



COLORADO
Department of Transportation
Region 4



ATKINS
Member of the SNC-Lavalin Group

US 34 & MacGregor Avenue Intersection Improvements Open House

December 5, 2018



Agenda

- Welcome / Introductions
- Short Presentation
- Questions / Answers
- Allow Time to View Exhibits
- Opportunity to Provide Comments



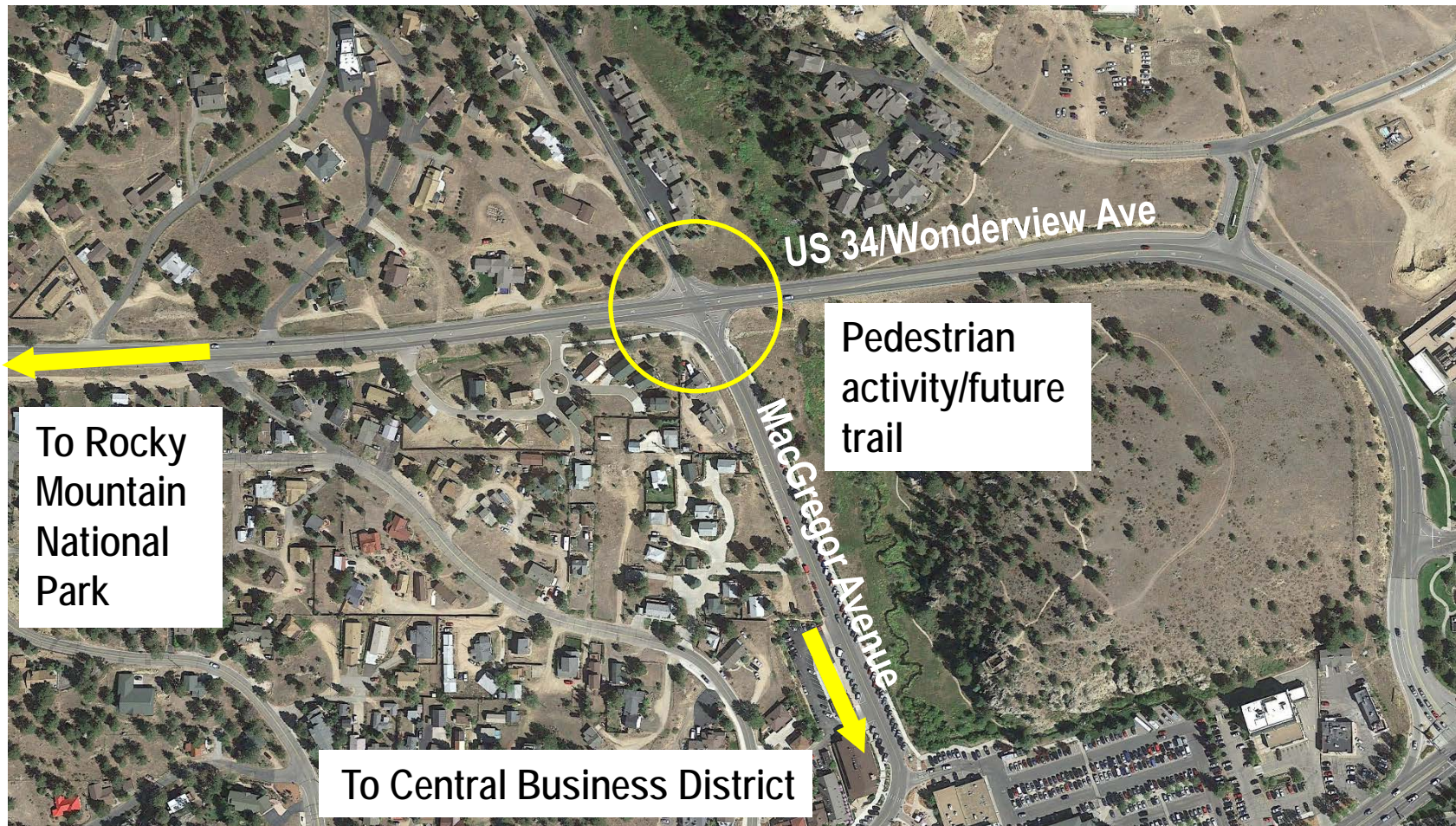


Project Overview and Background

- Intersection identified as candidate for improvements due to operational and safety concerns
- CDOT conducted an Intersection Treatment Study to identify possible improvements
- Project is funded for construction in the Winter/Spring of 2020

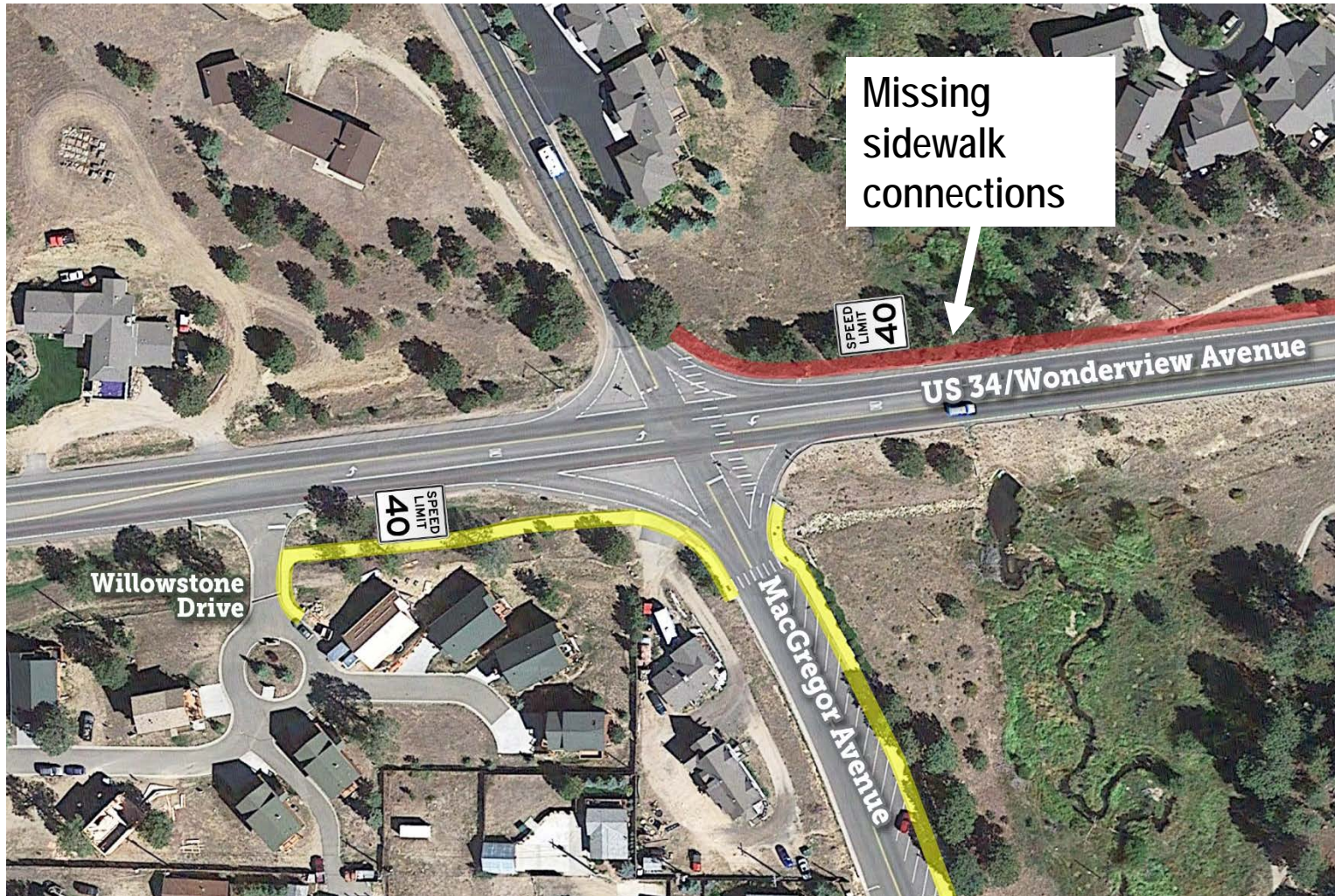


Project Overview and Background





Project Overview and Background



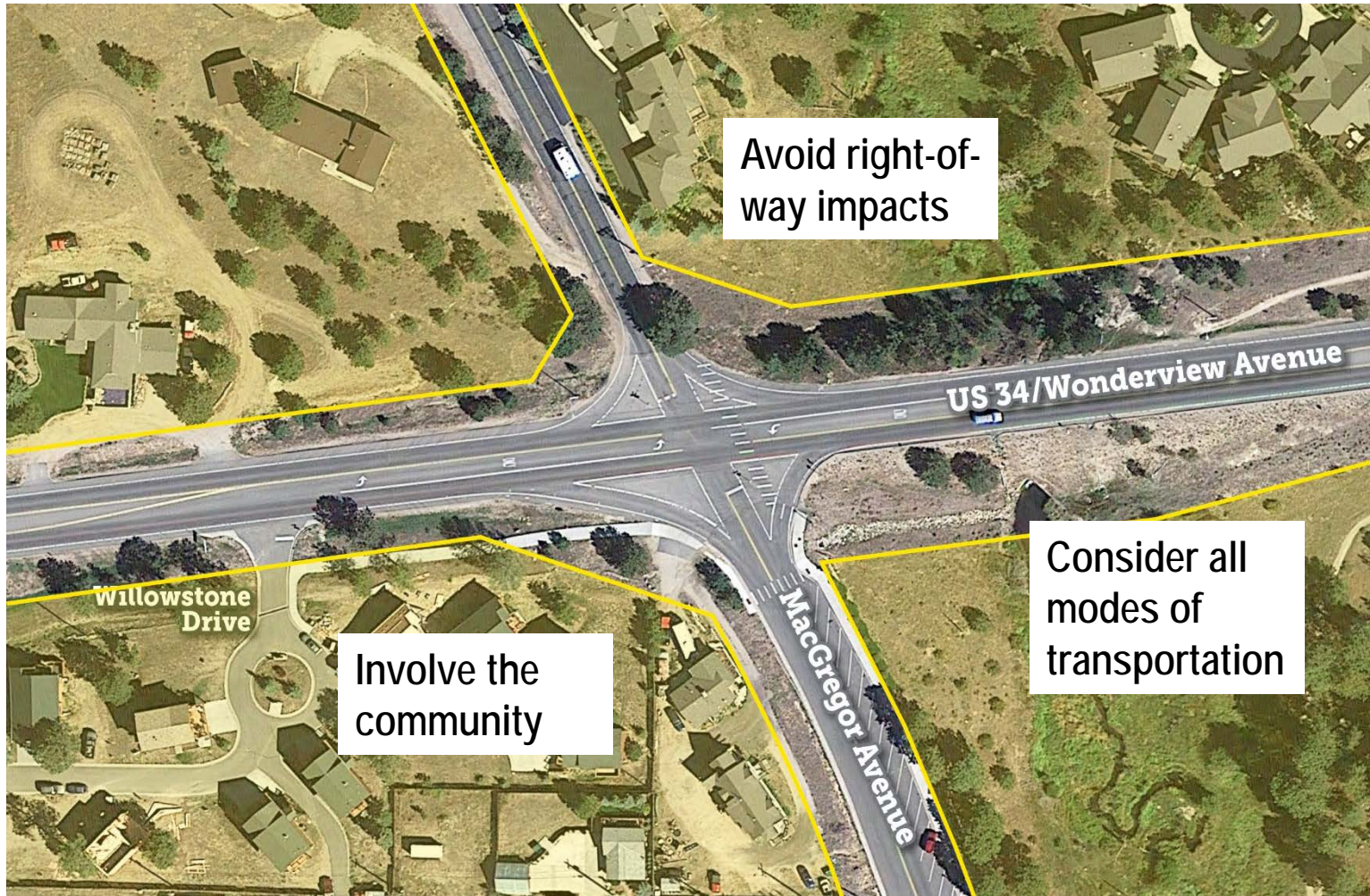


Purpose and Goals

- Improve the intersection to
 - Accommodate traffic volumes now and in the future
 - Improve safety for vehicles, pedestrians, cyclists, and other users
 - Provide cost savings when considering construction, maintenance, traveler delay, and crashes

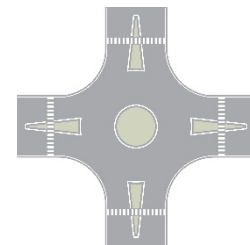
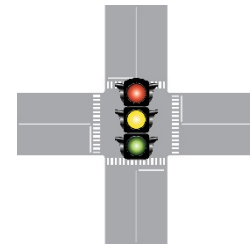
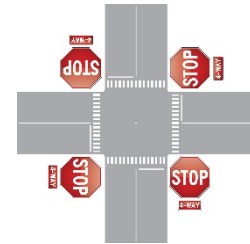
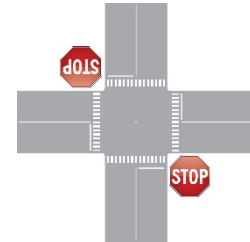


Options Considered



Options Considered

- No-Action – Leave intersection as a two-way stop control
- Build Option #1 – Make the intersection a four-way stop
- Build Option #2 – Install a traffic control signal
- Build Option #3 – Construct a roundabout



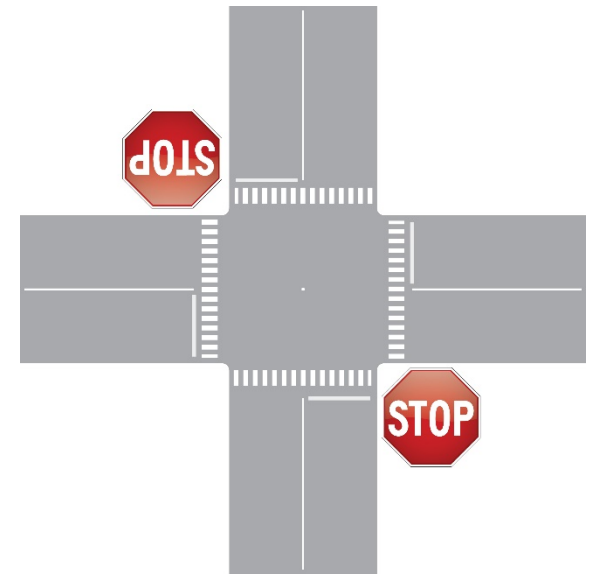


Intersection Treatment Study

- Evaluated each option to determine which one did the best job at addressing the project goals
 - Operations – How well will the intersection process vehicles (delay)
 - Safety – Will the option reduce conflicts and crashes
 - Costs – Which option will lower costs over the next 20-years (expected life-cycle)

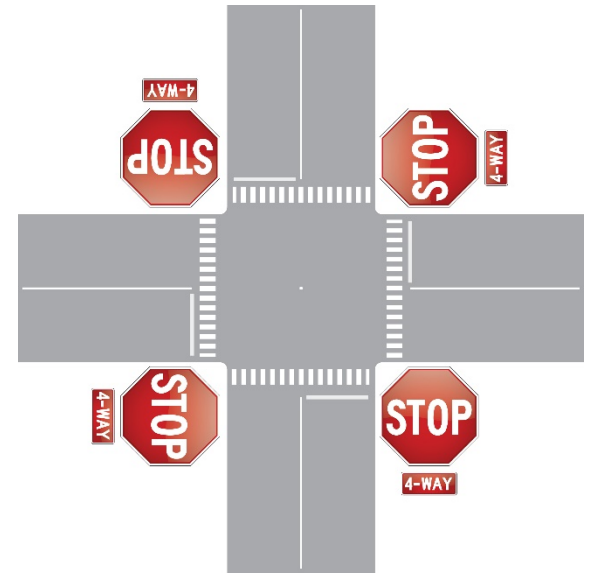
Results - Two-way stop

- Very high delay for drivers (especially on MacGregor Avenue)
- Will not reduce the number of conflict points
- Highest number of expected crashes
- Highest overall costs



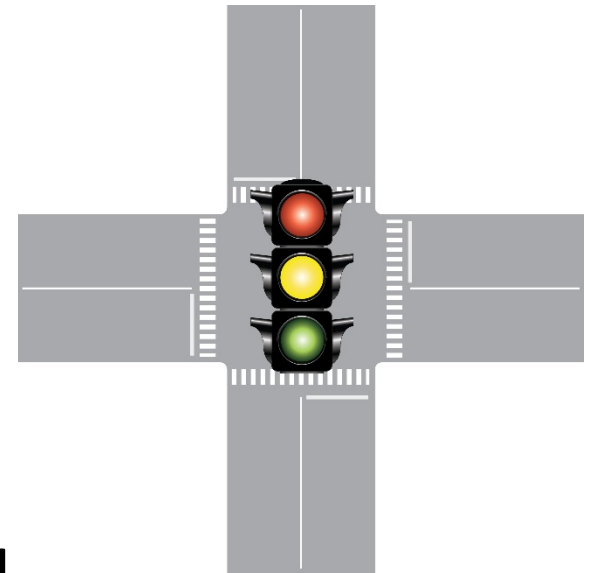
Results - Four-way stop

- Operations not much better than a two-way stop
- Will not reduce the number of conflict points
- Will do a good job are reducing crashes
- Cost would be high (lower than two-way stop)



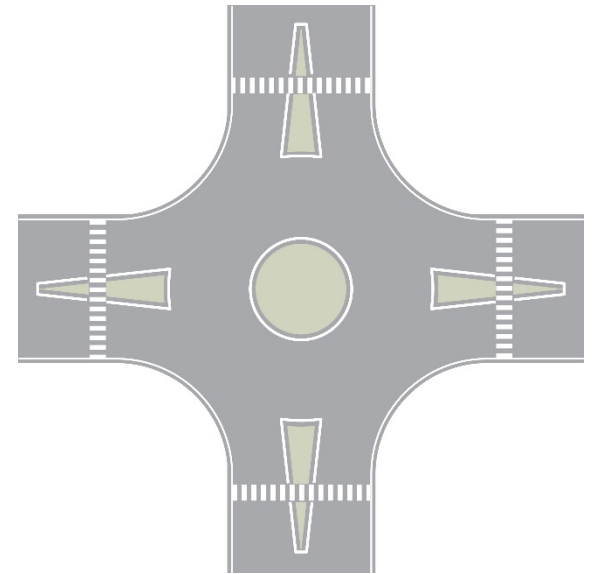
Results - Traffic signal

- Operations would be much better than either stop option
- Will not reduce the number of conflict points
- Will not reduce crashes as well as the four-way stop
- Cost would be lower than the two stop options



Results - Roundabout

- Will have the best operations for all vehicles
- Will have the lowest number of conflict points
- Will have the lowest number of expected crashes
- Will have the lowest costs over the next 20-years



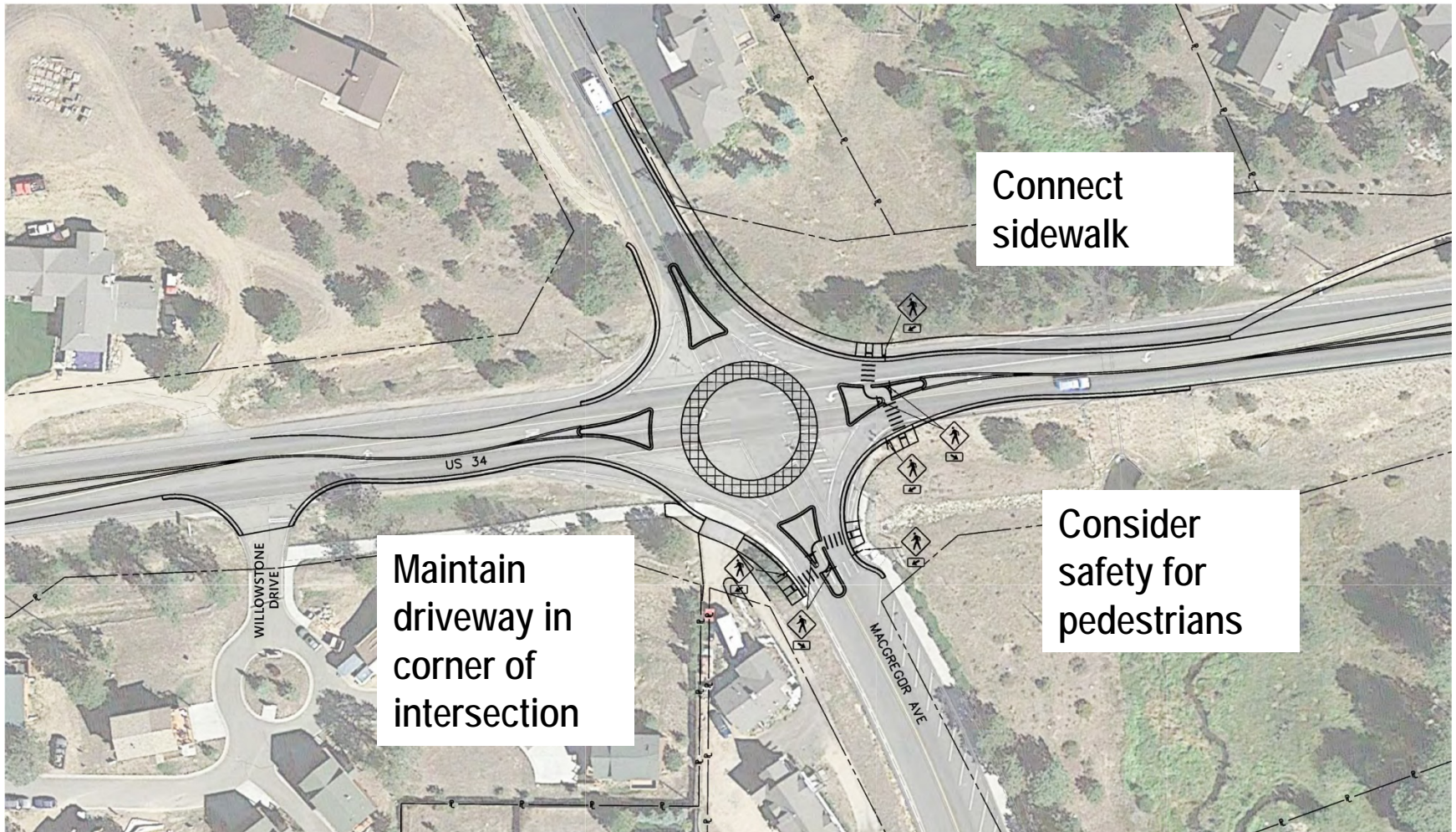


Next Steps/Critical Issues

- Move forward with design of roundabout
- Address driveway access
- Incorporate best practices to accommodate pedestrians/cyclists
- Fill in missing sidewalk connectivity
- Accommodate snow removal equipment and storage
- Minimize design while accommodating proper design vehicle size



Preliminary Design Option 1



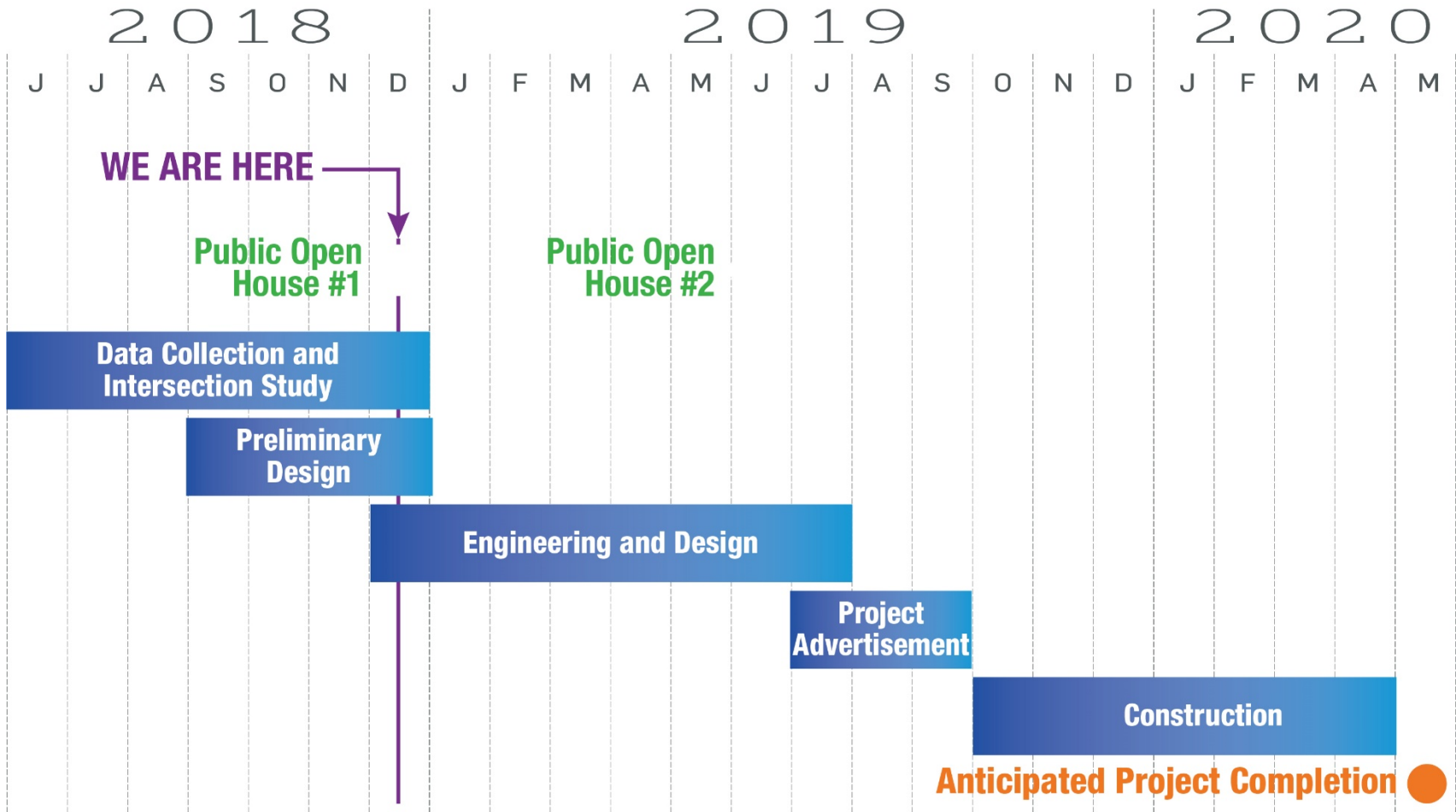


Preliminary Design Option 2





Project Schedule





Questions

