400,000
39		Regional	W	Washington Fields Road , Warner Valley Road to Airport Rd (Phase VII)	New Construction	\$4,005,000
40	SR-7	State	UDOT	So. Parkway Segment IIIb, Warner Valley Road to Washington Dam Road (1st Barrel)	New Construction	\$22,000,000
41		Regional	H	Purgatory Road - Environmental Study	Environmental	\$540,000
42		Regional	H	Purgatory Road , Extend to Washington Dam Rd	New Construction	\$11,664,000
43	SR-9	State	UDOT	So. Parkway Segment VI , Interchange at Telegraph & SR-9	Interchange	\$12,390,000
44	SR-9	State	UDOT	SR-9 I-15 to Southern Parkway, Environmental Document	Environmental	\$2,000,000
45	SR-9	State	UDOT	So. Parkway Segment VI, I-15 to 5300 W - Widen and Improve to Freeway Standards	New Construction	\$16,600,000
46		Regional	H	Turf Sod Road from 4300 West to Southern Parkway	New Construction	\$7,200,000
47	SR-7	State	UDOT	So. Parkway Segment IVb, Sand Hollow to 3000 S (1st Barrel)	New Construction	\$30,000,000
48		Regional	H	2770 West (SR-9 to 600 North)	New Construction	\$3,500,000
49	SR-7	State	UDOT	So. Parkway Segment V, 3000 S to SR-9 (1st Barrel)	New Construction	\$50,770,000
50		Regional	H	2300 South from 700 West to 4800 West (Phase I-III)	New Construction	\$30,700,000

51		Regional	H	3000 South from 1150 West to 3400 West	New Construction	\$4,000,000
52		Regional	H	1300 West Street from 600 North to 1500 South	New Construction	\$11,943,000
53		Regional	H	1150 West Street , from 600 North to 100 South	Widen/Reconstruct	\$1,954,000
54		Regional	H	700 West from 600 North to Airport Road	Widen/Reconstruct	\$12,263,000
55		Regional	SG	Traffic Control Center ITS	ITS	\$500,000
56		State	UDOT	Northern Washington Parkway Corridor , Red Hills Parkway to MP 13 - Environmental	Environmental	\$5,000,000
57		Regional	MPO	Active Transportation Improvements - Phase I	New Construction	\$3,000,000

<b>PHASE 1 (2015-2024)</b>						<b>Total Funding Needs:</b>	\$539,642,000
						<b>Funding Assumptions:</b>	\$530,651,455
						<b>Remainder (Overage)</b>	<b>(\$8,990,545)</b>

<b>Project #</b>	<b>Route</b>	<b>Category</b>	<b>City</b>	<b>Project Description</b>	<b>Project Concept</b>	<b>Estimated Cost in 2015 dollars</b>
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<b>Phase Two (2025-2034)</b>						
Project #	Route	Category	City	Project Description	Project Concept	Estimated Cost in 2015 dollars
1	3184	Regional	I	Old Highway 91 , 200 E to Shivwits Reservation 5-Lane	Reconstruction	\$5,000,000
2		Regional	I	Western Corridor North , Old Highway 91 to Snow Canyon Parkway	New Construction	\$29,400,000
3		Regional	SC	Santa Clara Dr to Western Corridor Connector Road	New Construction	\$2,000,000
4		Regional	SC	South Hills Collector A from Clary Hills Dr to Plantations Dr	New Construction	\$2,500,000
5		Regional	SG	Plantation Drive/Western Corridor - Old Hwy 91 to Sunbrook	New Construction	\$40,944,000
6	SR-18	State	UDOT	SR-18 , Red Hills Parkway to Winchester Hills	Widen/Reconstruct	\$58,800,000
7		Regional	SG	Temple Trail Drive Phase 2 - Construct new road from Indian Hills Drive to Dixie Drive	New Construction	\$2,700,000
8		Regional	SG	Temple Trail Drive, Phase I from Airport Road to Indian Hills Drive	New Construction	\$5,250,000
9		Regional	SG	Hidden Valley Drive Frontage Road - new road on east side of I-15 from MP 2 to MP 4	New Construction	\$19,440,000
10	I-15	State	UDOT	I-15 SPUI at MP 4, and Lane Widening from MP 4-8	Widen	\$112,900,000
11		Regional	SG	Man O War I-15 Crossing between Pioneer Rd to Hidden Valley Dr	New Construction	\$30,000,000
12		Regional	SG	Quality Drive from Commerce Dr to Hidden Valley Rd	New Construction	\$6,480,000
13		Regional	SG	400 East I-15 Ped Tunnel Crossing	New Construction	\$4,000,000

14		Regional	SG	1450 South Extension over the Virgin River to Riverside Drive	New Construction	\$20,000,000
15		Regional	SG	White Dome Frontage Road - new road from Southern Parkway to airport	New Construction	\$5,832,000
16		State	UDOT	Northern Washington Parkway Corridor , Red Hills Parkway to MP 13 - Phase I	New Construction	\$47,000,000
17		Regional	SG	River Road , Widen to 5-lane section from Enterprise Dr to So. Pkwy	Widening	\$6,840,000
18		Regional	SG	Cottonwood Springs Dr from Red Hills Pkwy to Washington Parkway	New Construction	\$7,200,000
19		Regional	SG	1630 East, Extend from Venture Dr to Southern Parkway	New Construction	\$5,000,000
20		Regional	SG	Horseman Park Road - extend road from Price City Hills Road to West Airport Rd	New Construction	\$3,600,000
21		Regional	SG	South Frontage Rd from White Dome Frontage Rd to Desert Canyon Dr	New Construction	\$9,360,000
22		Regional	SG	Airport Loop Road from Washington Fields Rd to 1630 E	New Construction	\$18,056,000
23		Regional	W	Main Street from I-15 Frontage Road to Washington Parkway	New Construction	\$1,752,000
24		Regional	W	Extend Main Street to 100 East, south of 400 South	New Construction	\$1,925,000
25		Regional	SG/W	Crimson Ridge Dr (SG/W) from 3000 East to Washington Fields Road	New Construction	\$3,136,000
26		Regional	W	Washington Fields Road from 3650 South to Stucki Farms (Phase VB)	Widen	\$2,269,000
27		Regional	W	Washington Fields Road from Stucki Farms to Warner Valley Road (Phase VIB)	Widen	\$3,068,000
28	SR-7	State	UDOT	So. Parkway Segment IIIa (SG & W), Airport to Warner Valley Road (2nd Barrel)	New Construction	\$22,420,000
29		Regional	SG	So. Pkwy East Frontage Road from Deseret Canyon Dr to So. Pkwy Interchange 9	New Construction	\$5,400,000
30	I-15	State	UDOT	I-15 Corridor Lane Widening, MP 10 to MP 16	Widen/Reconstruct	\$125,075,000
31		Regional	W	Washington Dam Road , 1900 East to East City Limits	Widen/Reconstruct	\$3,244,000
32	SR-7	State	UDOT	So. Parkway Segment IIIb, Warner Valley Rd. to Washington Dam Rd. (2nd Barrel)	New Construction	\$27,330,000
33		Regional	W	Long Valley Road , construct road from SR-7 Interchange 11 to Interchange 12	New Construction	\$8,884,000
34		Regional	W	Warner Valley Road from Purgatory to the road through Warner Valley	New Construction	\$10,447,000
35	SR-7	State	UDOT	So. Parkway Segment IVa, Wash. Dam Rd to Sand Hallow (2nd barrel)	New Construction	\$14,750,000
36		Regional	H	4300 West from SR-9 to Southern Parkway	New Construction	\$24,863,000
37	SR-9	State	UDOT	So. Parkway Segment VI, 5300 W to So. Pkwy - Widen/Improve to Freeway Standards	New Construction	\$21,700,000
38		Regional	H	130 North from 3400 West to 3700 West	New Construction	\$500,000
39		Regional	H	200 North from 2770 West to 3400 West	New Construction	\$5,000,000
40		Regional	H	3000 West from 150 South to Rlington Parkway	New Construction	\$13,900,000

41	SR-7	State	UDOT	So. Parkway Segment IVb, Sand Hallow to 3000 S (2nd Barrel)	New Construction	\$20,060,000
42	SR-7	State	UDOT	So. Parkway Segment V, 3000 S to SR-9 (2nd Barrel)	New Construction	\$18,880,000
43		Regional	H	2750 West from 150 South to 3000 West	New Construction	\$10,800,000
44		Regional	H	1300 South from 200 West to 3000 West	New Construction	\$5,800,000
45		Regional	H	Rlington Parkway from 400 South to 4700 South	New Construction	\$17,800,000
46		Regional	H	1150 West from 100 South to 1500 South (Phase II)	Reconstruction	\$5,000,000
47	SR-17	State	UDOT	SR-17 (TQ) - Widen from MP 4.1 to I-15	New Construction	\$7,000,000
48		State	UDOT	Toquerville Bypass - Construct bypass road off SR-17 from MP 4.1 to MP 1.1	New Construction	\$30,300,000
49		Regional	SG	Traffic Control Center ITS	ITS	\$500,000
50		Regional	MPO	Active Transportation Improvements - Phase II	New Construction	\$3,000,000
51	I-15	State	UDOT	Initial SR-9 Interchange Modifications	Reconstruction	\$23,400,000

<b>Phase Two (2025-2034)</b>					<b>Funding Needs:</b>	\$880,505,000
					<b>Funding Assumptions:</b>	\$826,089,633
					Remainder / (Overage)	(\$54,415,367)

Project #	Route	Category	City	Project Description	Project Concept	Estimated Cost in 2015 dollars
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<b>Phase Three (2035-2040)</b>						
1		Regional	I	Kwavasa Drive in Kayenta	New Construction	\$6,254,000
2		Regional	SG	Western Corridor , MP 2 to Old Highway 91 (1st Barrel)	New Construction	\$83,000,000
3		Regional	SG	Green Valley Drive - extend road to Western Corridor	New Construction	\$18,720,000
4		Regional	SC	Pioneer Parkway , Lava Flow Drive to Red Mountain Drive	Widen/Reconstruct	\$10,800,000
5		Regional	SG	Navajo Drive - extend road to Western Corridor	New Construction	\$9,450,000
6		Regional	SG	Dixie Dr - Widen to 7-lane section from Plantations Dr to Blackridge	New Construction	\$8,000,000
7		Regional	SG	Red Hills Parkway - Increase capacity between SR-18 and Northern Corridor	Widen/Reconstruct	\$10,080,000
8		State	UDOT	Northern Washington Parkway Corridor , Red Hills Parkway to MP 13 - Phase II	New Construction	\$47,000,000
9		Regional	W	Washington Fields Dr - Widen from Warner Valley to 3650 S	Widening	\$5,000,000
10	I-15	State	UDOT	I-15 Widening in Southbound direction from MP 16-13	Widen/Reconstruct	\$6,000,000
11		Regional	W	Roadway through Warner Valley from Warner Valley Road to Southern	New Construction	\$14,859,000

				Parkway		
12	I-15	State	UDOT	Leeds North Interchange @ MP 23.7	Interchange Upgrade	\$25,000,000
13	I-15	State	UDOT	I-15 MP Exit 16 to Exit 27 Widening	Widening	\$159,600,000
14		Regional	EWC	Babylon Road	New Construction	\$36,900,000
14		Regional	H	1500 South from 700 West to 3000 West	New Construction	\$6,600,000
15		Regional	H	3300 South from Rlington Parkway to 3000 West	New Construction	\$6,700,000
17	SR-9	State	UDOT	SR-9 , increase capacity from SR-59 to Southern Parkway	Widen/Reconstruct	\$20,000,000
18		Regional	EWC	Toquerville to Leeds Connector Road	New Construction	\$12,000,000
19		Regional	H	1500 West from 1300 South to 3000 South	New Construction	\$6,000,000
20		Regional	H	1150 West from 1500 South to 5000 South (Phase III)	New Construction	\$11,000,000
21	SR-9	State	UDOT	SR-9 (LV), Widen from SR-17 to La Verkin eastern city limit	New Construction	\$10,500,000
22	SR-59	State	UDOT	SR-59 from MP 20.9 to 22.10, from Big Plain Junction to SR-9	Widening	\$5,000,000
23		Regional	SG	Traffic Control Center ITS	ITS	\$500,000
24		Regional	MPO	Active Transportation Improvements - Phase III	New Construction	\$3,000,000
<b>Phase Three (2035-2040)</b>					<b>Funding Needs:</b>	<b>\$521,963,000</b>
					<b>Funding Assumptions:</b>	<b>\$515,178,781</b>
					Remainder	<b>(\$6,784,219)</b>

**2015-2040 Long-Range Plan  
Totals**

Total Assumptions	\$1,871,919,869
Total Needs	\$1,942,110,000
Total Difference	<b>(\$70,190,131)</b>

