

Staff Report

UPDATE ON ROUNDABOUT IMPROVEMENTS AT G.W. CARVER AND CAMERON SCHOOL ROAD

August 11, 2026

BACKGROUND:

The intersection of G.W. Carver Avenue and Cameron School Road lies along the boundary between the City of Ames and Story County. The intersection has been identified as a critical location for future transportation improvements because of current rural commute patterns and the projected traffic growth associated with planned and approved development in northwest Ames, including The Bluffs at Dankbar Farms and the proposed Greenbriar development. This need was first identified with the Dankbar project's traffic study.

Subsequent to the City's annexation and approval of the Dankbar project, the Ames Area Metropolitan Planning Organization (AAMPO) updated the long-range transportation plan with planned north growth. **The 2050 Metropolitan Transportation Plan (MTP) developed by the AAMPO identifies that with full buildout of north growth a roundabout at this location, Project N-47, is the preferred long-term improvement compared with the base assumption of a traffic signal improvement.**

The anticipated roundabout benefits include speed management, improved safety, better multimodal access, and lower long-term operating and maintenance costs. **However, this project is not included as a short-term project in the fiscally constrained program of the MTP as it was assumed to be a developer-funded project at the time of the plan's adoption.**

The existing Dankbar development agreement contemplated developer-funded turn-lane improvements and eventual traffic signalization, not a roundabout. The developer estimated their turn lane obligations to cost \$1.2 million and requested a 10-year TIF rebate as an incentive for the project.

In December 2025, the City Council supported up to \$1 million of TIF rebate over 10 years to the developer for the lane widening as part of the City's overall housing development incentives. **The City Council separately directed staff to pursue a roundabout intersection project with Story County that would be coordinated by the City, not a developer, in lieu of individual developer-constructed intersection improvements discussed with the housing incentives.**

Funding for the roundabout included assumptions of an Iowa Department of Transportation (DOT) grant, Story County funding, developer contributions, and the use

of City funds as incentives related to the Dankbar and Greenbriar projects. A determination of the funding share related to the Dankbar project was deferred at the time of The Bluffs Final Plat approval on June 9.

Planning-level estimates at the time of the incentive discussion in December 2025 anticipated that the roundabout and associated corridor improvements would cost approximately \$3 million. Preliminary engineering was required to establish the project limits, right-of-way impacts, drainage requirements, and a more detailed Opinion of Probable Construction Cost.

On January 30, 2026, the City of Ames Mayor sent a request to Story County for a partnership with the City in evaluating the roundabout alternative. Story County approved moving forward with preliminary engineering on February 10, 2026. On February 24, 2026, the City Council approved a Memorandum of Understanding (MOU) with Story County.

Under the MOU, the City and County agreed to share equally in the cost of preliminary engineering and preparation of a Traffic Safety Improvement Program (TSIP) grant application, with Story County's participation capped at \$50,000. The MOU does not obligate either party to proceed with final design or construction. On April 28, 2026, the City Council approved a professional services agreement with Bolton & Menk, Inc. for preliminary design and preparation of the TSIP application in an amount not to exceed \$60,728.

DESIGN ALTERNATIVES:

Attached to this staff report is an [appendix](#) that contains more detailed information on the four design alternatives and associated project cost estimates that were developed by Bolton and Menk. **Only two of the design alternatives are being considered in this report. These two represent the best technical solutions and are the most practical choices for addressing the necessary intersection improvements and are presented below:**

Design Alternative A: Roundabout

This alternative includes the construction of a single-lane roundabout at G.W. Carver Avenue and Cameron School Road, together with the associated approach, drainage, pedestrian, and other supporting improvements. This alternative supports the lower-speed (35 MPH), urban, and multimodal corridor identified in the AAMPO 2050 Metropolitan Transportation Plan and addresses the same intersection-improvement need contemplated by the Dankbar development agreement.

Design Alternative D: Traffic Signal with Lane Widening

This alternative includes installation of a traffic signal and construction of only the necessary turn lanes while retaining the existing two-lane pavement where practical. The roadway maintains a higher-speed corridor (45 MPH), but would be widened by approximately one lane through the rural section. The east leg of the intersection is assumed to require full reconstruction because of the existing roadway alignment. This alternative represents the minimum practical signalized improvement and is based on planning-level assumptions for earthwork and storm sewer needs.

PROJECT COST ESTIMATES:

City staff reviewed the consultant's estimated quantities and applied average historical City of Ames bid prices for the two alternative identified above. For project budgeting, the resulting construction costs were estimated with a 5% construction contingency applied, and an additional 20% was included for design and administration.

Design Alternative	Estimated Construction Expense (With 5% Contingency)	Overall Project Expense (With 20% Design and Administration)
Alternative A: Roundabout	\$3,154,200	\$3,785,040
Alternative D: Traffic Signal with Lane Widening	\$2,027,550	\$2,433,060

These preliminary estimates do not include permanent right-of-way or temporary easement acquisition. Any acquisition costs will be identified as the project and adjacent development plans advance and will be incorporated into the project budget before final design and bidding. It is estimated that any costs would be nominal and likely less than \$5,000. However, any acquisition from the Dankbar or Greenbriar sites would be at no cost.

PROJECT REVENUES:

The funding amounts shown below are planning assumptions and no funding agreements have been finalized. The requested \$500,000 TSIP grant is applicable only to the roundabout.

The Story County funding amount represents 25% of project costs in Alternative A, after taking into account grant funding and developer cash contributions. The Story County funding amount for Alternative D represents 25% of the cost of the traffic signal only. It does not include any funding associated with the lane widening.

Story County's share is proposed at 25% because one of the four quadrants of the intersection is located within Story County's jurisdiction. It is important to note that these amounts are not a commitment and would require an additional funding agreement with the County. The Story County Board of Supervisors is reviewing the same roundabout study and cost estimates at its August 11 meeting.

The \$200,000 additional developer cash contribution in both Alternative A and D has been verbally agreed to by the Developer. The remaining developer and projected TIF amounts remain subject to the applicable development agreements, minimum assessment agreements, and future City Council action.

Funding source	Roundabout Alternative A	Signal – Widening Only Alternative D	Funding Assumption
City ARPA Funding	\$820,000	\$820,000	Previously identified City funding for Greenbriar Housing Development Incentive
Iowa DOT TSIP	\$500,000	\$0	Requested for Alternative A, subject to grant award. Not eligible for Alternate D.
Previous traffic-signal contribution	\$135,000	\$135,000	Assumed available for the intersection improvement
Additional Developer cash contribution	\$200,000	\$200,000	Assumed based off verbal agreement with Developer
Story County participation (25% of project cost)	\$738,000	\$125,000	Alternative A amount is based on initial discussions of 25% of the project cost after grant and cash contributions. Alternative D is an assumption based off 25% of the traffic cost of the signal itself. Neither option represents a commitment and would require a funding agreement with Story County.
Dankbar Development TIF Assumption	\$1,000,000	\$1,000,000	Alternative D reflects the original lane-widening obligation with a \$1 million TIF rebate to developer; Alternative A reflects the previously assumed \$1 million TIF to the developer, but instead collected directly by the City.
SUBTOTAL OF ASSUMED FUNDING	\$3,393,000	\$2,280,000	
Remaining funding required	\$392,040	\$153,060	Additional funding to be finalized through agreements and/or City funding. This funding would likely be from TIF and/or MPO funding depending upon the option Council chooses.
Total project funding	\$3,785,040	\$2,433,060	

This preliminary comparison considers only initial project costs and funding assumptions; it does not account for the alternatives' ongoing operation and maintenance costs or the long-term safety benefits associated with the roundabout's anticipated crash reduction over the life of the project.

Because several funding sources have not been committed, the final City funding requirement cannot yet be determined. Any remaining balance after grant, County, TIF-support, and developer funding is finalized may require General Obligation bonds, AAMPO funds, or another City funding source. With relatively similar remaining funding gaps under the current assumptions, the comparison can focus primarily on the long-term operational, safety, speed-management, multimodal, corridor-character, and maintenance implications of the two intersection treatments.

TSIP GRANT APPLICATION:

Bolton & Menk has prepared a draft application requesting \$500,000 from the Iowa DOT Traffic Safety Improvement Program (TSIP). The application is based on the Alternative A roundabout project and identifies the safety-related portion of the construction work. Award of the grant is evaluated based upon the safety improvements that can be achieved through a project. The Story County Board of Supervisors is anticipated to provide a letter of support for the project and TSIP application at its August 11, 2026 meeting. Applications for the TSIP grant are due on August 15, 2026.

The draft application identifies the following safety benefits:

- Conversion of the existing two-way stop-controlled intersection to a single-lane roundabout.
- Reduction in vehicle conflict points from 32 to 8.
- Improved speed management at the transition into the developing urban area.
- Improved pedestrian and shared-use path crossings.
- Continued acceptable operation at Level of Service A under projected traffic volumes.
- **A projected crash reduction of approximately 65%.**
- **A favorable safety benefit-cost ratio of 2.76.**

The analysis estimates that the roundabout would reduce crashes by approximately 65% over its anticipated service life. A benefit-cost ratio of 2.76 means the estimated present value of the project's safety benefits is 2.76 times the present value of its implementation and maintenance costs. A ratio greater than 1.0 indicates that the estimated benefits exceed the estimated costs.

OPTIONS:

The options below focus on the primary decision of whether the long-term intersection treatment should be a roundabout or a traffic signal, as well as the timing and funding strategy for the selected improvement.

OPTION 1: ROUNDABOUT (ALTERNATIVE A):

Under this option, the City Council would select the roundabout as the preferred long-term intersection treatment and proceed using the preliminary design. The project would establish a transition from the existing 45 mph corridor to a 35 mph posted-speed environment through

the corridor.

The current project cost estimate for Alternative A is \$3,785,040. Staff would submit the requested \$500,000 TSIP grant application and continue coordinating with Story County and the affected developers. The funding plan assumes \$738,000 of Story County participation, representing approximately 25% of the estimated project cost less grant and developer cash funding. This is not a County commitment and would require an additional funding agreement.

The assumed County, developer, TIF-supported, grant, and City funding amounts would need to be finalized before the project advances into final design and bidding.

Based on the preliminary funding assumptions, the estimated remaining funding need is \$392,040 that is expected to be funded through the use of TIF by the City from the development in the abutting Bluffs project.

Once the funding responsibilities are sufficiently defined, staff would return to the City Council with the proposed funding agreements and a professional services agreement for final design. **Final design is anticipated to begin after July 1, 2027, followed by a potential project letting in late 2027/early 2028 and construction in 2028. This schedule generally corresponds with anticipated development along the corridor.**

The roundabout would reduce vehicle speeds and eliminate high-speed crossing and left-turn conflicts. The safety analysis prepared for the TSIP application estimates an approximately 65% reduction in crashes over the anticipated service life of the improvement.

The roundabout would operate at Level of Service A under the 2027 and 2050 traffic forecasts and would support a lower-speed, urban, and multimodal corridor with lower long-term operating and maintenance requirements than a traffic signal. **It is estimated that a roundabout alternative would save \$10,000 - \$15,000 annually in operating and future signal replacement expenses.**

OPTION 2: TRAFFIC SIGNAL WITH LANE WIDENING (ALTERNATIVE D):

Under this option, the City Council would not proceed with the roundabout and would instead select the widening-only traffic signal alternative.

The existing two-lane pavement would generally remain in place, and pavement would be added where necessary to provide the recommended turn lanes. The widening would be completed as a developer improvement, with the traffic signal installed at a later date when traffic conditions and development timing warrant installation.

The Alternative D estimate includes both the roadway widening and the future traffic signal. The east leg of the intersection is assumed to require reconstruction because of the existing roadway geometry. Future roadway reconstruction and development-specific improvements could be completed separately.

The current project cost estimate for Alternative D is \$2,433,060. There would be no TSIP fund because the traffic signal option would not be eligible. Staff would continue

coordinating with Story County and the affected developers.

One of the four traffic-signal poles would be located within Story County right-of-way, requiring additional coordination with the County and a request for future financial participation for 25% of the signal cost amounting to an estimated \$125,000 would be negotiated with Story County.

No Story County funding for widening is included in the current Alternative D funding assumptions. The widening along G.W. Carver Avenue would be completed as a developer improvement, and Story County would not participate in the roadway-widening costs.

Based on the preliminary funding assumptions, the estimated remaining funding need is \$153,060 that is expected to be funded through the use of TIF by the City from the development in the abutting Bluffs project.

When installed, a traffic signal could provide protected-turn phases and dedicated pedestrian intervals, but it is not the preferred long-term improvement identified in the AAMPO 2050 Metropolitan Transportation Plan.

The corridor would remain posted at 45 mph and would retain higher-speed crossing and turning conflicts. The traffic impact and safety analyses indicate negligible crash reduction from a signal alone and an approximately 25% reduction in crashes when the recommended left-turn lanes are included, compared with the approximately 65% reduction estimated for the roundabout.

The preliminary traffic analysis identifies approximately 450 feet between Cameron School Road and Columbus Drive, which limits the available distance for turn-lane storage and transitions. Because the turn-lane improvements would extend through the Columbus Drive intersection, Columbus Drive may need to be converted to right-in/right-out access, requiring left-turning traffic to use alternate routes.

The 45 mph design would require longer roadway taper transitions, retain a more suburban corridor character, and make comfortable pedestrian and bicycle crossings more difficult. A traffic signal would also require ongoing electrical service, equipment maintenance, and periodic replacement.

OPTION 3: ROUNDABOUT ALTERNATIVE A BUT DEFER THE PROJECT, REQUEST TO AMEND THE AAMPO METROPOLITAN TRANSPORTATION PLAN, AND PURSUE AAMPO STBG FUNDING IN FFY 2034 OR LATER:

Under this option, the City Council would select the roundabout as the preferred long-term intersection treatment, but delay final design and construction until federal-aid funding may become available through AAMPO's Surface Transportation Block Grant (STBG) program.

Based on current AAMPO funding forecasts and the projects anticipated to compete for those funds, FFY 2034 (October 2033–September 2034) is the earliest year STBG funding could reasonably be expected.

The project would be programmed in the Capital Improvements Plan accordingly, and the

corridor would remain posted at 45 mph until the roundabout is constructed. Staff would also continue to protect the anticipated roundabout footprint through development agreements, access decisions, right-of-way dedication, and easement coordination prior to construction.

Securing STBG funding would require two separate AAMPO actions, neither of which can be guaranteed. First, although the adopted AAMPO 2050 Metropolitan Transportation Plan (MTP) identifies the roundabout, Project N-47, as the preferred long-term improvement, the project is not included in the MTP's fiscally constrained program because it was assumed to be developer funded. **AAMPO would need to amend the MTP to include the project as a short-term improvement within the fiscally constrained program before it would be eligible for STBG funding.**

Second, an MTP amendment alone does not provide funding. **The project would also need to be submitted through AAMPO's annual competitive STBG application cycle, selected for award over other regional projects, and programmed in the Transportation Improvement Program (TIP).**

Because the intersection lies on the boundary between the City of Ames and Story County and both jurisdictions have authority over portions of it, the City and County would need to submit a joint STBG application. This would require a funding agreement between the two jurisdictions in advance of the application, including designation of the lead agency for federal-aid project delivery.

Deferral would also increase the cost of the improvement. **Applying 3% annual inflation over eight years to the current \$3,785,040 planning-level estimate results in an estimated 2034 project cost of approximately \$4,795,000.** This estimate would need to be reevaluated as development conditions and project requirements change.

An STBG award would require a 20% local match, consistent with AAMPO's standard 80/20 federal/local split. Against the escalated estimate, the local share for construction would be approximately \$959,000. Because the Iowa DOT Traffic Safety Improvement Program is a state rather than federal program, a TSIP award could be applied toward that match. **However, the City should not assume a 2026 TSIP award could be retained until construction in 2034. A new application would likely be required at the appropriate point in the modified schedule, with no assurance of award. In this option staff would not recommend applying for the TSIP grant in 2026, but rather wait until the project is closer to construction.**

This option would require a substantially different funding strategy from Option 1, and the \$392,040 remaining funding need shown for Alternative A does not apply. The project would rely primarily on future STBG funding and the required local match, and would likely not include the currently assumed TIF-supported funding. The amount and source of the local match, including any future City or County participation, would be determined when the project is programmed.

Before final design begins, staff would reevaluate traffic conditions, adjacent development, and project limits, and would identify any interim improvements needed to accommodate traffic growth in the meantime. **This option retains the long-term safety, speed-management, multimodal, and corridor-character benefits of the roundabout, but delays those benefits (and the capacity improvements needed to serve area growth)**

until construction is complete.

The project delay comes with an increased cost in the improvement and would reallocate funding that is typically used for street reconstruction projects in the City of Ames CIP.

STAFF COMMENTS:

Option 1 presents the best solution to advance the intersection improvement while the surrounding area is developing. It is consistent with the AAMPO 2050 Metropolitan Transportation Plan, and provides the roundabout's anticipated safety, speed-management, and multimodal benefits on the earliest schedule. Option 1 also takes advantage of TSIP grant funding to help fund the improvements.

Under Option 1, staff will finalize the TSIP application and submit it to the Iowa DOT by the August 2026 deadline. Submission of the application would not authorize final design, property acquisition, bidding, or construction. It would preserve the City's opportunity to obtain up to \$500,000 in state safety funding while the remaining project funding, cost allocations, and responsibilities are finalized.

Option 1 also requires that finalized developer agreements and TIF agreements are successfully negotiated in order to provide the necessary revenues to fund the project.

Option 1 is contingent upon agreements between Story County and the City of Ames for 25% of the cost as shown. Story County's share is proposed at 25% because the one of the four quadrants of the intersection is located within Story County's jurisdiction. Staff has requested through consultation with the County Engineer that the Board of Supervisors address at their August 11th meeting the assumed funding participation and whether to proceed with the TSIP application consistent with these assumptions.

With this option and Story County's concurrence, the City would apply for the state grant by August 15, 2026. Staff will return to the City Council with the proposed funding plan, cost allocations, intergovernmental and development agreements, and professional services agreement for approval before entering into final design or otherwise committing the City to construct the project.

If the Story County Board of Supervisors, at its August 11 meeting, does not support the TSIP application or indicates that the County's funding participation percentage would be less than the 25% in the table above, there would not be adequate funding to support the roundabout construction as noted in Option 1.

In this scenario, staff would recommend that the City Council chose Option 2 which would widen the existing pavement and install a traffic signal in lieu of the roundabout. No application would be made regarding TSIP grant funding as it is not eligible to fund a traffic signal improvement at this location.

ATTACHMENT(S):

Roundabout PRELIMINARY DESIGN FIGURE
ROW Figure
TSIP - Benefit Cost Estimate
GW Carver Report Design Alternatives.pdf