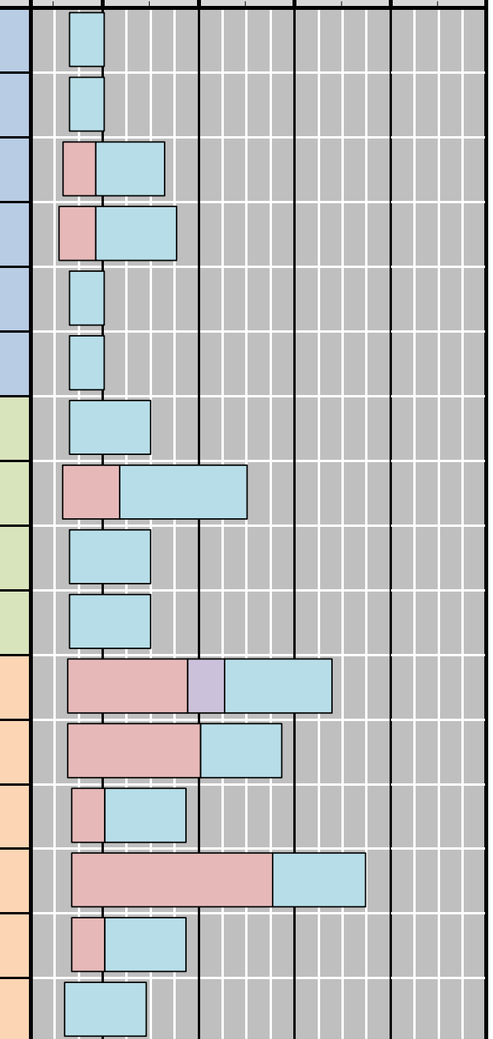
October 1, 2019

I-81 Study Project Prioritization
Capital Projects in the Program
Order of Projects is North to South

Mile Marker From	Mile Marker To	District	Jurisdiction	UPC	Study Project ID	Improvement Description	Proposed Environmental Document Type	Proposed Delivery Method	Direction	Program Allocation
303.7	303.9	Staunton	Frederick County	115803	49	Truck Scales NB Accel Extension [1]	PCE	D/B/B	NB only	$1,980,000
302.1	302.2	Staunton	Frederick County	115870	48	Exit 302 NB Decel Extension [1]	PCE	D/B/B	NB only	$1,047,000
283.3	282.9	Staunton	Shenandoah County	115804	52	Exit 283 SB Accel Extension [1]	PCE	D/B/B	SB only	$2,354,000
272.3	272.3	Staunton	Shenandoah County	115848	54	SB Flashing Chevron	PCE	D/B/B	SB only	$163,000
268.8	268.9	Staunton	Shenandoah County	115802	45	Exit 269 NB Decel Extension [1]	PCE	D/B/B	NB only	$1,000,000
205.3	205.7	Staunton	Rockbridge County	115801	42	Exit 205 NB Accel Extension [2]	PCE	D/B/B	NB only	$2,354,000
175.3	171.4	Salem	Botetourt County	115794	35	MM 176-172 curve improvements (flashing chevron) [1]	PCE	D/B/B	SB only	$163,000
171.7	175.6	Salem	Botetourt County	115794	34	MM 172-176 curve improvements (flashing chevron) [1]	PCE	D/B/B	NB only	$163,000
90.2	90.7	Salem	Pulaski County	115795	29	Extend acceleration lane (Exit 89)	PCE	D/B/B	NB only	$4,784,500
88	88	Salem	Pulaski County	115794	28	MM 88 curve improvements (flashing chevron) [1]	PCE	D/B/B	NB only	$163,000
67.6	67.6	Bristol	Wytheville	115600	9	MM 68 curve improvements (flashing chevron)	PCE	D/B/B	NB only	$163,000
26.7	26.8	Bristol	Washington County	115345	22	Extend deceleration lane	PCE	D/B/B	SB only	$5,528,000
25.9	26.1	Bristol	Washington County	115346	23	Extend acceleration lane	PCE	D/B/B	SB only	$2,005,000
21.5	21.5	Bristol	Washington County	115395	24	MM 22 curve improvement (chevrons)	PCE	D/B/B	SB only	$163,000
17.9	17.9	Bristol	Abingdon	115393	1	MM 18 curve improvement (flashing chevron)	PCE	D/B/B	NB only	$163,000
17.6	17.6	Bristol	Abingdon	115394	25	MM 18 curve improvement (flashing chevron)	PCE	D/B/B	SB only	$163,000
									Total Allocations in the Program	**$22,356,500**

Estimated Project Development and Delivery Timeline (using D/B/B as schedule)



Preliminary Engineering Right of Way Acquisition Construction

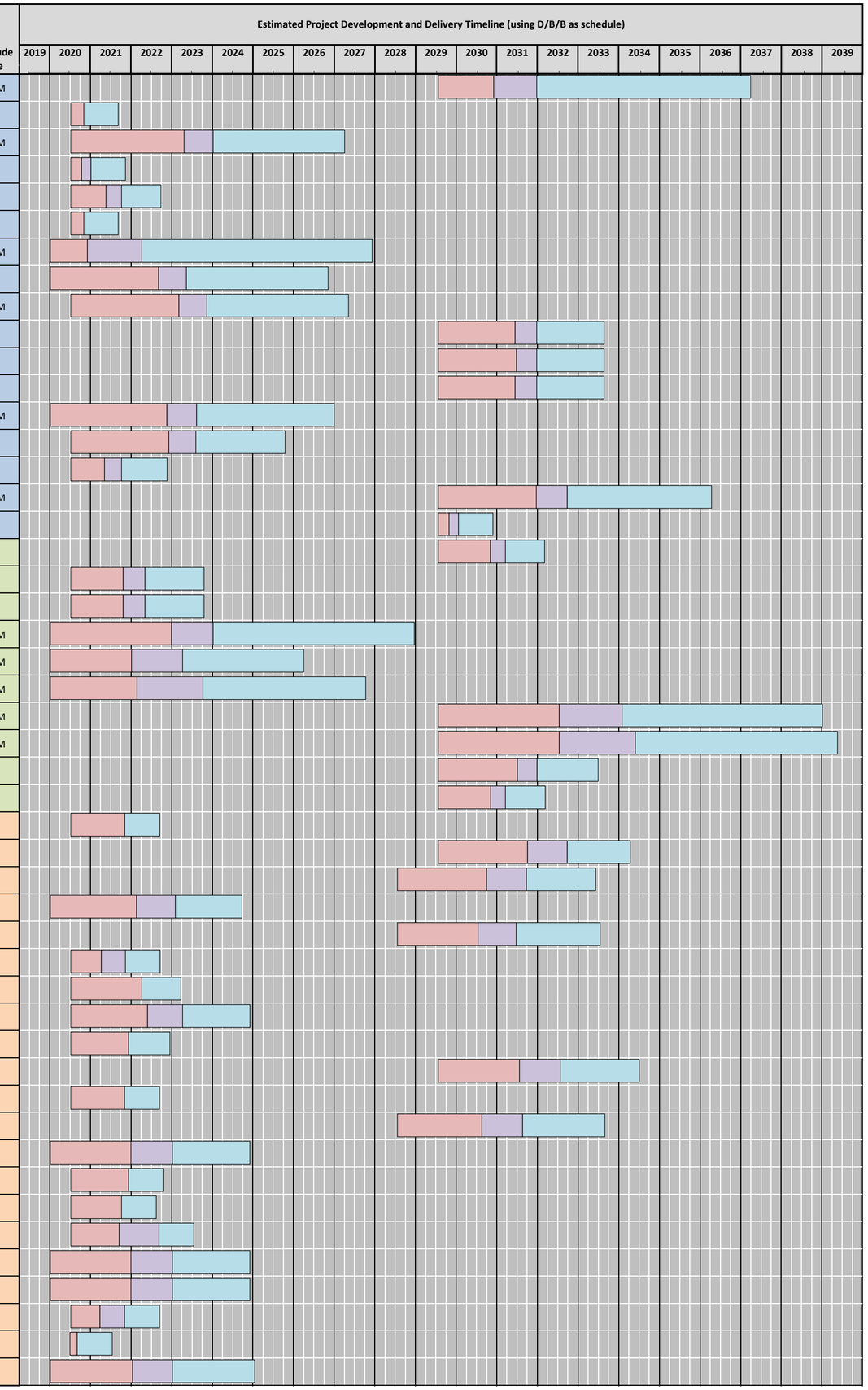
[1] Opportunity to Bundle with other I-81 Study Projects

[2] Coordinate/ Opportunity to Bundle with other projects in the SYIP

Preliminary I-81 Study Project Prioritization
PayGo Scenario
Order of Projects is North to South

October 1, 2019

Mile Marker From	Mile Marker To	District	Jurisdiction	Study Project ID	Direction	Improvement Description	Hybrid Priorization Rank	SMART SCALE Benefit/Mile Rank (25%)	Risk and Readiness Rank (15%)	VDOT Input (60%)	SMART SCALE Benefit Rank	Proposed Environmental Document Type	Proposed Delivery Method	Order of Magnitude Estimate Range
313.8	317.5	Staunton	Frederick County/ Winchester	63	Both Directions	Exit 313 - 317 Winchester Widening	41	29	40	4	9	CE	D/B	$204M - $268M
302.5	302.9	Staunton	Frederick County	47	NB only	Exit 302 NB Accel Extension [1]	3	30	10	1	17	PCE	D/B/B	$2M - $3M
299.2	295.7	Staunton	Shenandoah County / Warren County / Frederick	50	SB only	Exit 299 - 296 SB Widening	7	33	9	2	5	CE	D/B/B	$117M - $171M
296.7	296.3	Staunton	Shenandoah County	51	SB only	Exit 296 SB Accel Extension [1]	11	22	38	2	33	PCE	D/B/B	$1M - $2M
290.6	291.1	Staunton	Shenandoah County	46	NB only	Exit 291 NB Accel Extension [1]	12	4	37	2	18	PCE	D/B/B	$3M - $5M
279.2	278.7	Staunton	Shenandoah County	53	SB only	Exit 279 SB Accel Extension [1]	18	13	13	1	30	PCE	D/B/B	$2M - $3M
242.2	248.1	Staunton	Rockingham County/ Harrisonburg	62	Both Directions	Exit 243 - 248 Harrisonburg Widening	40	28	43	4	7	CE	D/B	$271M - $362M
236.5	234.6	Staunton	Augusta County	55	SB only	Weyers Cave SB Truck Climbing Lane [1]	29	31	6	3	12	CE	D/B/B	$29M - $39M
233.3	237.4	Staunton	Augusta County/ Rockingham County	44	NB only	Weyers Cave NB Truck Climbing Lane [1]	25	7	12	3	8	CE	D/B/B	$100M - $148M
232.9	232.7	Staunton	Augusta County	56	SB only	Mt. Sidney Rest Area SB Decel Extension [1]	4	1	33	2	26	PCE	D/B/B	$4M - $5M
232.5	231.9	Staunton	Augusta County	57	SB only	Mt. Sidney Rest Area SB Accel Extension [1]	10	18	15	2	28	PCE	D/B/B	$1M - $8M
232.4	232.8	Staunton	Augusta County	43	NB only	Mt. Sidney Rest Area NB Accel Extension [1]	15	17	11	2	21	PCE	D/B/B	$4M - $9M
221.8	225.3	Staunton	Augusta County/ Staunton	61	Both Directions	Exit 221 - 225 Staunton Widening	8	9	46	2	10	CE	D/B/B	$140M - $212M
221.5	221.2	Staunton	Augusta County	58	SB only	Exit 221 - 220 SB Auxiliary Lane	24	36	29	3	14	CE	D/B/B	$14M - $23M
205.2	204.7	Staunton	Rockbridge County	59	SB only	Exit 205 SB Accel Extension [2]	13	10	42	1	19	PCE	D/B/B	$3M - $5M
204.5	195.1	Staunton	Rockbridge County	60	SB Only	Rockbridge County Shoulder Improvements	48	15	45	4	11	CE	D/B/B	$77M - $111M
189	189.4	Staunton	Rockbridge County	41	NB only	Exit 188 NB Accel Extension	19	6	39	1	44	PCE	D/B/B	$2M - $3M
162.4	162.9	Salem	Buchanan / Botetourt County	33	NB only	Extend acceleration lane	16	32	4	2	29	PCE	D/B/B	$5M - $8M
158.4	158.2	Salem	Botetourt County	36	SB only	Extend Troutville Safety Rest Area deceleration lane	9	20	2	1	34	PCE	D/B/B	$1M - $2M
158	157.2	Salem	Botetourt County	37	SB only	Extend Troutville Safety Rest Area acceleration lane	14	21	18	1	16	PCE	D/B/B	$8M - $12M
144.2	151.3	Salem	Roanoke / Roanoke County	40	Both Directions	Widen to three lanes between MM 144 and Exit 150	32	16	23	3	6	EA	D/B/B	$322M - $476M
139	141	Salem	Salem / Roanoke County	39B	Both Directions	Widen to three lanes between Exit 140 and Exit 141	30	19	44	3	4	EA	D/B/B	$117M - $274M
136	139	Salem	Salem / Roanoke County	39A	Both Directions	Widen to three lanes between Exit 137 and Exit 140	31	43	14	3	3	EA	D/B/B	$174M - $238M
128.4	137.1	Salem	Montgomery County / Roanoke County / Salem	32	NB only	Widen to three lanes from Exit 128 to Exit 137 (136)	42	11	47	4	2	CE	D/B/B	$241M - $302M
116.2	128.4	Salem	Christiansburg / Montgomery County	31	NB only	Widen to three lanes from MM116 to Exit 128	43	14	48	4	1	CE	D/B	$215M - $260M
105.5	106	Salem	Radford / Montgomery County	30	NB only	Extend acceleration lane	22	34	26	2	32	PCE	D/B/B	$10M - $11M
94.2	93.7	Salem	Pulaski / Pulaski County	38	SB only	Extend acceleration lane	17	39	8	2	37	PCE	D/B/B	$3M - $7M
84.3	84.5	Bristol	Wythe County	12	SB only	Extend deceleration lane	33	47	1	3	47	PCE	D/B/B	$3M - $5M
81.7	81.9	Bristol	Wythe County	13	SB only	Extend deceleration lane	45	25	32	4	38	CE	D/B/B	$14M - $16M
73.2	73.8	Bristol	Wytheville	14	SB only	Add auxiliary lane between Exit 73 and Exit 72	36	38	31	3	31	CE	D/B/B	$19M - $29M
73	42.9	Bristol	Wytheville	11	NB only	Extend I-77 decleration lane and reconfgure off-ramp [1,2]	23	46	30	2	39	CE	D/B/B	$22M - $39M
72.7	72.9	Bristol	Wytheville	10	NB only	Extend deceleration lane	47	44	28	4	45	CE	D/B/B	$34M - $39M
67.3	67.4	Bristol	Wytheville	8	NB only	Extend deceleration lane	26	26	3	3	41	PCE	D/B/B	$3M - $4M
54.1	54.4	Bristol	Smyth County	15	SB only	Add auxiliary lane between Exit 54 and Smyth Safety Rest Area	28	27	36	3	36	CE	D/B/B	$5M - $8M
48.1	48.9	Bristol	Marion / Smyth County	7	NB only	Extend acceleration lane	6	8	25	1	13	CE	D/B/B	$19M - $34M
47.4	47.6	Bristol	Marion / Smyth County	16	SB only	Extend acceleration lane	46	41	22	3	42	PCE	D/B/B	$4M - $5M
45.5	45.6	Bristol	Marion / Smyth County	6	NB only	Extend deceleration lane	27	24	19	3	40	PCE	D/B	$22M - $27M
42.8	43	Bristol	Marion / Smyth County	17	SB only	Extend acceleration lane	2	5	16	2	20	PCE	D/B/B	$4M - $6M
41.6	41.8	Bristol	Wythe County	18	SB only	Add auxiliary lane between Exit 40 on I-77 and Exit 72 on I-81 and extend acceleration lane [1,2]	38	12	27	4	25	CE	D/B/B	$31M - $40M
39.5	40.6	Bristol	Chilhowie / Smyth County	4	NB only	Add truck climbing lane	35	42	24	3	35	CE	D/B/B	$21M - $33M
39.4	39.5	Bristol	Smyth County	19	SB only	Extend deceleration lane [1]	5	3	21	2	27	PCE	D/B/B	$1M - $2M
38.9	39	Bristol	Smyth County	5	NB only	Extend deceleration lane [1]	37	40	35	3	43	PCE	D/B/B	$2M - $3M
38.7	38.9	Bristol	Smyth County	20	SB only	Extend acceleration lane	39	48	41	3	48	CE	D/B/B	$6M - $10M
34	33	Bristol	Washington County	21	SB only	Add truck climbing lane [1]	21	37	20	2	23	CE	D/B/B	$18M - $26M
32.4	33.5	Bristol	Chilhowie / Washington County	3	NB only	Add truck climbing lane [1]	20	35	17	2	22	CE	D/B/B	$23M - $36M
19.2	19.3	Bristol	Abingdon / Washington County	2	NB only	Extend deceleration lane [2]	34	45	5	3	46	PCE	D/B/B	$2M - $4M
16.6	16.7	Bristol	Abingdon	26	SB only	Extend acceleration lane [2]	1	2	7	1	24	PCE	D/B/B	$3M - $4M
8.1	9.7	Bristol	Bristol / Washington County	27	SB only	Widen to three lanes	44	23	34	4	15	CE	D/B/B	$37M - $62M



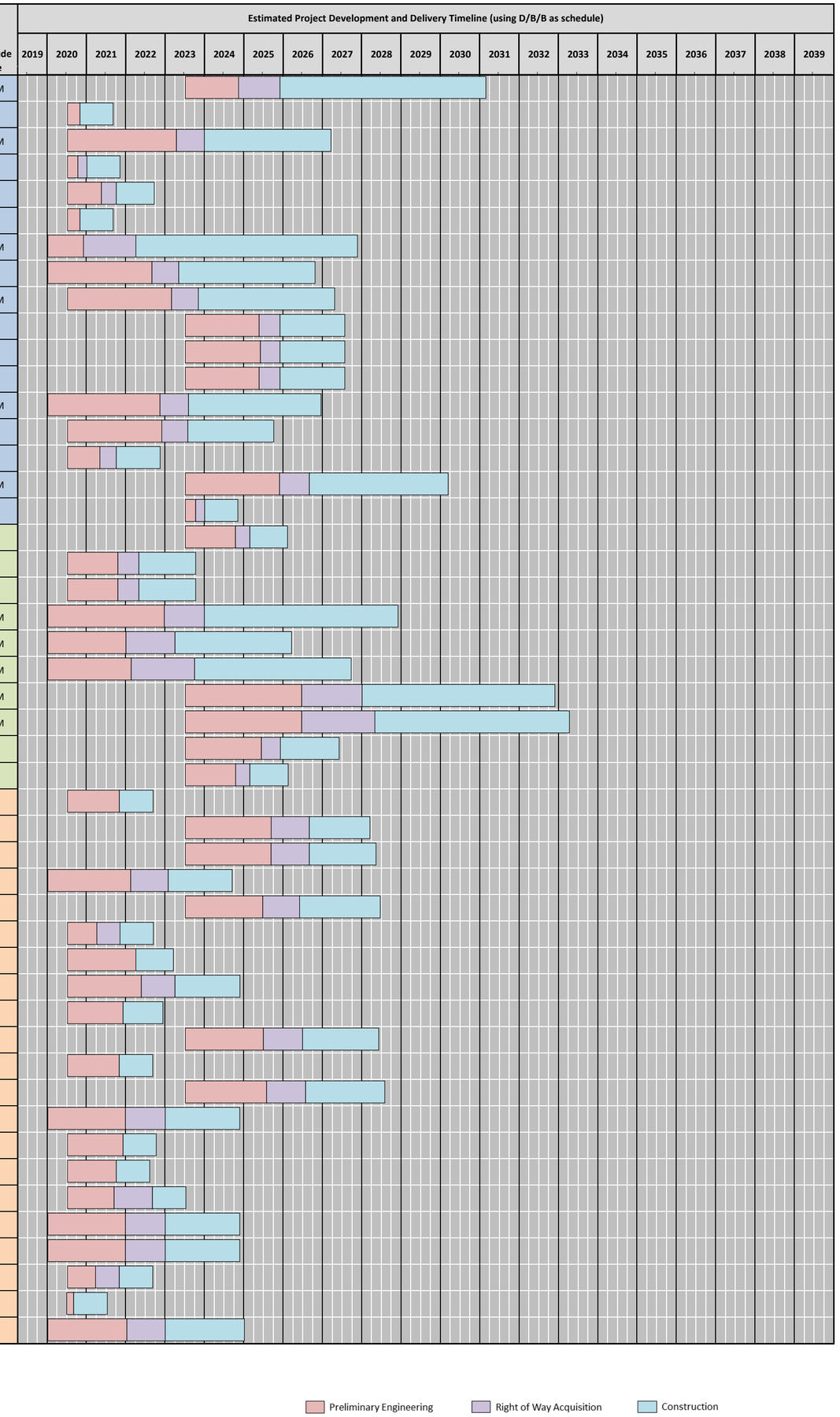
[1] Opportunity to Bundle with other I-81 Study Projects

[2] Coordinate/ Opportunity to Bundle with other projects in the SYIP

Preliminary I-81 Study Project Prioritization
Bonded Scenario
Order of Projects is North to South

October 1, 2019

Mile Marker From	Mile Marker To	District	Jurisdiction	Study Project ID	Direction	Improvement Description	Hybrid Priorization Rank	SMART SCALE Benefit/Mile Rank (25%)	Risk and Readiness Rank (15%)	VDOT Input (60%)	SMART SCALE Benefit Rank	Proposed Environmental Document Type	Proposed Delivery Method	Order of Magnitude Estimate Range
313.8	317.5	Staunton	Frederick County/ Winchester	63	Both Directions	Exit 313 - 317 Winchester Widening	41	29	40	4	9	CE	D/B	$204M - $268M
302.5	302.9	Staunton	Frederick County	47	NB only	Exit 302 NB Accel Extension [1]	3	30	10	1	17	PCE	D/B/B	$2M - $3M
299.2	295.7	Staunton	Shenandoah County / Warren County / Frederick	50	SB only	Exit 299 - 296 SB Widening	7	33	9	2	5	CE	D/B/B	$117M - $171M
296.7	296.3	Staunton	Shenandoah County	51	SB only	Exit 296 SB Accel Extension [1]	11	22	38	2	33	PCE	D/B/B	$1M - $2M
290.6	291.1	Staunton	Shenandoah County	46	NB only	Exit 291 NB Accel Extension [1]	12	4	37	2	18	PCE	D/B/B	$3M - $5M
279.2	278.7	Staunton	Shenandoah County	53	SB only	Exit 279 SB Accel Extension [1]	18	13	13	1	30	PCE	D/B/B	$2M - $3M
242.2	248.1	Staunton	Rockingham County/ Harrisonburg	62	Both Directions	Exit 243 - 248 Harrisonburg Widening	40	28	43	4	7	CE	D/B	$271M - $362M
236.5	234.6	Staunton	Augusta County	55	SB only	Weyers Cave SB Truck Climbing Lane [1]	29	31	6	3	12	CE	D/B/B	$29M - $39M
233.3	237.4	Staunton	Augusta County/ Rockingham County	44	NB only	Weyers Cave NB Truck Climbing Lane [1]	25	7	12	3	8	CE	D/B/B	$100M - $148M
232.9	232.7	Staunton	Augusta County	56	SB only	Mt. Sidney Rest Area SB Decel Extension [1]	4	1	33	2	26	PCE	D/B/B	$4M - $5M
232.5	231.9	Staunton	Augusta County	57	SB only	Mt. Sidney Rest Area SB Accel Extension [1]	10	18	15	2	28	PCE	D/B/B	$1M - $8M
232.4	232.8	Staunton	Augusta County	43	NB only	Mt. Sidney Rest Area NB Accel Extension [1]	15	17	11	2	21	PCE	D/B/B	$4M - $9M
221.8	225.3	Staunton	Augusta County/ Staunton	61	Both Directions	Exit 221 - 225 Staunton Widening	8	9	46	2	10	CE	D/B/B	$140M - $212M
221.5	221.2	Staunton	Augusta County	58	SB only	Exit 221 - 220 SB Auxiliary Lane	24	36	29	3	14	CE	D/B/B	$14M - $23M
205.2	204.7	Staunton	Rockbridge County	59	SB only	Exit 205 SB Accel Extension [2]	13	10	42	1	19	PCE	D/B/B	$3M - $5M
204.5	195.1	Staunton	Rockbridge County	60	SB Only	Rockbridge County Shoulder Improvements	48	15	45	4	11	CE	D/B/B	$77M - $111M
189	189.4	Staunton	Rockbridge County	41	NB only	Exit 188 NB Accel Extension	19	6	39	1	44	PCE	D/B/B	$2M - $3M
162.4	162.9	Salem	Buchanan / Botetourt County	33	NB only	Extend acceleration lane	16	32	4	2	29	PCE	D/B/B	$5M - $8M
158.4	158.2	Salem	Botetourt County	36	SB only	Extend Troutville Safety Rest Area deceleration lane	9	20	2	1	34	PCE	D/B/B	$1M - $2M
158	157.2	Salem	Botetourt County	37	SB only	Extend Troutville Safety Rest Area acceleration lane	14	21	18	1	16	PCE	D/B/B	$8M - $12M
144.2	151.3	Salem	Roanoke / Roanoke County	40	Both Directions	Widen to three lanes between MM 144 and Exit 150	32	16	23	3	6	EA	D/B/B	$322M - $476M
139	141	Salem	Salem / Roanoke County	39B	Both Directions	Widen to three lanes between Exit 140 and Exit 141	30	19	44	3	4	EA	D/B/B	$117M - $274M
136	139	Salem	Salem / Roanoke County	39A	Both Directions	Widen to three lanes between Exit 137 and Exit 140	31	43	14	3	3	EA	D/B/B	$174M - $238M
128.4	137.1	Salem	Montgomery County / Roanoke County / Salem	32	NB only	Widen to three lanes from Exit 128 to Exit 137 (136)	42	11	47	4	2	CE	D/B/B	$241M - $302M
116.2	128.4	Salem	Christiansburg / Montgomery County	31	NB only	Widen to three lanes from MM116 to Exit 128	43	14	48	4	1	CE	D/B	$215M - $260M
105.5	106	Salem	Radford / Montgomery County	30	NB only	Extend acceleration lane	22	34	26	2	32	PCE	D/B/B	$10M - $11M
94.2	93.7	Salem	Pulaski / Pulaski County	38	SB only	Extend acceleration lane	17	39	8	2	37	PCE	D/B/B	$3M - $7M
84.3	84.5	Bristol	Wythe County	12	SB only	Extend deceleration lane	33	47	1	3	47	PCE	D/B/B	$3M - $5M
81.7	81.9	Bristol	Wythe County	13	SB only	Extend deceleration lane	45	25	32	4	38	CE	D/B/B	$14M - $16M
73.2	73.8	Bristol	Wytheville	14	SB only	Add auxiliary lane between Exit 73 and Exit 72	36	38	31	3	31	CE	D/B/B	$19M - $29M
73	42.9	Bristol	Wytheville	11	NB only	Extend I-77 decleration lane and reconfgure off-ramp [1,2]	23	46	30	2	39	CE	D/B/B	$22M - $39M
72.7	72.9	Bristol	Wytheville	10	NB only	Extend deceleration lane	47	44	28	4	45	CE	D/B/B	$34M - $39M
67.3	67.4	Bristol	Wytheville	8	NB only	Extend deceleration lane	26	26	3	3	41	PCE	D/B/B	$3M - $4M
54.1	54.4	Bristol	Smyth County	15	SB only	Add auxiliary lane between Exit 54 and Smyth Safety Rest Area	28	27	36	3	36	CE	D/B/B	$5M - $8M
48.1	48.9	Bristol	Marion / Smyth County	7	NB only	Extend acceleration lane	6	8	25	1	13	CE	D/B/B	$19M - $34M
47.4	47.6	Bristol	Marion / Smyth County	16	SB only	Extend acceleration lane	46	41	22	3	42	PCE	D/B/B	$4M - $5M
45.5	45.6	Bristol	Marion / Smyth County	6	NB only	Extend deceleration lane	27	24	19	3	40	PCE	D/B	$22M - $27M
42.8	43	Bristol	Marion / Smyth County	17	SB only	Extend acceleration lane	2	5	16	2	20	PCE	D/B/B	$4M - $6M
41.6	41.8	Bristol	Wythe County	18	SB only	Add auxiliary lane between Exit 40 on I-77 and Exit 72 on I-81 and extend acceleration lane [1,2]	38	12	27	4	25	CE	D/B/B	$31M - $40M
39.5	40.6	Bristol	Chilhowie / Smyth County	4	NB only	Add truck climbing lane	35	42	24	3	35	CE	D/B/B	$21M - $33M
39.4	39.5	Bristol	Smyth County	19	SB only	Extend deceleration lane [1]	5	3	21	2	27	PCE	D/B/B	$1M - $2M
38.9	39	Bristol	Smyth County	5	NB only	Extend deceleration lane [1]	37	40	35	3	43	PCE	D/B/B	$2M - $3M
38.7	38.9	Bristol	Smyth County	20	SB only	Extend acceleration lane	39	48	41	3	48	CE	D/B/B	$6M - $10M
34	33	Bristol	Washington County	21	SB only	Add truck climbing lane [1]	21	37	20	2	23	CE	D/B/B	$18M - $26M
32.4	33.5	Bristol	Chilhowie / Washington County	3	NB only	Add truck climbing lane [1]	20	35	17	2	22	CE	D/B/B	$23M - $36M
19.2	19.3	Bristol	Abingdon / Washington County	2	NB only	Extend deceleration lane [2]	34	45	5	3	46	PCE	D/B/B	$2M - $4M
16.6	16.7	Bristol	Abingdon	26	SB only	Extend acceleration lane [2]	1	2	7	1	24	PCE	D/B/B	$3M - $4M
8.1	9.7	Bristol	Bristol / Washington County	27	SB only	Widen to three lanes	44	23	34	4	15	CE	D/B/B	$37M - $62M



[1] Opportunity to Bundle with other I-81 Study Projects
[2] Coordinate/ Opportunity to Bundle with other projects in the SYIP