



TECHNICAL ADVISORY COMMITTEE

MEETING #7 SUMMARY

DATE: Tuesday, October 22, 2019; 10:30 a.m. – 12:30 p.m.

LOCATION: Springfield City Hall, Library Meeting Room

ATTENDANCE

City of Springfield

- Brian Barnett, City Traffic Engineer
- Greg Ferschweiler, Operations Maintenance Supervisor
- Ben Gibson, Operations Supervisor
- Courtney Griesel, Economic Development Manager
- Michael Liebler, Transportation Planning Engineer
- Amy Linder, AIC Deputy Chief/Fire Marshal
- Kristi Krueger, Principal Engineer
- Lt. Russ Boring, Police Department
- Officer Tom Speldrich, Police Department **[for Lt. Boring]**
- Meghan Murphy, Environmental Services Technician
- Emma Newman, Senior Transportation Planner **[by phone]**
- Loralyn Spiro, DPW Communications Coordinator

ODOT

- Eric Alexander, Region 2 District 5 Assistant Manager
- Jenna Berman, Region 2 Active Transportation Liaison
- Nicole Charlson, Region 2 Transportation Safety Coordinator
- Carl Deaton, Region 2 Roadway Engineer
- Scott Nelson, Region 2 Access Management Engineer
- Amanda Salyer, Region 2 Traffic Investigations Engineer & ARTS Program Coordinator
- Katie Scott, Motor Carrier Division Mobility Operations Program Coordinator
- Manny Boswell, Motor Carrier Division Mobility Program Analyst **[for Katie Scott]**
- Bob Stolle, Region 2 Rail Crossing Safety Section

- Dorothy Upton, Region 2 Traffic Engineer **[by phone]**
- Kristie Gladhill, TPAU Senior Transportation Analyst **[by phone]**
- Keith Blair, Senior Transportation Analyst, Region 2

DLCD

- Patrick Wingard, South Willamette Valley Representative

Utility Providers

- Bart McKee, Senior Civil Engineer, SUB Water
- Dan Norland, Engineering Technician, SUB Electric
- Tamara Pitman, SUB Electric
- John Radosevich, NW Natural
- Steven Wages, SUB Water

LTD

- Bret Smith, Transit Service Planner
- Kelly Clarke, Senior Transportation Planner, [LCOG representing LTD]
- Jennifer Zankowski, Senior Development Planner\

Willamalane Park & Recreation District (WPRD)

- Eric Adams, Planning & Development Manager

School District #19 (SPS)

- Laughton Elliott-Deangelis, Safe Routes to Schools Coordinator
- Mike Schlosser, Transportation & Fleet Operations Manager

Project Staff and Consultants

- Bill Johnston, ODOT Project Manager, Transportation Planner, ODOT Region 2
- Molly Markarian, City of Springfield Project Manager, Senior Planner, City of Springfield
- John Bosket, Consultant Project Manager, DKS Associates
- Lacy Brown, Transportation Engineer, DKS Associates **[by phone]**
- Kayla Fleskes, Transportation Engineering/Planning Assistant, DKS Associates

Audience / Members of the Public

None present

MEETING PURPOSE

- Discuss Technical Memorandum #14: Alternatives (TM #14)
- Provide input on the initial alternative solutions for the first round of evaluation

WELCOME & INTRODUCTIONS

John Bosket, DKS Associates, welcomed everyone to the seventh meeting of the TAC. He reviewed the agenda with the committee.

ALTERNATIVE SOLUTION OVERVIEW

Kayla Fleskes, DKS Associates, presented the alternative solutions and discussed the changes to the alternatives made since last TAC meeting. The changes included: Enhanced Corridor (EC) transit being included in each of the alternative solutions, adding a buffered bike lane to Alternative Solution A and reworking Alternative Solution D to be in alignment with the Urban Design Initiative that is currently being developed by ODOT.

Kristi Krueger, City of Springfield, asked about U-turn opportunities for trucks and noted it could be made clearer that U-turns are not possible for heavy vehicles at signalized intersections. She also mentioned that the alternative solutions summary table in Technical Memorandum #13 (Table 2) incorrectly lists existing transit for Alternative Solution A instead of EC transit.

ALTERNATIVE SOLUTIONS RESULTS

John shared the results of the alternative solution evaluation with the TAC. He discussed the key findings related to each project goal and the reasoning behind the scoring tables shown in TM #14, asking the TAC to hold their questions for the end of the presentation.

For the Safety goal, John noted that raised medians were the largest contributor to safety and that roundabouts would have the ability to significantly improve safety at intersections. He noted that the buffered bike lanes and cycle tracks have the potential to improve safety, as well as the systemic safety improvements included in each alternative solution that were identified through other Main Street projects.

For the Business Community goal, John shared how maximizing the number of U-turn opportunities along the corridor would have the greatest impact to midblock travel times, which was a key metric used for the scoring of this goal. Based on the City's mobility standard, adding a signalized intersection along the corridor would be similar to adding 55 seconds of delay, and John noted that might be a helpful benchmark for people when talking about the change in midblock travel times. John noted the criteria on the potential to maintain or enhance property values or economic potential of sites along Main Street currently only includes a consideration of midblock travel times, but it could potentially include right-of-way (ROW) impacts as well.

For the Mobility goal, John noted the roundabouts perform better than the signals, but each can similarly meet ODOT mobility standards, and adding additional U-turn opportunities would help reduce the pressure on the traffic signals in particular. Mountable medians can limit the impact to emergency vehicle travel times. John also discussed the ability of the alternative solutions to accommodate over-dimension loads. It was noted that although Alternative Solution D contains a different cross section east of Bob Straub Parkway, that difference was based on the vehicle speeds and did not take into consideration the freight Reduction Review Route.

For the Transportation Choices goal, John presented that the biggest drivers were landscaped buffers and buffered bike lanes or a cycle track on enhancing pedestrian and bicycle facilities. For the Vital Community goal, John discussed the impacts of landscaping and raised median breaks that allow left turn access for motor vehicles.

For the Feasibility goal, John shared an example figure that showed the ROW impacts of widening for U-turns and ROW impacts for modifying the signal for a roundabout. John stated these figures are shown in the Appendix to TM #14. Amanda Salyer, ODOT, noted the impact is likely comparable once you consider additional turn lanes. Dorothy Upton, ODOT, noted that a truck could also not make a U-turn at signalized intersections as it would significantly impact the signal timing. Kristi noted that this discussion about preliminary ROW impacts and the figures shown could be confusing for the public without understanding the nuances of those impacts.

John continued discussing the Feasibility goal, noting the planning level cost estimate for each alternative. Kristi asked about what is included in the approach for the cost estimates. John noted that the estimates include major elements of each alternative. Kelly Clarke, LTD, noted that improvements will likely not all be done at once and John agreed that the phasing would be important. Kristi noted that some of the summary bullets in the document and TAC slide show should be reworded from “will” to “could”, particularly when it comes to discussing the ROW impacts, given the level of uncertainty at this level of planning.

ALTERNATIVE SOLUTIONS QUESTIONS

John opened up the group discussion by asking for comments and questions from the TAC before breaking into small groups. Bob Stolle, ODOT, noted that the typical cross section does not account for the rail crossing. He stated that a crossing order will be needed unless no changes are made near the rail crossings. He also noted that placement of the roundabouts will need to be addressed with respect to the railroad crossing. John noted we could be selective about locations where signals get converted to roundabouts in the next alternatives and that not all of them would need to be exclusively signalized or exclusively roundabouts through the corridor.

Loralyn Spiro, City of Springfield, noted the July Governance Team meeting where they selected the mode choice, they included both No Build and EC transit while for the alternative solutions we decided to include EC transit in all alternatives. She noted that City Council could still say we are going to go forward with No Build transit. John noted that would not significantly impact the alternative solutions and the intent is to make sure future transit along the corridor is accommodated. He noted the improvements in the Alternatives stand on their own without transit. Emma Newman, City of Springfield, also noted that EC transit can be implemented in stages/at different times so it would not have to move forward at the same time as the safety-focused improvements.

Officer Tom Speldrich, City of Springfield, asked about the length of the passenger car vehicles mid-block travel times, noting that fire trucks would have difficulty traveling through the corridor and making U-turns. Molly Markarian, City of Springfield, noted that no medians would be included in front of the fire department stations on the corridor. Kayla said she believes U-turns at signals can accommodate fire trucks (similar radius as a cul-de-sac) but would need to double check. Bart McKee noted that fire hydrants are on one side of the street today and need to be accessed by fire trucks.

Jenna Berman, ODOT, asked about adding plastic delineators/candlesticks in the buffer. John noted that without significant access consolidations, it would not be possible to add candlesticks in the buffer for any significant stretch along Main Street. Michael Liebler, City of Springfield, said he was concerned about Alternative Solution D having a cycle track and bicyclists would naturally travel both directions whether the intent was to design a one-way cycle track or not. He also noted that without significant access consolidation, the cycle track is not very feasible along Main Street.

Michael asked about ADA improvements and whether those were factored into the cost estimates. He said it would be helpful to express to Council the maintenance costs associated with ADA improvements, noting that the No Build has relatively large costs associated with it. Amanda agreed it would be helpful to show a cost associated with No Build to make Main Street ADA compliant.

Jenna Berman asked how many vehicles traveling along the corridor are over-dimension today? Jenna said it would be nice to be able to emphasize more frequent users on the corridor if the over-dimension uses of the corridor are relatively minimal. John stated he did not have that data but in his experience the frequency of use is not a factor in the requirement to maintain the ability for over-dimension loads on a freight Reduction Review Route.

ALTERNATIVE SOLUTIONS SMALL GROUP FEEDBACK

The TAC then broke into small groups to discuss the alternative solutions and how they see the next three alternatives shaping up. After discussing, the groups reported back and noted comments/questions on the following themes:

- General
 - There are lots of trade-offs to discuss that will be difficult to share with the public
 - Every median break introduces more conflicts, so breaks should be minimized as possible
 - Consider showing ROW impacts at actual locations in greater detail
 - To determine additional median break locations, consider street connectivity and land use (i.e., 51st Street and access to school).
 - None of the Alternatives address the desire for a Sense of Place articulated in Main Street Vision Plan.
 - Add financial cost for maintenance and operation (life cycle costs) to cost estimates
 - Consider water quality of stormwater run-off – address space and cost (all options).
- Roundabouts vs. Signals
 - Do all the roundabouts have to be fully two-lane? Can some be partial?
 - Roundabouts are safest option
 - Continue to include both roundabouts and signalized alternatives
 - If one of the alternatives moving forward shows a mix of traffic signals and roundabouts, need to have some logic behind which intersections will be roundabouts or traffic signals. Could be related to intersection operations and crash history.
 - Do not use 'hybrid' term when referring to intersection treatments – discuss phased implementation and how to phase in roundabouts with existing signals.

- Identify criteria that would be used to determine which intersections should be prioritized for implementation (i.e. intersections with worst safety record). A decision matrix would be useful for this.
- Need more information about roundabout interaction for bikes, utilities, and swales.
- Signals could work on the east end of Main Street, but need additional connectivity.
- Consider 28th intersection and proximity to railroad crossing (roundabouts could be mitigated with gates). Note also that at 35 MPH, 250 feet required sight distance & actually 400 feet, so worst case possible exception for RAB at 28th.
- Medians
 - Could have alternatives with more median breaks for better accessibility
 - Consider alternatives with fewer median breaks for safety
 - Incorporate paved, mountable median crossing for all emergency vehicles at hydrants with acceptable travel time (~250 feet, 10 seconds)
 - Reconsider Left Turn Out locations – 30th, 66th, 67th may be challenging
- Refine Stage
 - Consider two alternatives with roundabouts and one with signals in the next round of analysis.
 - Consider an option for a minimalist median strategy on segments and for intersections with roundabouts
- Presentation/Messaging
 - Frame Alt C as current ODOT Standard and Alt D as ODOT standard ‘in the works’
 - Note No Build is only for comparison and clarify its role in the Refine Stage
 - Convey that segment improvements can be can be constructed independent of intersections (independent phasing)
 - Highlight continuity of Alt D elements and Main Street Vision Plan
- Alternative Solution A
 - Keeping the access density context prominent in the discussion will be important for Alternatives A and D, and could access consolidation allow for more median openings?
 - Adding vertical separators for bikes likely won’t work well with freight, not even considering the over-dimension load aspect
 - Could potentially fit in some delineators to buffered bike lane in some sections of Main Street, but it doesn’t make sense as an overall corridor treatment
 - Prioritize forwarding this alternative to Refine stage with modification.
 - Consider physical separation/buffer of bike/ped facilities (5-6 feet, 2-3 feet), cornering treatments.
- Alternative Solution B
 - To limit costs and ROW impacts, an alternative like B could be considered. Keeping existing bike lane and sidewalk widths would also limit impacts of other alternative solutions.
- Alternative Solution C
 - Not a lot of benefit to the added width in C and may be hard to justify to the public.

- Can do better for speed reduction and active transportation.
- There was support for not carrying this alternative solution forward into the next round of evaluation.
- Alternative Solution D
 - What about a base UDI option that doesn't include all bike/ped improvements? Some combination of ODOT standard that is modified by UDI?
 - Important to separate bike facility from sidewalk, possibly with grade separation.
 - May be able to go narrower than 31' east of Bob Straub [change scoring under feasibility goal from red to orange].
 - Convey that there are options for landscape strip to address visibility impacts (i.e. low level landscaping).
 - Need to convey to Council what it will take to deliver what they desire (grade separated bike/ped facilities) – stencil markings, yield signs, training & education.
 - Consider different multi-use path options, combined bi-directional bike/ped path.
 - How does cycle track interact with roundabout and signals?
 - Issue of existing access density and cycle track - unsure safety concerns addressed without also addressing existing access density.

NEXT STEPS

- Meeting with the Strategic Advisory Committee (SAC) this afternoon, followed by Planning Commission, City Council, and Governance Team next month
- Public outreach will occur from November to Mid-January
- The next TAC meeting will be in February/March after the public comments have been compiled to help determine the next three alternatives for analysis

APPENDIX

- TAC Slide Show (attached)



OUR
MAIN
STREET
SPRINGFIELD

MAIN STREET SAFETY PROJECT | 20th Street to 72nd Street

TECHNICAL ADVISORY COMMITTEE MEETING

October 22, 2019



DKS public involvement SPRINGFIELD OREGON Oregon Department of Transportation

AGENDA

- Preliminary Analysis and Screening Results
 - Alternative Solutions
 - Analysis by Goal
 - Questions
- Discussion

ALTERNATIVES EVALUATION PROCESS

PRELIMINARY STAGE

- 5 prelim. alternatives

Refine Stage

- Prelim. analysis using evaluation criteria
- Community input
- Screen to 3 alternative solutions (may be hybrids of original 5)

PRELIMINARY STAGE
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

FIVE PRELIMINARY ALTERNATIVES
•••••

REFINE STAGE
GOALS & OBJECTIVES // EVALUATION CRITERIA // ANALYSIS // PUBLIC AND STAKEHOLDER INPUT
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

THREE REFINED ALTERNATIVE SOLUTIONS
•••

RECOMMEND STAGE
GOALS & OBJECTIVES // EVALUATION CRITERIA // ANALYSIS // PUBLIC AND STAKEHOLDER INPUT
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

ONE RECOMMENDED ALTERNATIVE SOLUTION
•

ALTERNATIVES EVALUATION PROCESS

Recommend Stage

- Refined evaluation again using evaluation criteria
- Community input
- Screen to recommended alternative solution

PRELIMINARY STAGE
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

FIVE PRELIMINARY ALTERNATIVES
•••••

REFINE STAGE
GOALS & OBJECTIVES // EVALUATION CRITERIA // ANALYSIS // PUBLIC AND STAKEHOLDER INPUT
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

THREE REFINED ALTERNATIVE SOLUTIONS
•••

RECOMMEND STAGE
GOALS & OBJECTIVES // EVALUATION CRITERIA // ANALYSIS // PUBLIC AND STAKEHOLDER INPUT
ELEMENTS // CONSTRAINTS // OPPORTUNITIES

ONE RECOMMENDED ALTERNATIVE SOLUTION
•

INITIAL ALTERNATIVES

Alternatives

- No-Build
- Alternative Solution A – Minimize Conflicts
- Alternative Solution B – Minimal Impacts
- Alternative Solution C – ODOT Standard
- Alternative Solution D – Active Transportation Enhanced

INITIAL ALTERNATIVES: No-Build

No-Build

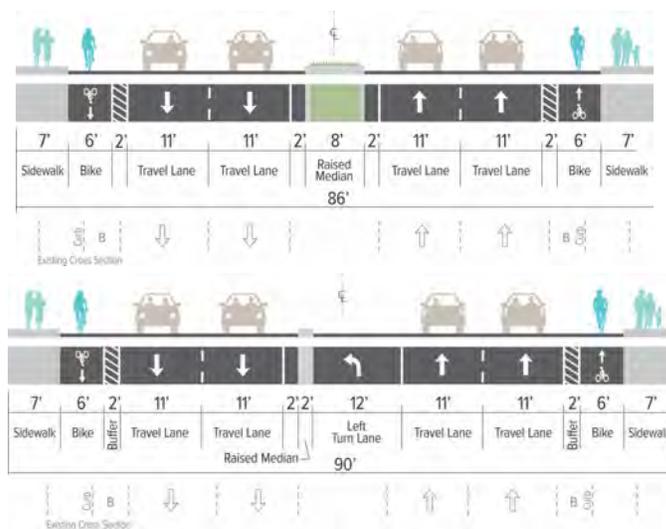
- Only provided as a baseline for comparison

6'	5'	12'	11'	12'	11'	12'	5'	6'
Sidewalk	Bike	Travel Lane	Travel Lane	Center Turn Lane	Travel Lane	Travel Lane	Bike	Sidewalk
80'								

INITIAL ALTERNATIVES: Alternative Solution A (Minimize Conflicts)

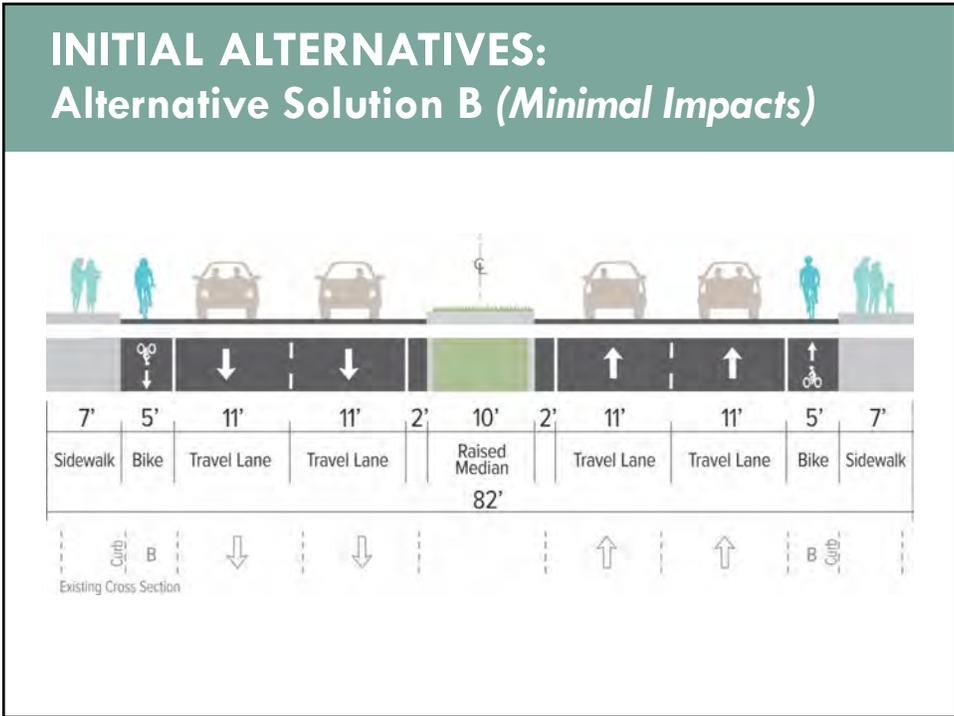
- Reduces turning conflicts the most
- Raised median breaks at arterial and collector streets (14 streets)
 - Fewer openings allows for a narrower median
- Roundabouts replace traffic signals
- Enhanced Corridor transit

INITIAL ALTERNATIVES: Alternative Solution A (Minimize Conflicts)



INITIAL ALTERNATIVES: Alternative Solution B (Minimal Impacts)

- Stays within existing curb lines
- Signalized intersections
- Raised median breaks at arterials, collectors (14 streets) **and local streets where full left turn lanes can be constructed** (7 streets)
- Enhanced Corridor transit

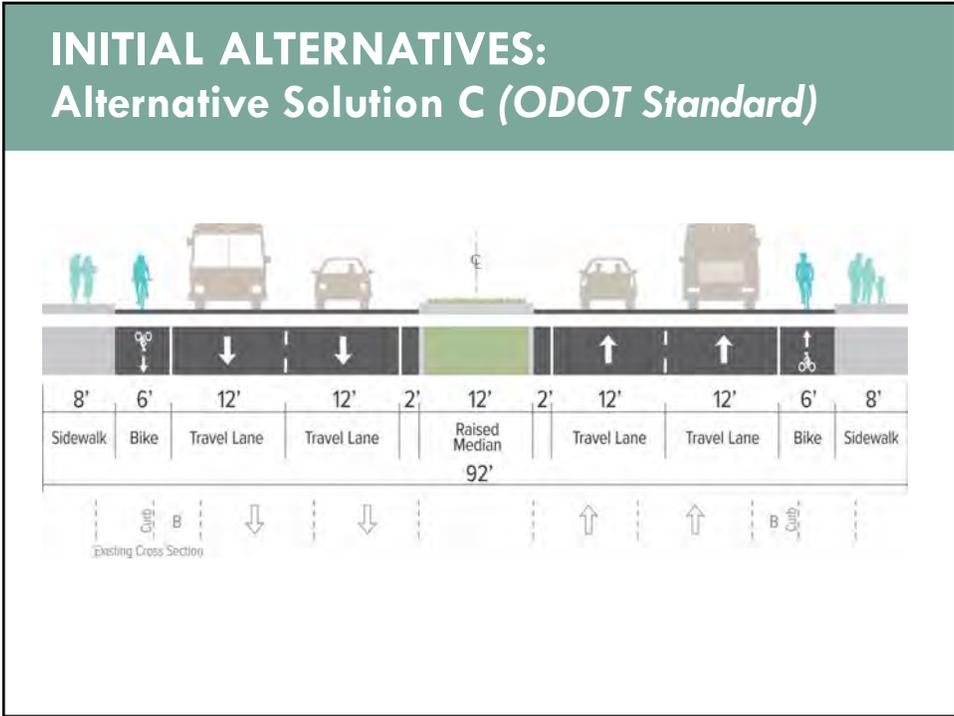


INITIAL ALTERNATIVES:
Alternative Solution C (ODOT Standard)

- Street cross section according to current ODOT standard design
- Raised median breaks at arterials, collectors (14 streets), local streets where full left turn lanes can be constructed (7 streets), **and left turns onto Main Street where feasible (8 streets)**

INITIAL ALTERNATIVES:
Alternative Solution C (ODOT Standard)

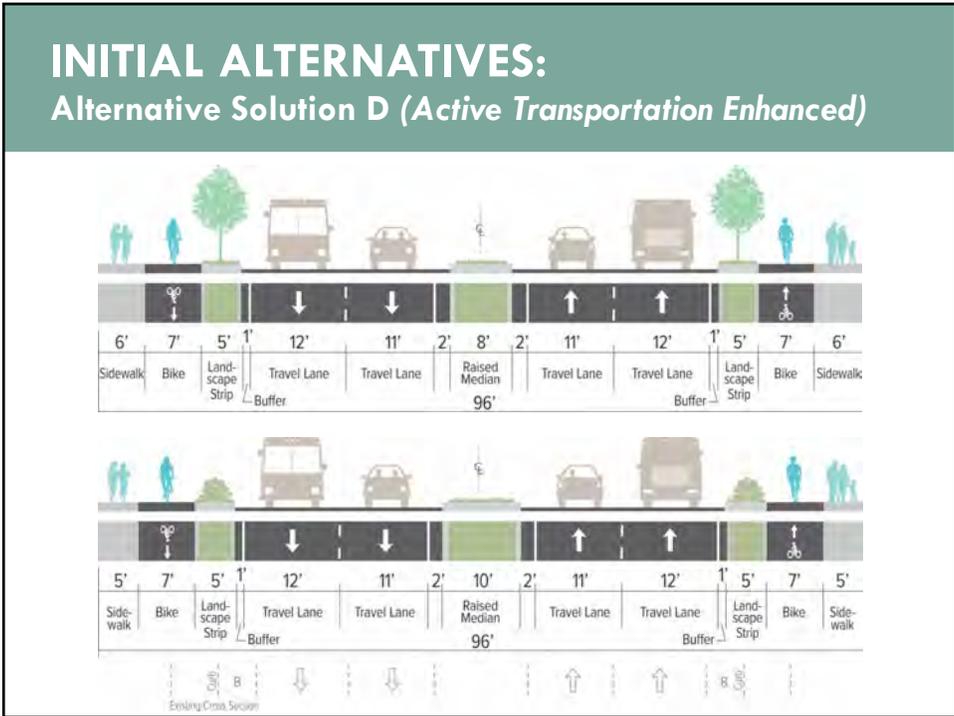
- Most turning movement conflicts
- Signalized intersections
- Enhanced Corridor transit



- ### INITIAL ALTERNATIVES: Alternative Solution D (Active Transportation Enhanced)
- Roundabouts, **plus two new roundabouts to slow speeds and enhance accessibility**
 - Raised median breaks at arterial and collector streets (14 streets)
 - Enhanced Corridor transit

INITIAL ALTERNATIVES: Alternative Solution D (Active Transportation Enhanced)

- Includes raised cycle track behind the curb
- Widest overall footprint (96 feet)
- Only alternative solution with a landscape strip behind the curb



ALTERNATIVE SOLUTIONS ANALYSIS

Qualitative Scoring	Level of Support for Evaluation Criteria
	Strongly Supports
	Moderately Supports
	No Significant Change
	Moderately Conflicts
	Strongly Conflicts

ALTERNATIVE SOLUTIONS ANALYSIS: SAFETY

Crash Type	Future (2040) Predicted Crashes Per Year				
	No-Build	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Multiple Vehicle	98.6	45.7	60.0	60.0	45.2
Single Vehicle	9.1	4.2	5.0	5.0	4.2
Pedestrian	3.1	2.5	2.5	2.5	2.5
Bicycle	1.1	0.4	0.7	0.7	0.4
Total	112	53	68	68	52

ALTERNATIVE SOLUTIONS ANALYSIS: SAFETY

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Safety – Increase the safety of Main Street for all users	Have been demonstrated to result in reducing fatalities and serious injury crashes so that Main Street is not on the statewide high crash list	Potential to reduce the number of crashes resulting in fatalities and serious injuries				
		Potential to improve safety for people walking and biking along and across Main Street				
		Potential to reduce vehicle speeds				
		Number of All Road Transportation Safety (ARTS) and Safety Priority Index System (SPIS) locations addressed				
	Have been demonstrated to result in reducing the frequency of all crashes so that Main Street is not on the statewide high crash list	Potential to reduce the number of crashes				
		Number of ARTS and SPIS locations addressed				

ALTERNATIVE SOLUTIONS ANALYSIS: SAFETY

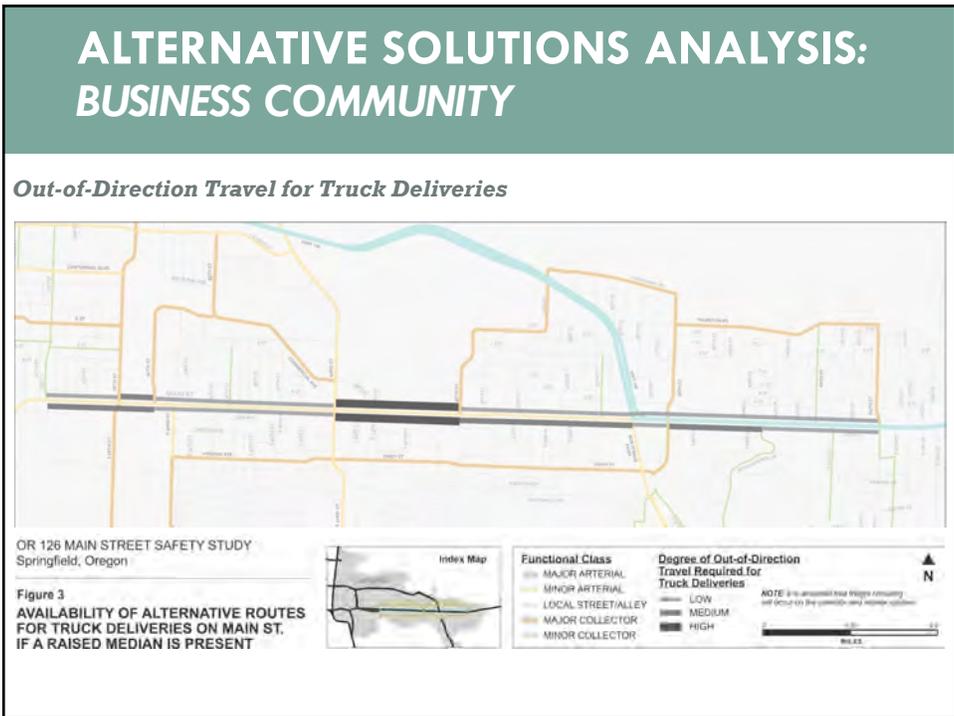
Key Safety Findings

- **Raised medians:** largest contributor to improved safety
- **Roundabouts** significantly reduce crashes; could address problematic intersection areas better compared to **signals**.
- **Buffered bike lanes and cycle tracks** increase separation between cars and people biking; can reduce crashes
- **Systemic safety improvements** can reduce some crashes at a low cost.

ALTERNATIVE SOLUTIONS ANALYSIS: BUSINESS COMMUNITY

Average Increase in Mid-block Travel Times from Raised Medians

	PM Peak Hour (seconds)	
	Eastbound	Westbound
Alt. Sol. A	88	88
Alt. Sol. B	152	189
Alt. Sol. C	149	164
Alt. Sol. D	56	56



ALTERNATIVE SOLUTIONS ANALYSIS: BUSINESS COMMUNITY

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Business Community – Support the viability of existing and future businesses Support the visibility and economic viability of Main Street businesses Support the visibility and economic viability of Main Street businesses; Support the potential for future businesses to locate on Main Street	Provide viable ways for customers and deliveries to patronize/serve businesses along Main Street corridor	Change in travel time to access businesses by customers driving, walking, biking, and busing to Main Street businesses				
		Availability of routes to businesses that are appropriate for truck traffic				
		Potential impacts on business signing visibility				
		Potential to maintain or enhance property values or economic potential of sites along Main Street				

ALTERNATIVE SOLUTIONS ANALYSIS: BUSINESS COMMUNITY

Key Business Community Findings:

- **Maximizing U-turn opportunities** can reduce out-of-direction travel and delay for business access.
- **Roundabouts** improve mid-block travel times and reduce delay to U-turn movements.
- **Roundabouts** allow freight vehicles to make a U-turn at intersections.
- Properly selecting **landscaping** will limit impacts to business signing visibility.

ALTERNATIVE SOLUTIONS ANALYSIS: MOBILITY

Mobility Results:

- **Roundabouts** significantly reduce overall delay (25-35% reduction in corridor through travel time)
- **Signals** will have slightly increase delays compared to No Build (< 5% increase in corridor through travel time)
- Adding more **U-turn opportunities** will reduce pressure on traffic signals/roundabouts
- Mountable **medians** will limit the impact to emergency vehicle travel times

ALTERNATIVE SOLUTIONS ANALYSIS: MOBILITY

Alternative Solution Impacts on Ability to Accommodate Over-Dimension Loads

Typical Minimum Curb-to-Curb Width on Main Street East of Bob Straub Parkway	
No-Build	31 feet
Alternative Solution A	32 feet
Alternative Solution B	29 feet
Alternative Solution C	32 feet
Alternative Solution D	26 feet

ALTERNATIVE SOLUTIONS ANALYSIS: MOBILITY

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Mobility – Ensure people and goods travel efficiently and reliably through the corridor	Maintain or improve the efficiency and reliability of passenger vehicle and transit operations through the corridor; Maintain or improve emergency response times for police, fire and life safety operations	Intersection delay	⬆️	⬆️	⬆️	⬆️
	Maintain or improve emergency response times for police, fire and life safety operations	Average corridor travel time	⬆️	⬆️	⬆️	⬆️
		Travel time reliability	⬆️	⬆️	⬆️	⬆️
	Meet ODOT's freight vehicle mobility standards along Main Street	Delay caused by traversable and non-traversable obstructions	⬆️	⬆️	⬆️	⬆️
	Meet Main Street's functional classifications in the Springfield Transportation System Plan	Potential to meet vehicle-carrying capacity requirements for a Reduction Review Route (east of Bob Straub Pkwy) ^A	⬆️	⬇️	⬆️	⬇️
		Consistency with the functional classification of major arterial east of Bob Straub Pkwy and minor arterial west of Bob Straub Pkwy	⬆️	⬆️	⬆️	⬆️

ALTERNATIVE SOLUTIONS ANALYSIS: MOBILITY

Key Mobility Findings:

- **Roundabouts** reduce delay; meet ODOT mobility targets at nearly all intersections on Main Street.
- **Signalized intersections** will experience more delay; can perform better by allowing more **U-turn opportunities** along the corridor.
- A different **cross section** should be considered east of Bob Straub Parkway.

ALTERNATIVE SOLUTIONS ANALYSIS: TRANSPORTATION CHOICES

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D	
Transportation Choices – Create a multimodal environment that connects people and destinations	Ensure access to services and destinations along Main Street for all members of the community	Frequency of enhanced pedestrian crossing opportunities of Main Street					
		Frequency of enhanced bicycle crossing opportunities of Main Street					
		Continuity of pedestrian and bicycle facilities along Main Street					
	Create safe, comfortable, efficient, and continuous pedestrian and bicycle travel and access along Main Street	Pedestrian level of traffic stress along Main Street					
		Bicycle level of traffic stress along Main Street					
		Opportunity to relocate obstructions (e.g., utility poles, signposts) out of the walkway					
	Support existing transit service and provide flexibility to accommodate Enhanced Corridor transit service in the future	Compatibility with existing and potential future transit service					

ALTERNATIVE SOLUTIONS ANALYSIS: TRANSPORTATION CHOICES

Key Transportation Choices Findings:

- **Buffered bike lanes** or a **cycle track** are needed to make any significant changes to the level of traffic stress experienced by people biking;
- **Landscaped buffers** will help reduce traffic stress for people walking.
- **Raised medians** improve the ability to create enhanced pedestrian and bicycle crossings along Main Street between intersections.
- **Enhanced Corridor transit** in each of the alternative solutions is consistent with LTD’s planned transit service improvements.

ALTERNATIVE SOLUTIONS ANALYSIS: VITAL COMMUNITY

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Vital Community – Support the vitality of the community and its vision for Main Street	Enhance the built and natural environment and stimulate implementation of the Main Street Vision Plan to make it a vibrant place for those who live, work, shop and travel through the corridor	Potential for streetscape improvements to be incorporated into the corridor, such as landscaping, stormwater planters, inviting bus stop amenities and other distinctive amenities				
		Potential to reduce vehicle speeds				
	Connect neighborhood residents to Main Street destinations and services; and transportation options to access the broader region	Alignment of enhanced pedestrian and bicycle crossings with active transportation travel routes to neighborhoods to the north and south				
		Continuity of pedestrian and bicycle facilities along Main Street				
		Directness of routes (for motor vehicles) between neighborhoods and Main Street destinations and services				

ALTERNATIVE SOLUTIONS ANALYSIS: VITAL COMMUNITY

Key Vital Community Findings:

- **Landscaping** has the potential to improve the streetscape; can manage storm water runoff.
- **Roundabouts** can significantly reduce vehicle speeds at intersections. Vertical elements in landscaping or narrower travel lanes may also reduce speed.
- **Raised medians** allow for enhanced crossings and connect people walking and biking to Main Street destinations and services.
- **Median breaks** that allow left-turn access onto Main Street from local streets will create more direct routes for people driving to Main Street destinations.

ALTERNATIVE SOLUTIONS ANALYSIS: FEASIBILITY

Preliminary Planning Level ROW Impacts

- *Main Street and 42nd Street Example*



ALTERNATIVE SOLUTIONS ANALYSIS: FEASIBILITY

	Planning Level Cost Estimate (2019 dollars)
Alternative Solution A	\$105 million (approx. \$22 million per mile)
Alternative Solution B	\$40 million (approx. \$8.5 million per mile)
Alternative Solution C	\$75 million (approx. \$16 million per mile)
Alternative Solution D	\$135 million (approx. \$28 million per mile)

ALTERNATIVE SOLUTIONS ANALYSIS FEASIBILITY

Goal	Objectives <i>Identify infrastructure solutions that:</i>	Solutions Evaluation Criteria	Alt. Sol. A	Alt. Sol. B	Alt. Sol. C	Alt. Sol. D
Feasibility – Develop a plan with a clear and achievable approach to implementation	Can be implemented starting within five years of Facility Plan acknowledgement and maintained with foreseeable resources	Degree to which recommendations can be implemented				
		Consistency with Springfield's TSP and LTD's Community Investment Plan.				
		Ability to maintain improvements with reasonably anticipated resources				
	Can be implemented incrementally as funding is secured	Potential for initial phases to be eligible for ODOT transportation safety funding (All Roads Transportation Safety), or other funding sources that may become available				
	Ensure the cost-effective use of resources	Benefit/Cost ratio of safety-focused improvements				

ALTERNATIVE SOLUTIONS ANALYSIS: FEASIBILITY

Key Feasibility Findings:

- The **raised median** safety benefit significantly outweighs the cost.
- The cost of **roundabouts** are substantial.
- Wider **cross sections** will be more expensive due to larger ROW impacts on adjacent properties.
- A different **cross section** east of Bob Straub Parkway should be considered.
- **Landscaping** will be more expensive to maintain in the buffers and medians than other treatments.

ALTERNATIVE SOLUTIONS ANALYSIS

Questions?

NEXT STEPS / NEXT MEETINGS

Nov-Jan

Community Engagement

Feb/Mar

**TAC #8: Refined Alternative
Solutions & Analysis**