Appendix J

First Level Screening Results

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SR 303 Corridor Study - First Level Screening

#	Location	Issues	Solutions	Need [1]	Notes	Does it meet Purpose & Need?	Is it feasible?	Is it within the scope of this study?	Passes 1st level screening
MP1	Full Corridor	Obstructions in sidewalk for length of corridor	Underground utilities	PB, S	Much higher cost to underground utilities, but improves visual quality and non-motorized connectivity and safety	yes	yes	yes	yes
MP2	Full Corridor		Relocate obstructions to back of sidewalk	PB, S	Relocating to back of sidewalk would likely require easements or ROW impacts.	yes	yes	yes	yes
MP3	Full Corridor	Several intersections at LOS E/F and long queues (corridor-wide)	Adaptive signal control along the corridor	R		yes	yes	yes	yes
MP4			Include consideration of green wave signal timing	R		yes	yes	yes	yes
MP5			Provide signal count down	R	No precedent has been set for this type of signal control. Some concerns were noted about safety given that drivers could try to time running through signals at full speed while the conflicting traffic might run a light. This could result in severe crashes.	yes	no	no	
MP6	6th Street/11th Street	LOS E in 2030, 2040 (PM) at 6th Street intersection and LOS F in 2030, 2040 (PM) at 11th Street intersection	One-way couplet with 11th and 6th	R		yes	no	yes	
MP7	13th Street/15th Street	Narrow travel width along 13th Street and 15th Street	One-way couplet with 13th and 15th (13th EB, 15th WB)	S, R	Low volume corridors that operate at reasonable LOS in the year 2040 at the intersection of Warren Ave. 15th Street is a short corridor constrained by the Evergreen Rotary Park and Olympic College. Forcing a one-way couplet would divert traffic through the neighborhood on Park Ave.	yes	yes	no	
MP8	Warren Ave Bridge	Speeding over the Warren Avenue bridge	Realign 17th/16th to 17th alignment with roundabout and new connection to Olympic College	S, R	Roundabout v/c is greater than 1.0 and the roundabout will not operate well at 16th Street in the year 2040. Likely right-of-way takes from the college.	yes	no	yes	
IC1	Burwell Street	Split phase for northbound driveway takes time at Burwell Street intersection	Remove northbound phase - move east ped crossing and close parking lot (repurpose for bike ped or pocket park?)	R		yes	yes	yes	yes
IC2	Burwell Street	LOS E in 2040 (PM) at Burwell Street	Roundabout	R, S	v/c = 0.615 (2040 PM), ROW impacts not known	yes	yes	yes	yes
IC3	6th Street	Split phase for EB/WB at 6th Street	Remove EB/WB split phase and provide concurrent lefts	R		yes	yes	yes	yes
IC4	6th Street	LOS E in 2030, 2040 (PM) at 6th Street	Roundabout	R, S	Not feasible because the signal queue at 11th would back into and through the roundabout. If the roundabout were standalone or the 11th Street intersection didn't queue it would have v/c = 0.749 (2040 PM)	yes	no	yes	
IC5	11th Street	Eastbound left turn queues well beyond the storage during the PM Peak at 11th Street intersection	Add eastbound left turn lane	R		yes	yes	yes	yes
IC6	11th Street	LOS F in 2030, 2040 (PM) at 11th Street intersection	Roundabout	R, S	The v/c = 0.978 (2040 PM) would not meet the state standard for roundabout operation. Highly likely impacts to a park.	no	no	yes	

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IC7	16th Street	Transit operations, pedestrian safety at 16th Street intersection	Roundabout	R, S	The v/c = 1.093 (2040 PM) would not meet the state standard for roundabout operation	no	yes	yes	
IC8	Callahan Drive	Not needed for LOS, but would reduce southbound speeds onto Warren Ave Bridge	Convert interchange to signal control	R, PB	Repurpose property within interchange to urban design opportunities that enhance connectivity for non-motorized	yes	yes	yes	yes
IC9	Callahan Drive	Not needed for LOS, but would be part of a corridor traffic management strategy. Consistent intersection control with roundabouts. Reduce southbound speeds onto Warren Ave Bridge	Roundabout	R, S, E	v/c = 0.842 (2040 PM)	yes	yes	yes	yes
IC10	Sheridan Road	Operational issues for eastbound/westbound at Sheridan Road intersection	Remove EB/WB split phase, convert westbound thru-left lane to thru only	R		yes	yes	yes	yes
IC11	Sheridan Road	LOS E in 2030, LOS F 2040 (PM) at Sheridan Road	Roundabout	R, S, E	The v/c = 0.92 (2040 PM) would not meet the state standard for roundabout operation	no	yes	yes	
IC12	Sylvan Way	Not needed for LOS, but would be part of a corridor traffic management strategy. Consistent intersection control with roundabouts.	Roundabout	R, S, E	v/c = 0.874 (2040 PM)	yes	yes	yes	yes
IC13	E Broad Street	Not needed for LOS, but would be part of a corridor traffic management strategy. Consistent intersection control with roundabouts.	Roundabout	R, S, E	v/c = 0.769 (2040 PM)	yes	yes	yes	yes
IC14	Hollis Street	Not needed for LOS, but would be part of a corridor traffic management strategy. Consistent intersection control with roundabouts.	Roundabout	R, S, E	v/c = 0.725 (2040 PM)	yes	yes	yes	yes
IC15	Hollis Street	Signal close to E Broad signal - may back up into E Broad	Remove signal	R	Would require buses to be rerouted. Continued coordination with the County.	yes	yes	yes	yes
IC16	NE Riddell Road	Large delay on southbound approach at NE Riddell Road intersection	Double left turn lanes	R		yes	yes	yes	yes
IC17	NE Riddell Road	LOS E in 2040 (PM) at NE Riddell Road intersection	Roundabout	R, S, E	v/c = 0.828 (2040 PM)	yes	yes	yes	yes
IC18	NE McWilliams Road	LOS E in 2030, LOS F 2040 (PM) at NE McWilliams Road	Roundabout	R, S, E	v/c = 0.86 (2040 PM)	yes	yes	yes	yes
T1	Full Corridor	Kitsap Transit routes run 50% on time	Transit signal priority (TSP)	R, T	Improves corridor reliability/mobility for transit but not for vehicles - how to analyze for both modes? Base it on person trips? Would be used at intersections that meet implementation criteria. For example: TSP is best used at intersections that operate at LOS C, D or possibly E.	yes	yes	yes	yes
T2	Full Corridor	Access to transit	Add streetcar service on Warren Ave	T	There is not adequate population density along the corridor to warrant a streetcar investment at this time. As density increases beyond the year 2040, this concept could be reconsidered.	yes	no	yes	

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T3	Full Corridor	Transit reliability	Reversible BAT lane - middle of station width, one side dedicated lane, time of day BAT lane	R, T	Reversible BAT lane would require additional width for the necessary barriers. Also additional width would be required at the intersections. This is a highly complex	yes	no	yes	
T4	Burwell Street	Transit reliability at Burwell Street	Transit turn lane and TSP	R, T		yes	yes	yes	yes
T5	6th Street	Access to transit between 6th Street and 11th Street	Reduce gaps in transit stops along SR 303	T		yes	yes	yes	yes
T6	11th Street	Transit reliability	Include transit lanes from downtown along Washington to 11th up to Warren Ave.	T, R	Requires further study between Kitsap Transit and Bremerton to enhance or modify the current routhing and corridor. Should be considered in other studies.	yes	maybe	no	
T7	13th Street	Access to transit, illegal ped crossings between 13th Street and 16th Street	Relocate bus stops to intersections	T, R, S		yes	yes	yes	yes
T8	~~16th Street~~	~~Improve eastbound right from 16th Street onto southbound Warren Ave for buses~~		~~R~~		-	-	-	
T9	Callahan Drive	Limited transit access at Callahan Drive interchange	New multimodal center east of Wheaton Way/Callahan Drive interchange	T, E	Required further discussion to determine if this is within the scope of this study and how general assumptions can be made regarding sizing and utilization.	yes	maybe	maybe	
T10	Callahan Drive	Limited transit access at Callahan Drive interchange	New multimodal center (park and ride) west of interchange - exclusive access for transit to turn eastbound right onto southbound Warren Ave	T, E	west side open land is designated as Stephenson Canyon Park or private properties.	yes	no	maybe	
T11	Sheridan Road	Transit reliability	Northbound BAT lane from Sheridan to McWilliams	R, T		yes	yes	yes	yes
T12	Old East Bremerton High Gym	Transit reliability	Construct new park and ride to reduce length of required BAT lane	R, T	Required further discussion to determine if this is within the scope of this study and how general assumptions can be made regarding sizing and utilization.	yes	maybe	maybe	
~~T13~~	~~Old East Bremerton High Gym~~		~~New multimodal center at the school property~~	~~T, E~~	~~Duplicate of above~~	~~yes~~	~~maybe~~	~~maybe~~	
T14	Sylvan Way/E Broad Street	Difficult pedestrian access to transit stops between Sylvan Way and E Broad Street	Enhanced midblock ped crossing with refuge near Dibb Street	T, S, PB	consolidated into T17	-	-	-	
T15	Sylvan Way/E Broad Street	~~Access to transit~~	~~New transit stops near Sylvan~~	~~T~~	consolidated into T17	-	-	-	
T16	Sylvan Way/E Broad Street	Difficult pedestrian access to transit stops between Sylvan Way and E Broad Street	Relocate bus stops to intersections	T, S, PB	By relocating the bus stops from mid-block to the intersections, pedestrians can use signal timing for safe crossing of the road.	yes	yes	yes	yes
T17	E Broad Street	Access to transit stops between Sheridan Road and Broad Street; Hollis Street to Furneys	Relocate bus stops to intersections, add ped crossings (specifically one at Dibb Street)	T, S, PB	Combined with alternatives (Crossed out below)	yes	yes	yes	yes
T18	E Broad Street	Future issues with transit mobility due to signal delay for buses entering Wheaton Way transit center	Include bus pullout across from new transit center so buses don't need to turn left into center.	T, R		yes	yes	yes	yes

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T19	E Broad Street	Access to new Wheaton Way transit center	Improve walkable connectivity to northwest and neighborhoods to the west	T, PB		yes	yes	yes	yes
T20	E Broad Street	Access to new Wheaton Way transit center	Add more parking	T	Expand the lot so that more people can use transit. Requires further discussion to determine needs and location of additional P&R services and transit use	yes	maybe	maybe	
T21	Hollis Street/NE Riddell Road	~~Access to transit stops between Hollis Street and NE Riddell Road~~	~~Relocate bus stops to intersections~~	~~T, S, PB~~	consolidated into T17	-	-	-	
T22	NE Riddell Road/NE Furneys Lane	~~Access to transit stops between NE Riddell Road and NE Furneys Lane~~	~~Relocate bus stops to intersections~~	~~T, S, PB~~	consolidated into T17	-	-	-	
PB1	Full Corridor	ADA (corridor wide)	Improve curb cuts for full length of the corridor to meet ADA requirements	PB, S		yes	yes	yes	yes
PB2	Full Corridor	Ped/bike connectivity (corridor wide)	Widen sidewalks	PB, S		yes	yes	yes	yes
	Full Corridor	Ped safety	Ped scale lighting	PB, S					
PB3	South End	Ped/bike connectivity	Improve connectivity into downtown from ferry	PB, S	This concept warrants further consideration in another study effort. It is too far from the SR 303 corridor to be included in this study.	yes	yes	no	
PB4	4th Street	Ped/bike connectivity	Sign 4th Street as ped/bike connection with ped/bike connector on Warren/4th	PB, S		yes	yes	yes	yes
PB5	6th Street/11th Street	No pedestrian crossings between 6th Street and 11th Street	Add new ped crossing	PB		yes	yes	yes	yes
PB6	13th Street	Bike mobility	Stripe 13th with Sharrows	PB		yes	yes	yes	yes
PB7	13th Street	~~Bike mobility between 13th Street and 16th Street~~	~~Improve bike access to SR 303~~	~~PB~~	Duplicate of above	-	-	-	
	16th Street	Bike connectivity	Shared-use path between Ohio Ave/17th Street and Chester Ave/18th Street	PB					
PB8	Warren Ave Bridge	Ped mobility along Warren Ave Bridge	Improve pedestrian connection off of Warren Ave bridge to 16th (existing southbound ramp). Remove hard curbed turn at 16th.	PB, S		yes	yes	yes	yes
PB9	Warren Ave Bridge	Ped mobility along Warren Ave Bridge	Widen to greater than 8', include barriers	PB, S		yes	yes	yes	yes
PB10	Warren Ave Bridge	Ped mobility along Warren Ave Bridge	Complete sidewalks on the west side of the bridge for pedestrians	PB, S		yes	yes	yes	yes
PB11	Warren Ave Bridge		Park on SE quadrant of the Warren Ave Bridge	PB, E	Further discussion about whether park development is within the scope of the study.	yes	yes	maybe	
PB12	Warren Ave Bridge		Bridge to bridge connectivity for bikes (Manette to Warren)	PB	Further development of this concept is warranted to ensure a full non-motorized connectivity is provied.	yes	yes	no	
PB13	Warren Ave Bridge		Bike connectivity route as recommended by bicycle group (mostly off-corridor)	PB	Most elements are included in descriptions below	yes	yes	yes	yes

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PB14	Warren Ave Bridge	Bike mobility along Warren Ave Bridge	Cycletrack on west side of bridge only	PB		yes	yes	yes	yes
	Warren Ave Bridge		Cycletrack on both sides of the bridge	PB		yes	yes	yes	yes
PB15	Warren Ave Bridge		Non-motorized tunnel crossing Warren Ave at 18th Street as reccomended by bicycle group	PB, S		yes	yes	yes	yes
PB16	Warren Ave Bridge		Improve wayfinding for cyclists	PB		yes	yes	yes	yes
PB17	Warren Ave Bridge		Bridge to bridge connectivity for bikes (Manette to Warren)	PB	Further development of this concept is warranted to ensure a full non-motorized connectivity is provied.	yes	yes	no	
PB18	Warren Ave Bridge	Bridge walk is long and isolated, can feel unsafe	Include safety call box and/or beacon	S		yes	yes	yes	yes
PB19	Warren Ave Bridge	Suicide rates are high on the bridge	Include high railings to limit ability for jumping, add call box for help	S		yes	yes	yes	yes
PB20	Callahan Drive	Non-motorized accessibility at Callahan Drive interchange	Widen sidewalks, add bike lanes	PB		yes	yes	yes	yes
PB21	Callahan Drive	Non-motorized accessibility at Callahan Drive interchange	Shared-use path along Callahan Drive tunnel crossing Warren Ave as reccomended by bicycle group	PB, S		yes	yes	yes	yes
PB22	Almira Drive	Ped/bike connectivity (north end)	Improve connectivity for people walking from Almira to SR 303 using direct mid-block access points between Almira and SR 303.	PB, S, E, T	Provides non-motorized network connectivity off of the busy SR 303 corridor. This level of connectivity could improve neighborhood access to local retail and to transit as well.	yes	yes	yes	yes
PB23	Almira Drive	Ped/bike connectivity	Extend Cherry Ave onto trail to connect to new bike path at Almira	PB, S, E, T	Provides non-motorized network connectivity off of the busy SR 303 corridor. This level of connectivity could improve neighborhood access to local retail and to transit as well.	yes	yes	yes	yes
AM1	Full Corridor	Access to business	Median control along blocks	S, R		yes	yes	yes	yes
AM2	North of Warren Ave Bridge		Access management between Sylvan and Riddell with roundabouts	S, R, E		yes	yes	yes	yes
AM3	4th Street	Center curbs from Burwell through 5th reduce SR 303 capacity northbound. An additional northbound lane could be provided to help facilitate better traffic flow at the Burwell intersection.	Remove center islands and replace with clearly marked ped crossing and c-curb.	S, R	This was recommended for consideration to improved traffic flow and still provide a narrow cross section that fosters safe pedestrian crossings. Members of the SAG mentioned confusion about cuts in the islands and the public mentioned concerns about loss of a lane.	yes	yes	yes	yes
AM4	6th Street/11th Street	Turning traffic between 6th Street and 11th Street blocks through traffic	2 lanes with two-way left turn lanes	S, R		yes	yes	yes	yes
AM5	13th Street/16th Streeet	Turning traffic between 13th Street and 16th Street blocks through traffic	Left turn lane u-turn with median control between 13th Street and 16th Street	S, R		yes	yes	yes	yes

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TC1	Warren Ave Bridge	Speeding on the Warren Avenue bridge	Remove northbound add lane at 17th and require a t-intersection for right turns	S		yes	yes	yes	yes
TC2	Warren Ave Bridge		Narrow lanes, build in chicanes	S, R		yes	yes	yes	yes
TC3	Warren Ave Bridge		Roundabouts on both ends of bridge	S, R	Repeat of IC7 and IC9	-	-	-	
TC4	Warren Ave Bridge		Photo enforcement of speeding	S, R	This requires state and local laws to be revisited prior to enforcement.	yes	yes	no	
TC5	Warren Ave Bridge	Center curb on Warren Ave Bridge	Remove and replace with striping/chicanes	S, R	The goal of this corridor element is to reduce speeds on the segment of Warren Ave between 17th Street and Sylvan by using proven traffic calming techniques. This includes the idea of knitting together the corridor contexts from north and south of the Warren Ave bridge	yes	yes	yes	yes
	Warren Ave Bridge	Center curb on Warren Ave Bridge	Remove and replace with enhanced barrier	S, R					
TC6	Callahan Drive	Speeding at Callahan Drive interchange	Use chicanes, planting, striping, visual cues, and narrowed lanes to slow speeds on the corridor.	S, R		yes	yes	yes	yes
O1	Full Corridor	Unclear routes to/from downtown	Improve place making and wayfinding into downtown	E	Further coordination with City planning group to get ideas about signage that is consistent with the long term plan to allow for phased implementation.	yes	yes	yes	yes
O2	South End	Placemaking	From 13th to Burwell make zoning compatible with a "signature street" vision.	E	All work must be between existing curbs. Accompanying city code to enforce zoning requirements	yes	yes	yes	yes
O3	Warren Ave Bridge	Placemaking along Warren Ave Bridge	Urban design concepts to highlight the Warren Ave bridge and viewshed as a gateway to Bremerton	E		yes	yes	yes	yes
O4	Warren Ave Bridge		Viewpoint on Warren Ave Bridge	E		yes	yes	yes	yes
O5	North End	Economic growth	Specific improvements by growth centers as outlined in the City Comphrensive Plan Land Use	E	Comp plan shows clear vision of a Boulevard style roadway with planting areas and walkable	yes	yes	yes	yes

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