CITY OF BLOOMINGTON

TRANSPORTATION COMMISSION

October 20, 2025 @ 5:30 p.m.

Commissioner:	Term:	Appointed by:
Rick Coppock	07/01/2025 - 07/01/2027	Board of Public Works
John Connell	03/25/2025 - 03/25/2027	Public Transportation Corporation (BT)
Eoban Binder	02/01/2025 - 01/31/2027	Common Council
Stephen Volan	02/01/2025 - 01/31/2027	Common Council
Brian Drummy	02/01/2025 - 01/31/2027	Common Council
Matt Flaherty	01/01/2024 - 12/31/2027	Council Ex-Officio
Lesley Davis	02/01/2025 - 01/31/2027	Mayor
Vacant		M-2 (Mayor Appointment)
Mark Stosberg	05/09/2025 - 05/09/2027	Plan Commission

In-person:
City Hall, 401 N. Morton St.
Common Council
Chambers, Room #115

Virtual:
https://bton.in/TCmeet
Zoom Meeting ID:
635 944 1221
Passcode: COBPT

Submit Public Comment:
https://bton.in/TCpcf

City of Bloomington: Transportation Commission

In-person:
City Hall, 401 N. Morton St.
Common Council Chambers, Room #115

Virtual:
https://bton.in/TCmeet
Zoom Meeting ID: 635 944 1221
Passcode: COBPT

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1. **ROLL CALL**
2. **APPROVAL OF MINUTES***
    a. September 15, 2025
3. **REPORTS AND COMMUNICATIONS**
    a. From Commissioners
    b. From Staff
        i. Administrative Updates
        ii. 180 Day Order Update
        iii. Fatal Crash Report
        iv. Outdoor Dining in Downtown Corridor
        v. Summit District PUD and Transportation Improvements
4. **CASES (PETITIONS, RESOLUTIONS, TRANSPORTATION INQUIRIES)***
    a. TC-I-25-10 - Matlock Heights Parking Restrictions
    b. TC-I-25-11 - N Walnut & Blue Ridge Intersection Area Improvements
5. **DISCUSSION OF TOPICS NOT ON THE DOCKET**
6. **GENERAL PUBLIC COMMENT ON ITEMS NOT ON THE DOCKET**
7. **ADJOURNMENT**

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* = Agenda items seeking for a Commission vote

Auxiliary aids for people with disabilities are available upon request with adequate notice. Please call **812-349-3429** or e-mail **human.rights@bloomington.in.gov**

The City offers virtual options, including CATS public access television (live and tape delayed) found at https://catstv.net/

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact **Iris Bull** at **iris.bull@bloomington.in.gov** and provide your name, contact information, and a link to or description of the resource you are having problems with.

Transportation Commission Meeting Minutes

September 15, 2025

A meeting of the City of Bloomington Transportation Commission was held in City Council Chambers at 401 N Morton Street in Room #115 on September 15, 2025 at 5:30 PM. A virtual room was simultaneously hosted on Zoom at the following link: https://bton.in/TCmeet [Zoom Meeting ID: 635 944 1221; Passcode: COBPT]. The meeting was presented by staff member Ryan Robling.

Video archives of Transportation Commission meetings are maintained by CATS. Unless otherwise noted, all times noted in the meeting minutes are a reference to the approximate time stamp of the session recording according to [HH:MM:SS] (hour mark, hour mark: minute mark, minute mark: second mark, second mark). Information about the video archive and other documents maintained by the Transportation Commission are maintained on its dedicated website, as well as the City of Bloomington's OnBoard platform. Residents are encouraged to submit public comments to the Transportation Commission in-person or online. To expedite concerns about existing transportation infrastructure, residents are also encouraged to file a uReport ticket.

ROLL CALL

COMMISSIONERS SORTED BY IN ORDER OF APPOINTMENT

In-person: Rick Coppock
John Connell by proxy: Shelley Strimaitis
Stephen Volan
Matt Flaherty
Lesley Davis
Mark Stosberg

Absent: Brian Drummy

City Staff: Ryan Robling
Iris Bull
Andrew Cibor
Driss Tahir
Hank Duncan
Kendall Knoke
Michelle Wahl *(Virtual)*
Adam Wason *(Virtual)*

APPROVAL OF MINUTES

- **Approve meeting minutes from July 21, 2025 [00:01:45]**

  Stosberg made a motion to adopt meeting minutes. Flaherty seconded the motion.

  Discussion:

  Flaherty noted that full narrative minutes are not required for meeting documentation, especially when video recordings of a session are available. Bull acknowledged that the meeting minutes for the July session were extensive, and they remarked that future minutes may be more brief. Flaherty noted no preference in particular.

  Volan noted an error in the template description for the minutes and recommended adding time codes for specific agenda items. Volan noted unique advantages of narrative minutes as guide for reviewing video documentation. Volan also noted appreciation for packet bookmarking.

  Volan moved to approve July 21, 2025 meeting minutes by a voice vote. The meeting minutes were approved unanimously. [00:05:48]

REPORTS AND COMMUNICATIONS

- **Report from Commissioner Volan [00:06:20]**

  Volan noted that the Commission is still working through the development of procedures that reflect the deliberative agendas of the three commissions it assumed. Volan encouraged other commissioners to ask questions and express ideas, no matter how rudimentary. Volan also apologized for the absence of CATS at the July session, noting that the work camera operators perform is valuable for the Commission, as well as the public.

- **180 Day Order Update [00:07:53]**

  Cibor presented a report on the implementation of two new 180 Day Orders. One Order was an extension of a previous Order for the four, all-way stop intersections along 7th St. A new Order was issued in response to Commission activity at the July meeting, where commissioners approved the installation of stops signs along two intersections: E 13th and N Woodlawn, and E 13th and N Indiana Ave. Cibor noted a desire to install the Orders before the arrival of new students for the Fall 2025 term.

  Discussion:

  Volan asked for clarification on how many orders are currently enforced. Cibor observed that the naming schema for Orders indexes the number of issued orders for the year, so to date there are 8 active orders. Volan asked for clarification on how

commonly Orders are issued and what a high number for the year might be. Cibor clarified that 8 Orders for a year is on the higher end of an average. Volan asked if an archive of Orders is available online. Cibor clarified that the Orders are published online by virtue of their inclusion into the Transportation Commission packets, but that he has not previously received a request to publish an archive of Orders. Volan expressed a desire to see a virtual archive of Orders developed, such that each Order was provided a unique URL, and linked on the Transportation Commission website. Cibor replied that the request would be considered. Volan also requested that the Transportation Commission report on 180 Orders foreground the date that the Orders are issued and the date they take effect, perhaps in the document headers or subject description).

Flaherty asked for an update on the City Administration's legal position on whether or not City Council will take action on transportation matters, whether or not municipal code will be changed so that matters like 180 Orders are solely the responsibilities of the City Engineer? Cibor clarified that he doesn't have any significant updates to provide at this time, but that staff may coordinate with the Legal department to provide the Commission with an update in the future if so desired. Volan noted that Commissioners would entertain the suggestion to invite Legal staff to a future meeting.

Flaherty asked for the status of a bicycle count on 7th St. Cibor noted problems with counting equipment along the corridor, but noted that he would work on coordinating with Engineering staff to provide an update. Flaherty noted an interested on evaluating whether or not the bicycle count can be used to measure an impact on usership of the protected bike lane along the corridor.

- **Parking Study Update [00:14:00]**

  Michelle Wahl from Parking Services introduced consultants Jon Martens and Lauren Ahlgrim from Walker Consultants to present preliminary survey data from an ongoing study of Bloomington parking services relative to other comparable municipalities.

  Discussion:

  Flaherty asked if the presentation materials were available online. Wahl clarified that they are available on the Parking Services website.[1]

  Flaherty asked about the plan for the report once the survey is complete. Wahl clarified that the report is intended as serve as a component to a more broadly scoped research endeavor undertaken by Parking Services staff. Following delivery of the final report, Parking Services intends to augment the findings with additional

[1] *A copy of the Walker Consulting presentation slides has been uploaded to Onboard as Appendix 1 to the September 15, 2025 meeting documents.*

financial information. Staff then intend to provide the Transportation Commission with another survey update.

Volan asked if Commission members would be provided an opportunity to provide input on the report before it is finalized. Wahl reiterated the intent to follow up with Commission members after Parking Services receives a completed report from Walker Consulting. During this follow up, Wahl anticipated that Commissioners would be welcome to ask questions about the final report. Wahl also anticipated an additional review period where Parking Services staff and Commissioners would remediate concerns or issues and work towards mutually agreed upon recommendations that would go before City Council. Volan asked for clarification on Commissioner's ability to provide meaningful input on the report and recommendations before anything is sent to City Council. Wahl noted uncertainty about the type of input Commissioners may request.

Volan asked about the stakeholders consulted for the research contributing to the Walker Consulting report. Wahl described the stakeholders and noted that a full list could be provided on request. Volan asked if the Transportation Commission was considered as a stakeholder. Adam Wason clarified that the Commission was considered a stakeholder and would be provided an opportunity to provide meaningful input into proposed changes to the parking services infrastructure. Wason anticipated that Parking Services would return for additional discussion on this topic in November at the earliest. Volan suggested that staff consider scheduling a special session of the Commission to facilitate a discussion of the parking services study; Wason noted that they would consider the suggestion.

Volan asked study consultants if they had considered the parking services structure of universities in the towns considered for the study. Martens clarified that universities were not considered; IU parking services was included in the presentation at the request of City of Bloomington staff, but that generally they tend to review and compare municipalities to each other. Volan asked if it would be possible to change the scope of the research at this time to account for this gap in the research. Wason clarified that it was unlikely that a change of scope in the contract could be considered at this time, but that he would ask the consultants about data that may be applicable and readily available.

Coppock asked study consultants if raw data would be provided for review. Wason clarified that Parking Services staff could provide that data in the future. Volan pointed out that such data could be presented at a future special meeting.

Flaherty observed that the intent of the report is to support policy recommendations, and asked if explicit goals and values were taken into account when crafting the report and performing the study from the beginning. Wason clarified that Parking Services can provide that framework more formally as part of their reporting on the survey reporting in the future, but that in general the goal is to provide an efficient

parking system that values all users equitably and at a fair cost. Martens also clarified that the survey solicited value statements from survey participants.

Volan observed the staff report template that Transportation Commission uses to foreground goals and values as part of a proposed change or recommendation.

Cibor observed that the parking study will eventually contribute to Title 15 changes, and he noted that the staff report template will be used at that point to structure Commission discussion.

Volan recommended that Walker Consulting staff consult the 2018 parking services report produced by the Parking Commission.

- **12th & Monroe Quick Build Project [00:49:50]**

  Staff report presented by Hank Duncan (Planning and Transportation).

  Discussion:

  Davis asked for a clarification about the unique functions and appearance of curb extensions, delineator posts, and parking blocks. Kendall Knoke, project engineer, provided descriptions and local context for the use of these devices.

  Volan requested a definition for the term “quick build.” Duncan clarified that the phrase describes projects not made with permanent materials, such as concrete, and typically have a lifespan of 3-5 years.

- **2026 Proposed Budget Update [00:54:00]**

  Cibor presented a staff report on the 2026 proposed budget allocations for transportation-related projects.

  Discussion:

  Volan asked for the inclusion of real-world dollars associated with chart figures. Cibor clarified that the associated packet materials for City Council does provide that level of detail to some degree, and that resource is hyperlinked in the staff report. Volan asked if the Transportation Commission would be involved in the setting of budgetary priorities for future budget proposals. Cibor clarified that the intent of sharing the proposed budget is to solicit questions and comments about the priorities at this time, though he does understand the desire to participate at earlier stages of proposal development.

CASES (PETITIONS, RESOLUTIONS, ETC.)

- **TC-R-25-05: Parking on N Illinois St [00:57:40]**

Staff recommends an amendment to Title 15 to remove the full-time "No Parking" restriction on the west side of Illinois Street between W 12th Street and W 15th Street, and install "No Parking" signage at the bus stop and near intersections to improve safety and visibility.

Staff recommends that the Transportation Commission adopt the proposed findings and forward the resolution for an amendment to Title 15 related "No Parking" designation on Illinois Street (between W 12th and W 15th Streets), with a positive recommendation.

Driss Tahir (Engineering Department) presented.[2]

Discussion:

Strimaitis observed that the site in question has been frequently reported by residents as a problematic area. They also observed the possibility of installing an island for busses that would provide for more parking in the future.

Flaherty clarified that the proposed solution would increase the amount of functional parking in the area. Tahir affirmed that it would. Flaherty asked for clarification on whether or not the proposed change would affect whether or not the road could function as a "queuing street." Volan asked for a clarification on the meaning of the term "queuing street." Flaherty clarified that they understand the term to refer to streets where it is impossible or very uncomfortable for two cars to pass when parking is fully utilized, such that you have to wait for oncoming neighbors to pass in order to utilize the road.

Generally, Flaherty noted, this design is effective for controlling speed and maximizing safety.

Cibor affirmed that the proposed change would likely have the effect of creating queues as Flaherty described.

No public comment was heard on the item.

Stosberg made a motion to adopt the resolution as presented. Flaherty seconded the motion.

The motion passed 6-0 [01:06:44].

❖ **TC-R-25-06 - Parking on W 8th St (Maple St to Rogers St)**

Increase the time limit of existing limited parking zones on the south and portions of the north sides of W 8th St., between Rogers St. and Fairview St., from two hours to four hours.

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[2] *The Chair recognized the agenda item but a commissioner did not formally move to introduce the item for discussion. This procedure changed for the review of subsequent cases so that the Chair was not formally introducing items.*

Staff recommends that the Transportation Commission adopt the proposed findings and forward the resolution for an amendment to Section 15.32.080 related to the four hour limit on W 8th St. to the Council with a positive recommendation.

Stosberg motioned to introduce TC-R-25-06: Parking on W 8th St (Maple St to Rogers St). Flaherty seconded. Robling presented.

Discussion:

Flaherty asked about whether staff had considered removing neighborhood parking zone 10, citing low subscription from residents in the area. Robling noted that it wasn't considered for the petition before the Commission, but that staff are considering removing Zone 10 in the future.

Volan asked if meter parking performance was considered on on the West block of 8th St. Robling clarified that it wasn't considered for this petition. Volan followed up with a question about data collected for the petition. Robling clarified that spot checks were performed by staff but not during the school year.

Public Comment:

Daniel Pierce was recognized for public comment in person. Pierce observed from personal experience that the stretch of street in question in front of the school is used by guardians as a pick-up and drop-off zone for children.

Final Commission Discussion:

Volan noted that staff should include data utilized to inform their recommendations alongside the staff report. Volan also observed a general need for more discussion about neighborhood parking zones, noting that perhaps undersubscribed zones should be priced lower.

Stosberg made a motion to adopt the resolution as presented. Flaherty seconded the motion.

The motion passed 6-0 [01:17:55].

- **TC-P-25-07 - 2025 Resident Led Traffic Calming Program - W 11th St (Monroe - Maple)**

2025 Resident-Led Traffic Calming Program project concept on W 11th St. from Monroe Street to Maple Street include three sets of speed cushions and a reduction of the posted speed limit from 30 mph to 25 mph.

Staff recommends that the Transportation Commission adopt the proposed findings, approve this project concept, and forward the proposed amendment to Section

15.24.020 of Title 15 related to the posted speed limit on W 11th Street to the Council with a positive recommendation.

Stosberg motioned to introduce TC-R-25-07: 2025 Resident Led Traffic Calming Program - W 11th St (Monroe - Maple). Flaherty seconded. Duncan presented.

Discussion:

Volan asked about whether one of the bump-outs in the plans could be sized to accommodate a tree planting. Duncan clarified that the specific plot in question is likely too small to accommodate a tree planting, but that they may consult the Senior Environmental Planner to discuss that suggestion. Volan asked whether or not it would be possible to make it policy that tree plots added to monolithic sidewalks be widened enough to accommodate tree plantings. Duncan affirmed that the Planning and Transportation Department would support such a policy, and that they would support adjusting this plan in particular for the inclusion of a tree plot. Duncan also cited that the project was one they inherited, so it is possible that a tree plot was originally not considered because staff were attending to needs for Emergency Medical Service (EMS) and transit service vehicular accessibility.

Volan asked about staff use of prioritization scores and the development of the "walk potential" metric. Duncan invited Commissioner Stosberg to define the term "walk potential," citing their involvement with the development of it. Stosberg clarified that "walk potential" defines pedestrian demand throughout the City by evaluating 20 different categories of interesting destinations which a person might want to walk to; the more categories of things nearby, the higher the walk potential. Stosberg clarified that the term is not a metric for comfort (i.e., "walkability"), which is why it can be useful in a planning context—it helps planners prioritize areas where the infrastructure may be poor but the potential value to residents is predictably high. More technical questions about the use of the rubric were discussed.

No public comment was heard on the item.

Stosberg made a motion to adopt the resolution as presented. Flaherty seconded the motion. Motion passed 6-0.

❖ **TC-R-25-08 - Hopewell West and Related Code Updates**

Certain modifications to Bloomington Municipal Code (BMC) Title 15:

- ➢ **Amend BMC 15.12.010 Schedule A to add: Traffic on "Jackson Street" Shall Stop for Traffic on "First Street"**
- ➢ **Amend BMC 15.32.100 Schedule O Loading Zones to add: "600 Block of South Jackson Street, first space north of 1st Street on the east side"**

Staff recommends that the Transportation Commission adopt the proposed findings and forward the resolution for an amendment to Schedule A (stop

intersections) and Schedule O (loading zones) of Title 15 to the Council with a positive recommendation.

Stosberg motioned to introduce TC-R-25-08: Hopewell West and Related Code Updates. Flaherty seconded. Knoke presented.

Discussion:

Volan asked for clarification that the streets noted on the map provided are new streets. Knoke affirmed that the streets will be new.

Flaherty requested rationale for not extending the east-west alley through to S Rogers St. Knoke noted that the decision was made prior to his involvement with the project, but that his recollection was that there was a grading issue that interfered with installing a connection.

No public comment was heard on the item.

Stosberg made a motion to adopt the resolution as presented. Flaherty seconded the motion. Motion passed 6-0.

DISCUSSION OF TOPICS NOT ON THE DOCKET

Commissioner Coppock: Intersection of E 3rd St. and S College St. [01:33:15]

Coppock inquired to Cibor about whether or not this intersection has been the focus of any staff investigations following a traffic accident. Coppock noted that someone had inquired to them about an investigation history. Cibor noted that the intersection was the focus of multiple investigations, citing upcoming changes due to construction of the new convention center and its inclusion within the College and Walnut Corridor Study.

Volan asked if crash data was available for public viewing. Robling cited the recent publication of a county-level dashboard that allows anyone to investigate crash data for roads all over Monroe County. Robling also reported that staff would update the website with a link to the dashboard for the sake of convenience.

Commissioner Flaherty: Transportation Commission Obligation to Produce a Parking Study [01:35:15]

Flaherty reminded fellow commissioners of the requirement outlined in municipal code for the Commission to produce an annual analysis fo parking asset management. Flaherty observed that production of the analysis will be a large undertaking and require additional resources. Volan observed that it was unlikely based on what had been observed earlier that the Walker Consulting study would serve the Commission's needs in this regard. Volan noted that it would be diligent to talk with administrative staff about how to organize and produce that kind of report. Coppock asked for clarification about the location of the 2018 Parking Study

produced by the former Parking Commission; Volan noted that this report should be linked on the Transportation Commission website in some capacity in the future.

Robling: Planning and Transportation to Host Public Meeting for the E 10th St. Safety Improvement Project [01:38:30]

Robling noted that a public meeting for the 10th St. Safety Improvement Project will be held on September 22 at 5:30PM, at E 10th St. in the parking lot of the Mr. Copy (501 E 10th St.)

Davis asked for clarification on the event location, noting that the building itself is not accessible for wheelchair users. Robling clarified that the event will be facilitated in the parking lot, not the building.

Commissioner Volan: Corridor Study Information [01:38:55]

Volan inquired about the public availability of information related to past, ongoing, or planned corridor studies. Robling noted that previous corridor studies should be linked on the Planning Transportation Clearing House website.

Commissioner Volan: Procedures for Requesting Traffic Investigations [01:39:49]

Volan inquired about the process for requesting staff consideration of specific infrastructure interventions or traffic control changes at intersections in the City. Cibor recommends that Commissioners and residents utilize the uReport system to identify specific places in town for staff to investigate. Cibor also noted that anyone may also email staff directly for guidance or discussion about such inquiries. Stosberg noted anecdotally that the uReport system does seem to escalate issues to staff in a timely manner.

PUBLIC COMMENT

[01:44:20] James Ferguson presented a petition on behalf of 134 voting-age residents from the Blue Ridge Community for further discussion of the traffic devices in place to control speeds around access points to the neighborhood and a nearby chiropractic office.

[01:48:15] Daniel Piece, as a Blue Ridge neighborhood resident, expressed support for the safety improvements noted in the Blue Ridge petition presented by Ferguson.

[01:50:00] Cary Floyd and Kevin Floyd provided comment as Blue Ridge neighborhood residents who also frequently use bicycles. They expressed support for the safety improvements, and specifically the traffic signal, proposed in the petition presented by Ferguson. Kevin cited game-days as particularly hazardous.

ADJOURNMENT at 07:23 PM

To: Transportation Commission
From: Iris Bull, Administrative Assistant
Mtg Date: October 20, 2025
Subject: Administrative Updates

Documenting Administrative Changes

Staff that support City of Bloomington boards and commissions are provided some liberty in the approach they take to documenting internal policies and procedures related to group activities. In an effort to improve clarity into the myriad of administrative decisions staff make in this capacity, a change log was developed to track and document specific administrative requests and decisions. A copy of the current Change Log is attached to this report.

The Log is fed manually, so it will be vulnerable to neglect. However, if used as intended, it has the potential to help Commissioners, staff, and residents anticipate changes to the structure and procedures that define the Transportation Commission.

Change Log Details

For each item on the Change Log, there is currently a two-digit ID number, description for the decision, name of the person who proposed the change, date the change was proposed, status for the item, and name for the staff member who approved the change.

ID Numbers

A two-digit numbering system was adopted because the intent is to refresh the change log annually. It is my sincere hope that no one expects to implement more than 99 changes to administrative procedures in a single year.

Decision Description

Each description should describe a very specific action that someone can take. The length should never exceed what a person would write on a sticky note.

Date

The date should document when a specific request was put towards an administrative staff member. By default, all implemented changes are being logged by platforms like

Google Drive and Onboard with a version history. A date for the implementation of an item is technically redundant, so it wasn't considered as a field for the table.

Status

In an ideal world, staff should be able to act immediately on any reasonable administrative request. Unfortunately, the reality of our situation is that administrative staff are frequently stressed by competing demands and priorities. In addition to documenting when changes are implemented, we want to identify changes that staff intend to implement in the near future. If an item is actionable but not something that can be prioritized in the short-term, it may be "tabled." Tabled doesn't mean that an item won't be implemented, but it may require more documented interest or resources before staff can implement it.

Approval

Honestly speaking, this column of activity was inherited from a template, and it may inevitably become a hollow signifier that inflates my personal ego. The intent, however, is to try and document who or what has had the 'final word' on each change. The best use of this information may be to intuit who has certain types of expertise or experience with making particular sorts of choices or changes within the administrative machine.

Limitations

The Change Log is basically a spreadsheet, which will mean that it will be inherently difficult to make accessible to people who rely on screen reader technology. Staff are currently exploring options for providing alternative resources and documentation when tables are the cornerstone for our administrative documentation. However, the current guidance documentation we have for making accessible documents foregrounds abstinence as the best viable strategy. Commissioners and residents in need of alternative documentation should reach out to Transportation Commission staff as the need arises to explore other accessibility options.

Change Log Highlights for October 20, 2025

- Updated the downloadable link for the Commission's Bylaws;
- Adjusted several formatting conventions relevant to packet creation;
- Improved cross-listing of Commission resources and platforms as part of the standard template for meeting minutes;

Last updated Oct 14, 2025

Change Log

Change logs are references to document the evolution of a project, and it may inform future decisions. When appropriate, the log will document both rationales and responsible parties for a change or decision. Except where written documentation exists, records for decisions that were made before the creation of this log will not be noted out of concern for accuracy.

Transportation Commission

ID	Decision	Proposal	Date	Status	Approval
00	Maintain a change log for decisions that affect Commission packet submissions and packet production	Iris Bull	Sep 19, 20...	Implemented	Andrew Cibor
01	Update downloadable link on TC website for Bylaws with version passed on July 21	Steve Volan	Sep 15, 20...	Implemented	Ryan Robling
02	Change first page of meeting minutes to be more visually distinct from the public notice	Steve Volan	Sep 19, 20...	Implemented	Iris Bull
03	Adjust the bullet indentation of action items to align with conventional hierarchical distinctions	Steve Volan	Sep 19, 20...	Implemented	Iris Bull
04	Adopt Bates Numbering styling conventions for Commission packets	Steve Volan	Sep 19, 20...	Implemented	Iris Bull
05	Add vacancy listing to Packet cover page / Public Notice	Steve Volan	Sep 19, 20...	Implemented	Iris Bull

ID	Decision	Proposal	Date	Status	Approval
06	Update Bylaws with hyperlinks to relevant Transportation Commission resources, portals, documents, and archives	Steve Volan	Sep 19, 20…	In Progress	Iris Bull
07	Change language of “Statue” to “Ordinance” on TC website	Steve Volan	Sep 19, 20…	In Progress	Iris Bull
08	Revise Staff Memo Template to make clear that memos are *for* the Commission to review	Steve Volan	Sep 19, 20…	Implemented	Iris Bull
09	Add links to video archive and other highly-trafficked URLs to the Meeting Minutes template	Iris Bull	Oct 14, 2025	Implemented	Iris Bull

Notes

- **For Drive users:** Navigate to Document Tabs to view detailed notes on the implementation of specific changes.

Detailed Change Log as of October 20, 2025

ID	Decision
00	Maintain a change log for decisions that affect Commission packet submissions and packet production.
01	Update downloadable link on TC website for Bylaws with version passed on July 21
02	Change first page of meeting minutes to be more visually distinct from the public notice. ● Copy of Public Notice removed as cover page; ● Title amended to include “Transportation Commission;” ● Date of Meeting noted as document subtitle.
03	Adjust the bullet indentation of action items to align with conventional hierarchical distinctions. ● Bullets were aligned along the margin (0”); ● Supporting text for each item was adjusted by a .25” indent.
04	Adopt Bates Numbering styling conventions for Commission packets. ● This change isn’t automated and staff will need to remember to manually number the document after generating the packet.
05	Add vacancy listing to Packet cover page / Public Notice. ● Text spacing was adjusted to eliminate a page break caused by the addition of another row in the table; ● The background image was reduced in size and adjusted to 30% opacity to improve contrast with text.
06	Update Bylaws with hyperlinks to relevant Transportation Commission resources, portals, documents, and archives. ● Staff anticipate finishing this before the meeting on October 20
07	Change language of “Statue” to “Ordinance” on TC website.
08	Revise Staff Memo Template to make clear that memos are *for* the Commission to review.
09	Add links to video archive and other highly-trafficked URLs to the Meeting Minutes template.

To: Transportation Commission
From: Andrew Cibor, City Engineer
Mtg Date: October 20, 2025
Subject: 180 Day Order Update

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180 Day Orders

Bloomington Municipal Code 15.08.040 - Temporary, experimental or emergency traffic regulations empowers the City Engineer to make changes to traffic regulations that pertain to temporary, experimental, or emergency conditions on City facilities. The act of making these changes is commonly referred to as "180 Day Orders". In instances where the order is desired to be made permanent, the practice has been to submit the changes to City Council for their consideration as an ordinance that modifies the applicable section of the Bloomington Municipal Code.

The following Orders have been issued since the Commission's September 15, 2025 meeting.

New Orders

- **25-09 - On-Street Parking on N Illinois Street (W 12th to W 15th Street)**
  - Effective date: 10/9/2025
  - Expiration date: 4/7/2026
  - Makes observed parking on the west side of the road legal (except at the bus stop) and eliminates on-street parking on the east side of the road at the intersections to improve visibility. Implementation of these changes were supported by the Transportation Commission at the September 2025 meeting.
- **25-10 - On-Street Parking on W 8th Street (Rogers St to Fairview St)**
  - Effective date: 10/16/2025
  - Expiration date: 4/14/2026
  - Extends the limited parking zone duration from 2 hours to 4 hours. Implementation of these changes were supported by the Transportation Commission at the September 2025 meeting.
- **25-11 - Stop Control at N Prow Rd & W Acuff Rd Intersection**
  - Effective date: 10/7/2025
  - Expiration date: 4/5/2026

- A subdivision north of Acuff Road extends Prow Road and converts what was a roadway curve into a three leg intersection. This order documents the need for westbound traffic on Acuff Road to stop for traffic on Prow Road. This design was approved by the Plan Commission on October 7, 2024.

Extended Orders

- **25-03 - Loading Zones adjacent to E Kirkwood Ave**
  - Effective date: 3/24/2025
  - Expiration date: 3/19/2026
  - This Order was reissued to extend its expiration date from September 20, 2025 to March 19, 2026. The Transportation Commission received a report on this Order at the July 21, 2025 meeting.
- **25-04 - Parking & Stop Control in Hopewell East**
  - Effective date: 4/23/2025
  - Expiration date: 4/18/2026
  - This Order was reissued to extend its expiration date from October 20, 2025 to April 18, 2026. The Transportation Commission received a report on this Order at the July 21, 2025 meeting.
- **25-05 - Parking on 1st Street**
  - Effective date: 4/30/2025
  - Expiration date: 4/25/2026
  - This Order was reissued to extend its expiration date from October 27, 2025 to April 25, 2026. The Transportation Commission received a report on this Order at the July 21, 2025 meeting.

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- ☒ To make and enforce temporary regulations;
- ☐ To make and enforce experimental regulations;
- ☐ To make and enforce regulations necessary to deal with emergencies; and/or
- ☐ To make and enforce regulations necessary to deal with special conditions.

In January of 2025, the Common Council of the City of Bloomington, Indiana passed ordinance 2025-02, *An Ordinance Establishing the Outdoor Dining Program in the Downtown Corridor*. This ordinance includes the closure of portions of East Kirkwood Avenue to vehicular traffic in order to support expanded outdoor dining.

Following implementation, city staff identified a need for additional designated loading zones to support access for deliveries, passenger pick-up and drop-off, food service operations, and other commercial activity impacted by the street closures. After review of traffic and parking patterns, and in consultation with relevant departments, it was determined that establishing loading zones in key areas would help address issues related to illegal parking and improve overall functionality. Based on areas with a history of frequent loading/unloading activity and associated parking violations, the following locations are designated as loading zones:

- S Washington Street - the 4th and 5th parking spaces south of E Kirkwood Ave on the west side of the street
- N Dunn St – the 4th parking space north of E Kirkwood Ave on the east side of the street
- S Dunn St – the 1st parking space south of E Kirkwood Ave on the east side of the street

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

9/22/2025
Date

Effective Date: 3/24/2025
Expiration Date: 3/19/2026

**Reissued on 9/22/2025 to extend expiration from 9/20/2025 to 3/19/2026.*

Case Number: 25-03

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

☒ To make and enforce temporary regulations;

☐ To make and enforce experimental regulations;

☐ To make and enforce regulations necessary to deal with emergencies; and/or

☐ To make and enforce regulations necessary to deal with special conditions.

The City of Bloomington and the Bloomington Redevelopment Commission are nearing completion of the Hopewell East infrastructure construction project. The project constructed four new City street blocks that require establishment of traffic control. After careful review and consideration, the Order has been issued and the following actions will be implemented:

- Install all-way stop control at the intersection of:
  - Madison Street & University Street
- Install two/one-way stop control at the intersections of:
  - Rogers Street (uncontrolled) & University Street (stop controlled)
  - *2nd Street (uncontrolled) & Madison Street (stop controlled)* [1]
  - Morton Street (uncontrolled) & University Street (stop controlled)
  - 1st Street (uncontrolled) & Madison Street (stop controlled)
- Install back-in angle parking on the south side of University Street between Rogers Street and Madison Street
- Establish no-parking zones on:
  - South side of University Street between Madison Street and Morton Street
  - Both sides of Madison Street from approximately 30' south of University Street to 100' north of University Street (adjacent to Hopewell Commons)

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

10/10/2025
Date

Effective Date: 4/23/2025
Expiration Date: 4/18/2026

**Reissued on 10/10/2025 to extend expiration from 10/20/2025 to 4/18/2026.*

Case Number: 25-04

[1] Indicates a change that does not require amendment to Title 15 of the Bloomington Municipal Code.

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- ☒ To make and enforce temporary regulations;
- ☐ To make and enforce experimental regulations;
- ☐ To make and enforce regulations necessary to deal with emergencies; and/or
- ☐ To make and enforce regulations necessary to deal with special conditions.

The City of Bloomington is nearing completion of the 1st Street Reconstruction project. The project reconstructed the roadway and created an area for on-street parking that did not previously exist. Additionally, a section of 1st Street where no parking has been, or will be, allowed was identified that is not listed in City Code. After careful review and consideration, the Order has been issued and the following actions will be implemented:

- Remove the no-parking zone on the south side of 1st Street from 60' east of Rogers Street to a point 120' east of Rogers Street
- Establish a no-parking zone on both sides of 1st Street between Morton Street and Walnut Street

Questions regarding this Order shall be directed to the City Engineer.

MG — 10/10/2025

Signature of City Engineer — Date

Effective Date: 4/30/2025
Expiration Date: 4/25/2026

Case Number: 25-05

**Reissued on 10/10/2025 to extend expiration from 10/27/2025 to 4/25/2026.*

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- ☒ To make and enforce temporary regulations;
- ☐ To make and enforce experimental regulations;
- ☐ To make and enforce regulations necessary to deal with emergencies; and/or
- ☐ To make and enforce regulations necessary to deal with special conditions.

The City of Bloomington is preparing to implement modifications to parking regulations along N **Illinois Street between W 12th Street and W 15th Street** in the Crestmont neighborhood. This proposal is in response to public concerns and field observations of illegal parking on the west side of the street, including vehicles blocking a Bloomington Transit bus stop, as well as visibility issues caused by vehicles parking close to intersections on the east side of the street.

After careful review and consideration, the following actions will be implemented:

- **West side:** Remove the "No Parking" restriction on N Illinois Street between W 12th Street and W 15th Street and allow parking, except within the designated bus stop area, where signage will be installed.
- **East side:** Maintain parking on N Illinois Street between W 12th Street and W 15th Street, but establish "No Parking" zones at intersections (W 13th Street and W Illinois Court) through signage to improve visibility.

These changes were supported by the Transportation Commission at their September 2025 meeting and are intended to improve conditions at intersections and the transit stop, clarify parking regulations, promote speed limit compliance, and provide additional legal parking opportunities for residents.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

9/22/2025
Date

Effective Date: 10/9/2025
Expiration Date: 4/7/2026

Case Number: 25-09

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- ☒ To make and enforce temporary regulations;
- ☐ To make and enforce experimental regulations;
- ☐ To make and enforce regulations necessary to deal with emergencies; and/or
- ☐ To make and enforce regulations necessary to deal with special conditions.

The City of Bloomington is preparing to implement modifications to parking regulations along **W 8th Street between N Rogers Street and N Fairview Street** in the Near West Side neighborhood. This proposal is in response to public feedback and was supported by the Transportation Commission at their September 2025 meeting.

After careful review and consideration, the following actions will be implemented:

- Extend the duration of the limited parking zone from 2 hours to 4 hours on the north side of W 8th Street from N Rogers Street to N Jackson Street and on the south side of W 8th Street from N Rogers Street to N Fairview Street. Signage will be updated to communicate this change.

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer

10/8/2025
Date

Effective Date: 10/16/2025
Expiration Date: 4/14/2026

Case Number: 25-10

180-DAY ORDER

Pursuant to Bloomington Municipal Code § 15.08.040 I hereby issue this 180-Day Order, the details of which are described in detail below, for the following reason(s):

- ☒ To make and enforce temporary regulations;
- ☐ To make and enforce experimental regulations;
- ☐ To make and enforce regulations necessary to deal with emergencies; and/or
- ☐ To make and enforce regulations necessary to deal with special conditions.

The extension of N Prow Road and the reconfiguration of the intersection of W Acuff Road and N Prow Road were approved by the Plan Commission as part of a subdivision approval on October 7, 2024. The addition of a stop sign for westbound traffic on W Acuff Road is appropriate to ensure orderly operation of the new "T" intersection in accordance with the approved plans. The new intersection was opened to traffic on October 7, 2025.

This Order authorizes the installation of the following stop control:

- Westbound traffic on W Acuff Road shall stop for traffic on N Prow Road

Questions regarding this Order shall be directed to the City Engineer.

Signature of City Engineer — Date: 10/10/2025

Effective Date: 10/7/2025
Expiration Date: 4/5/2026

Case Number: 25-11

To: Transportation Commission
From: Andrew Cibor, City Engineer
Mtg Date: October 20, 2025
Subject: Fatal Crash Report

Fatal Crashes

The City adopted a goal of achieving zero deaths and serious injuries on City roads by 2039.

The Traffic Commission passed a resolution on November 17, 2021 that asked the Engineering Department Director to provide the Commission a report on fatal crashes that occurred on city-maintained roads (Attachment 1). The City Engineer provided the Traffic Commission a report on all four fatal crashes that met the resolution's criteria before the Transportation Commission was formed.

The City's Safe Streets For All (SS4A) plan includes a short-term action item that involves modifying the City's existing fatal crash analysis structure. While some components of this action item cannot be implemented without additional staff capacity, staff intends to "Provide (a) brief report on crash data and findings to Advisory Transportation Committee" regarding fatal crashes on city-maintained roads similar to what was completed in the past for the Traffic Commission.

Safe Systems Approach

The Federal Highway Administration states, "reaching zero deaths requires the implementation of a Safe System approach." The six principles and five elements that form the foundation of the Safe Systems approach are helpful considerations when reviewing crash reports, infrastructure, policy, etc.

- Safe System Principles
    - deaths and serious injuries are unacceptable
    - humans make mistakes
    - humans are vulnerable
    - responsibility is shared
    - safety is proactive
    - redundancy is crucial
- Safe System Elements
    - safe road users

- safe vehicles
- safe speeds
- safe roads
- post-crash care

July 3, 2025 Fatal Crash (Bloomfield and Liberty)

On Thursday, July 3, 2025 around 12:45PM there was a crash at the intersection of W Bloomfield Road and S Landmark Avenue. The crash involved a motorcycle traveling westbound on Bloomfield Rd and a SUV making an eastbound to northbound left-turn movement from Bloomfield Rd onto Liberty Ave. The motorcycle was observed crossing the double yellow line passing westbound vehicles stopped at the intersection before colliding with the turning SUV. On August 22, 2025 the motorcycle operator involved in the crash passed away.

Attachment

Traffic Commission Resolution 21-01 Calling for Engineering Reports on Traffic Fatalities

RESOLUTION

CALLING FOR ENGINEERING REPORTS ON TRAFFIC FATALITIES

WHEREAS, drivers killed two residents who were correctly using pedestrian infrastructure on 3rd Street downtown in 2020.

WHEREAS, road fatalities among all transportation modes concentrate on roads and intersections with specific, known engineering features such as a large number of lanes or large radius turns.

WHEREAS, infrastructure design is a significant determining factor in collision frequency and severity.

WHEREAS, the City of Bloomington's 2018 Comprehensive Plan recommends that the city work to achieve zero transportation fatalities by viewing crashes as a preventable result of past decisions (pg 69, pg 122).

WHEREAS, the City of Bloomington's 2018 Comprehensive Plan contains Policy 6.1.7: Prioritize safety and accessibility over capacity in transportation planning, design, construction, and maintenance decisions (pg 74).

WHEREAS, the city's Engineering Department has unique expertise at evaluating the role that infrastructure design plays in crashes.

THEREFORE, BE IT RESOLVED BY THE TRAFFIC COMMISSION OF THE CITY OF BLOOMINGTON, INDIANA, THAT:

Whenever a public roadway user is killed as a result of a collision on a city-maintained road, the Director of the Engineering Department must, within 90 days, present to the city's Traffic Commission a summary of the infrastructure design attributes that may have contributed to the crash, what steps might reduce the likelihood of such an incident in the future, and an estimate of the resources needed to take those steps.

(as amended and passed by the Traffic Commission on November 17, 2021)

To: Transportation Commission
From: Chaz Mottinger, Special Projects Manager, ESD
Mtg Date: October 20, 2025
Subject: Outdoor Dining Program Status Update and Feedback

Background

The City of Bloomington first implemented temporary outdoor dining measures in 2020 to support local businesses during the COVID-19 pandemic. These measures evolved into the Expanded Outdoor Dining Program, which was formalized in Ordinance 22-01. It allowed for the use of parklets and facilitated the closure of Kirkwood Ave to motor vehicles to allow for outdoor seating.

In 2025, City Council adopted Ordinance 2025-02 to establish a recurring, seasonal Outdoor Dining Program. This ordinance repealed and replaced the previous version, reinstating both the parklet and Kirkwood Avenue conversion components in alignment with Ordinance 22-01. It also suspends certain provisions of the Bloomington Municipal Code to facilitate the use of public right-of-way for outdoor seating. The conversion affects East Kirkwood Avenue blocks 100 to 500.

Each year, the program's guidelines are reviewed and approved by the Board of Public Works. For 2025, the outdoor dining season runs from April 4 to November 10. More information on the 2025 parklet guidelines is available here, and the Kirkwood guidelines can be found here. Parklet participants are: Orbit Room, Metalworks (now closed), Crazy Horse, and BuffaLouie's. Kirkwood participants are: Uptown Cafe, Farm, Village Deli, Nick's English Hut, and Lennie's Brewpub.

Ordinance 2025-02 provides a consistent framework to support economic activity and cultural vibrancy downtown, while allowing flexibility for future adjustments. This program is overseen and implemented by staff from Economic and Sustainable Development, Public Works, Engineering, Community and Family Resources, Bloomington Transit, and Public Safety, in addition to working with the Mayor's Office and City Council.

Update

The 2025 Outdoor Dining Program has experienced mixed results. Under Ordinance 2025-02, blocks 100–500 on East Kirkwood were closed to vehicular traffic during the program period, regardless of whether participating businesses utilized outdoor dining. The intent was to encourage community use and street activation; however, the anticipated engagement has been limited due to issues such as understaffing, lack of necessary budget, and policy issues. In addition, it soon became clear that the 200 block needed to remain open for the season due to access concerns from nearby First Christian Church, whose alleyway serves as a primary entry and parking area and cannot be accessed when the block is closed.

Public Works, which oversees special event implementation on Kirkwood, has faced challenges managing these closures due to limited capacity. In particular, the closure of the 300 block, where no businesses participated in outdoor dining, was widely viewed by community members and business owners as underutilized and visually unappealing based on ongoing and anecdotal feedback. Following the Hoops event on October 2, this block was reopened to traffic.

The parklet component of the program saw improvements this year. Several businesses invested in raised platform decks that align with the sidewalk, enhancing accessibility and aesthetics. Staff anticipates the program guidelines to be updated for the 2026 season to require all parklets to have raised platforms.

One participating business closed during the season, which uncovered a series of issues that are not outlined in the current ordinance, relating to abandoned property and communications.

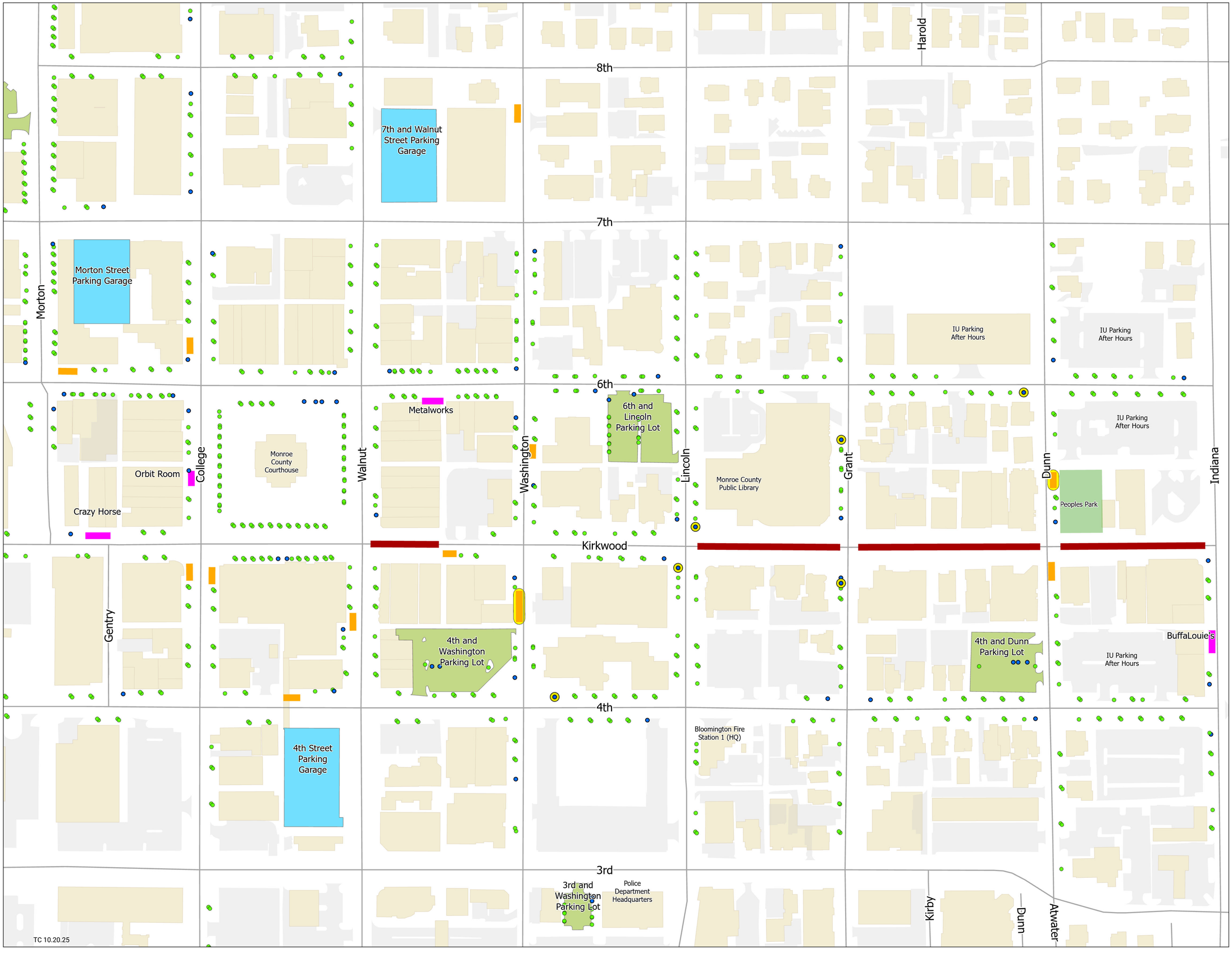
Prior to the start of the 2025 season staff identified and installed six additional accessible spaces in proximity to the Kirkwood corridor. In response to frequent reports of short-term parking in front of the bollards, partially blocking lanes of traffic, staff also installed two loading zones on both Dunn St and Washington St.

City staff are currently collecting updated feedback from both business owners and the public to help inform future program adjustments. The Planning department will also conduct a Kirkwood Corridor Study in 2027 – further details will be provided at a later date. We welcome any input or recommendations the Transportation Commission may have on these matters. Thank you.

ITS Department
City of Bloomington

2025 Pedestrian Season

Outdoor Dining Program
(Kirkwood Conversion + Parklets)



Map Legend

- Road Closure
- Streatery
- Meter
- Accessible Meter
- New Accessible Meter
- Loading Zone
- New Loading Zone

0 125 250 Feet

(Scale of 1 Inch Equals 250 Feet is valid only when printed at original 36 x 24 inch size.)

Produced: 3/28/2025
Layout: BloomingtonCityMap_36x24Landscape
Project: ParkletsKirkwoodClosure

TC 10.20.25

To: Transportation Commission
From: Andrew Cibor, City Engineer
Mtg Date: October 20, 2025
Subject: Summit District PUD and Transportation Improvements

Summit District PUD

A planned unit development (PUD) referred to as the Summit District was approved by City Council on May 15, 2024. The development is located in the southwest area of the City east of Weimer Road. The development includes a number of internal proposed roadways including a connection of Adams Street to the north and south of the project, and an extension of Sudbury Drive (Attachment 1). The site is almost 140 acres and is approved to include up to 4,250 new housing units, commercial space, and a hotel. Development of the site is anticipated to be phased with an expected delivery timeframe of 10 years.

The Summit District development team prepared a Traffic Impact Analysis (Attachment 2) that evaluated and identified transportation improvements to address the impacts of the proposed Summit District project and a Supplemental Memo (Attachment 3). Because the traffic study and its review was not completed prior to the PUD approval, a condition was adopted requiring a memorandum of understanding be executed between the developer and the City that describes off-site improvements that would be required.

Transportation Improvements

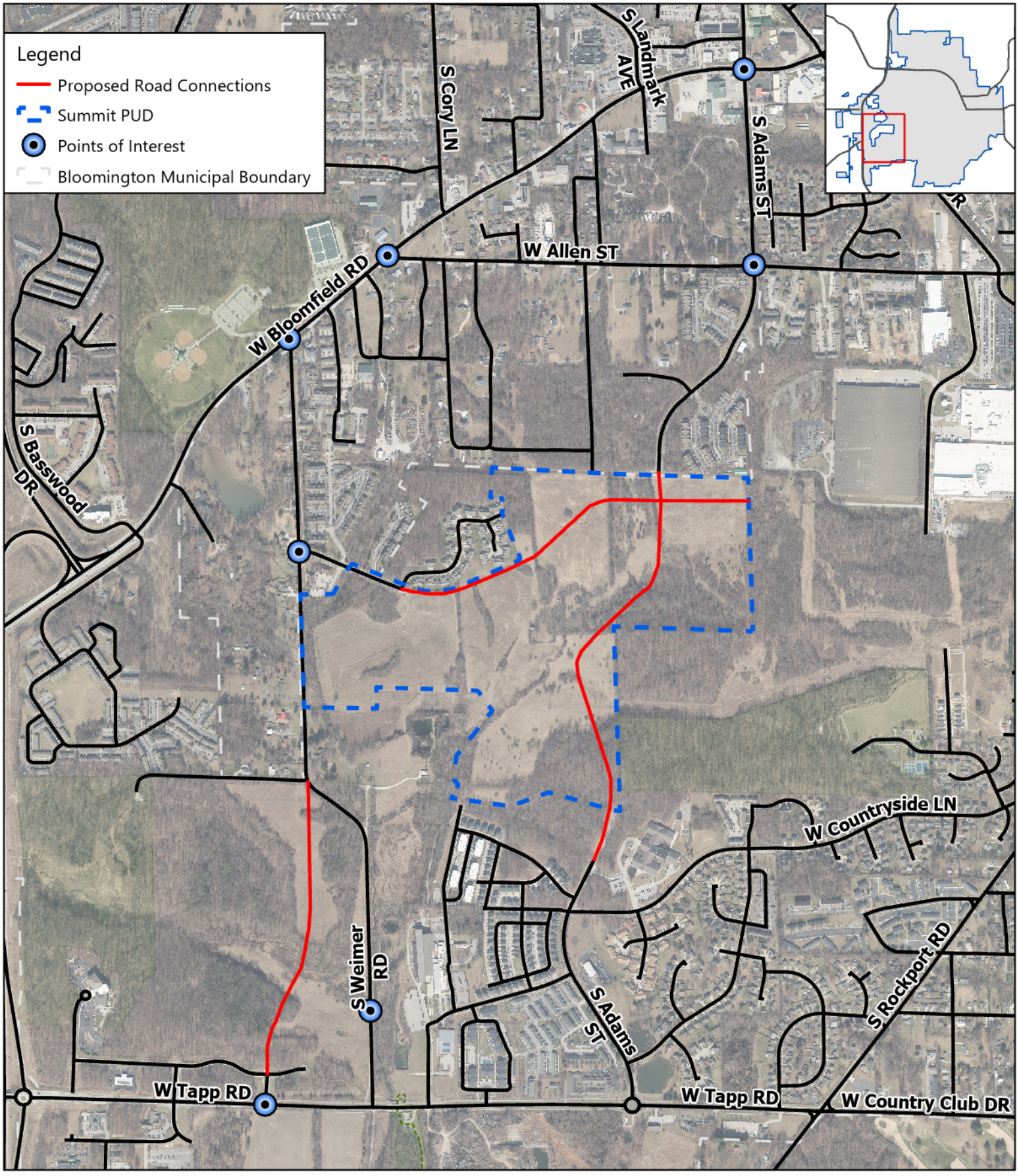
Eight future transportation improvement projects outside of the Summit District site have been identified to support development and the community at large. Specific details of what each project may include and their timing are to be determined; however, the improvements are organized within an estimated macro-level phasing plan.

- Phase 0
    - Weimer Road single lane culvert crossing
- Phase 1
    - Vanguard Parkway extension/Weimer Road realignment between Schmalz Boulevard and Wapehani Road
    - Tapp Road/Vanguard Parkway intersection improvements
    - Bloomfield Road/Weimer Road intersection improvements

- Phase 2
    - Bloomfield Road/Allen Street intersection improvements
    - Bloomfield Road/2nd Street/Adams Street intersection improvements
    - Weimer Road/Sudbury Drive intersection improvements
    - Adams Street/Allen Street intersection improvements

Attachments

- Attachment 1 - Summit District Area Map and Transportation Improvements
- Attachment 2 - Summit District Traffic Impact Analysis
- Attachment 3 - Summit District Traffic Analysis Supplemental Memorandum



Summit District PUD

Engineering Department
City of Bloomington

Produced: 10/14/2025

0 250 500 1,000 1,500 2,000 FT

For use as map information only, information is NOT warranted.

IC 19.20.25

Summit District PUD

Traffic Impact Analysis

Bloomington, Indiana

March 18, 2024

Prepared For:
TRG Development, LLC

Prepared By:
EMCS, Inc.

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www.emcsinc.com

I certify that this Traffic Impact Analysis has been prepared by me or under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

Amanda M. Johnson

Amanda M. Johnson, PE, PTOE
Indiana Registration #PE11200692
EMCS, Inc.

Daniel Dugan

Daniel Dugan, EI
ET32200115
EMCS, Inc.

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Tables

Appendices

Executive Summary

The purpose of this Traffic Impact Analysis (TIA) is to identify the potential intersection improvements needed due to the proposed Summit District Planned Unit Development (PUD). The 138.5-acre site is located approximately 1.5 miles southwest of downtown Bloomington, IN. Summit District PUD will include residential and commercial uses. This report documents the analysis and findings.

Study Area

The study area consists of an area roughly bounded by the arterials of Bloomfield Road, Walnut Street, Tapp Road; and Interstate 69. The existing study intersections are:

1. Bloomfield Road & Recreation Center Drive (unsignalized)
2. Bloomfield Road & Weimer Road (unsignalized)
3. Bloomfield Road & Rolling Ridge Way (signalized)
4. Bloomfield Road & Allen Street (unsignalized)
5. Bloomfield Road & Landmark Avenue (signalized)
6. Bloomfield Road/2nd Street & Adams Street (signalized)
7. 2nd Street & Patterson Drive (signalized)
8. Tapp Road & Deborah Drive (signalized)
9. Tapp Road & Vanguard Parkway (unsignalized)
10. Tapp Road & Weimer Road (unsignalized)
11. Tapp Road & Adams Street (roundabout)
12. Tapp Road/Country Club Drive & Rockport Road (signalized)
13. Country Club Drive & Rogers Street (signalized)
14. Country Club Drive/Winslow Road & Walnut Street (signalized)
15. Weimer Road & Sudbury Drive (unsignalized)
16. Weimer Road & Wapehani Road (unsignalized)
17. Allen Street & Adams Street (unsignalized)
18. Allen Street & Strong Drive (unsignalized)
19. Patterson Drive & Allen Street (signalized)
20. Patterson Drive & Fairview Street (signalized)
21. Patterson Drive & Rogers Street (signalized)
22. Walnut Street & Grimes Lane (signalized)
23. Rogers Street & Rockport Road (signalized)

Proposed Development

The proposed development will be located south of Bloomfield Road and will be constructed in five zones consisting of single-family and multifamily housing. There will be a total of 4250 units built by 2034, including 835 single family houses. The development will be accessed by proposed roadway connections to the existing city street network. Sudbury Drive will be connected from Weimer Road to Adams Street. Adams Street will be connected to Allen Street in the north and Tapp Road in the south. These proposed accesses are expected to be open to all modes of traffic by opening day.

Phase	Multifamily Units	Single-Family Units	Ground-Floor Commercial (1000 sf)
Opening Day 2029	1283	553	20
Full Build Year 2034	2132	282	45
Subtotal	3415	835	65
Total	4250		65

Traffic Forecast

Existing turn movement counts were collected at each of the study area intersections. A background growth rate of 0.5% per year was then applied to each turning movement to obtain background opening day traffic volumes. See **Section 3.2** for more information. Existing traffic was then redistributed to the proposed Adams Street and Sudbury Drive connections. Finally, proposed trips from the new development were added to develop traffic forecasts for the following scenarios:

- Scenario 1: Existing Year 2023 volumes
- Scenario 2: Opening Day background 2029 volumes + Phase 1 site generated trips
- Scenario 3: Full Build Year background 2034 volumes + Phase 1 site generated trips
- Scenario 4: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips
- Scenario 4A: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips + proposed improvements

Analysis

A capacity and queuing analysis was performed for all study intersections using existing signal timings provided by the City of Bloomington for all study scenarios.

Non-Motorized and Transit Access

A review of existing bicycle and pedestrian facilities was conducted. The proposed Summit PUD will be in close proximity to the B-Line trail, B-Link Trail, and Clear Creek Trail. Many existing sidewalk facilities are present to provide access to these trails. An additional connection east through the development with a mid-block crossing on Rogers Street would increase access to the B-Line trail system.

Additionally, bus stop locations were reviewed. Although existing bus routes travel through the study area, the nearest stop would be an approximate 1-mile walk. Bloomington Transit has shown interest in expanding bus service along the proposed Adams Street connection from Tapp to 2nd Street which would increase access to bus facilities for the Summit PUD.

Findings and Recommendations

All six proposed internal intersections operate at or above acceptable levels of service during both peak hours of all scenarios with the proposed lane configurations. The following existing intersections operate at or above acceptable levels of service during both peak hours of all scenarios and do **not** need improvements:

- Bloomfield Road & Rolling Ridge Way
- 2nd Street & Patterson Drive
- Tapp Road & Deborah Drive
- Tapp Road & Adams Street
- Weimer Road & Sudbury Drive
- Weimer Road & Wapehani Road
- Allen Street & Strong Drive
- Patterson Drive & Allen Street
- Patterson Drive & Fairview Street
- Rogers Street & Rockport Road

The following table shows the intersections that need improvements by phase:

Existing Year 2023 — Without Development

Intersection	Improvement
4. Bloomfield Road & Allen Street	Install EB Right- & NB Left-Turn Lanes
5. Bloomfield Road & Landmark Avenue	Adjust Signal Timings
13. Country Club Drive & Rogers Street	Adjust Signal Timings, Install WB Right-Turn Lane

Opening Day 2029 — With Phase 1 (1836 Units)

Intersection	Improvement
2. Bloomfield Road & Weimer Road	Install Traffic Signal, Install NB & EB Right-Turn Lanes
9. Tapp Road & Vanguard Parkway*	Install Left-Turn Acceleration Lane and EB Left-Turn Lane

*Only recommended provided Weimer Road is realigned to Vanguard Parkway

Full Build Year 2034 — With Phase 1 (1836 Units)

Intersection	Improvement
22. Walnut Street & Grimes Lane	Adjust Signal Timings

Full Build Year 2034 — With Phases 1 & 2 (2414 Additional Units)

Intersection	Improvement
6. Bloomfield Road/2nd Street & Adams Street	Adjust Signal Timings
12. Tapp Road/Country Club Drive & Rockport Road	Adjust Signal Timings
14. Country Club Drive/Winslow Road & Walnut Street	Adjust Signal Timings
15. Weimer Road & Sudbury Drive	Install SB Left-Turn Lane
17. Allen Street & Adams Street	Install Turn Lanes on All Approaches
21. Patterson Drive & Rogers Street	Adjust Signal Timings

The following is a detailed description of the needed improvements:

Bloomfield Road & Recreation Center Drive / Weimer Road
The northbound approach to this intersection operates below the acceptable level of service during both peak hours of Scenarios 2, 3, & 4, starting on opening day 2029 with approximately 45% of units constructed. A traffic signal may be warranted based on available data and a preliminary peak hour volume warrant once the development is approximately 45% constructed. The installation of a new **traffic signal** and the addition of a northbound **right-turn lane** are recommended. An exclusive eastbound **right-turn lane** is also warranted and recommended. If a traffic signal is constructed, it is recommended that Weimer Road and the Recreation Center Drive align and that the signal is coordinated with others along Bloomfield.

Bloomfield Road & Allen Street
The Allen Street approach to this intersection operates below acceptable levels of service during the PM peak hour of all scenarios. Adding an exclusive **left-turn lane** to the Allen Street approach and an exclusive **right-turn lane** to the Bloomfield Road eastbound approach are recommended. With these improvements the Allen Street approach will still be below the acceptable level of service during the PM peak hour. However, the available data showed that a traffic signal would likely not be warranted in any scenario. If the demand increases significantly above what is expected in this study, a signal warrant should be evaluated.

Bloomfield Road & Landmark Street
The southbound approach to this intersection operates below acceptable levels of service in the PM peak hour during all scenarios. **Optimized splits** are recommended.

Bloomfield Road/2nd Street & Adams Street
This intersection operates below acceptable levels of service during both peak hours of Scenario 4 when 100% of units are constructed and with the current signal timings. **Optimized splits** are recommended.

Tapp Road & Vanguard Parkway
This intersection operates below acceptable levels of service during both peak hours of Scenarios 3 and 4, starting in 2034 with no more than 45% of units built and with the volume from the Weimer Road realignment. Building a **left-turn acceleration lane** for the southbound left-turning movement could improve operations by allowing left-turning vehicles to make a two-stage turn if necessary. Adding an exclusive eastbound **left-turn lane** is also warranted and recommended. An exclusive westbound right-turn lane is warranted but not recommended since it would not be needed if this intersection eventually becomes signalized. These improvements should be implemented concurrently with the realignment. The available data showed that a traffic signal would likely not be warranted with the proposed development. However, the installation of a traffic signal or a roundabout would improve operations at this intersection. Volumes at this intersection should be monitored and reanalyzed after the Weimer Road realignment project is constructed.

Tapp Road & Weimer Road
The southbound approach to this intersection operates below acceptable levels of service during the PM peak hour of Scenario 1 (existing 2023), and both peak hours of Scenario 2 (2029 with 45% of units constructed). However, since Weimer Road is expected be realigned to Vanguard Parkway before Scenarios 3 and 4, **no additional improvements** at the intersection with Tapp Road are recommended.

Tapp Road/Country Club Drive & Rockport Road
The eastbound through movement has a volume-to-capacity ratio (v/c) >1 in Scenario 4, when 100% of units are built. **Coordination** with Country Club Drive & Rogers Street; as well as **optimized** splits, phasing, offsets, and cycle lengths are recommended.

Country Club Drive & Rogers Street
The westbound right-turning movement at this intersection has a volume-to-capacity ratio (v/c) >1 in the PM peak hour of Scenario 1 (existing 2023), and the level of service is below acceptable levels during both peak hours of Scenario 4 (2034 with 100% of units constructed). **Coordination** with Country Club Drive/Winslow Road & Walnut Street, adding an exclusive westbound **right-turn lane**, installing **flashing yellow arrow** signal heads, and **optimized** splits, phasing, offsets, and cycle lengths are recommended. After implementation of optimized traffic signal timings, this intersection should be observed for increased volume due to latent demand and signal timings should be adjusted accordingly.

Country Club Drive/Winslow Road & Walnut Street
The westbound approach to this intersection operates below the acceptable level of service in the PM peak hour during all scenarios. **Coordinating** Country Club Drive & Rogers Street with this intersection, installing **flashing yellow arrow** signal heads, and **optimized** splits, phasing, offsets, and cycle lengths are recommended.

Weimer Road & Sudbury Drive
This intersection operates at or above the acceptable level of service in all scenarios. However, an exclusive southbound **left-turn lane** is warranted at this intersection in the PM peak hour of Scenario 4 (2034 with 100% of units constructed) and is recommended.

Allen Street & Adams Street
This intersection operates below the acceptable level of service in both peaks of Scenario 4 when 100% of units are constructed. Building an exclusive northbound **right-turn lane**, an exclusive westbound **left-turn lane**, an exclusive southbound **left-turn lane**, and exclusive eastbound **right-turn lane** are recommended. With these improvements it will still operate below the acceptable level of service during the PM peak hour. Alternatively, a future connection to Strong Drive would improve this intersection to an acceptable level of service. A signal or a roundabout at this intersection would also improve it to an acceptable level of service.

Patterson Drive & Rogers Street
The southbound approach of this intersection operates below the acceptable level of service in the PM peak hour during Scenario 4 when 100% of units are constructed. **Optimized splits** are recommended.

Walnut Street & Grimes Lane
The eastbound through and right-turning movements at this intersection have a volume-to-capacity ratio (v/c) >1 in Scenarios 3 and 4, starting in 2034 with at least 45% of units constructed. **Optimized splits** are recommended.

1.0 Introduction

1.1. Purpose

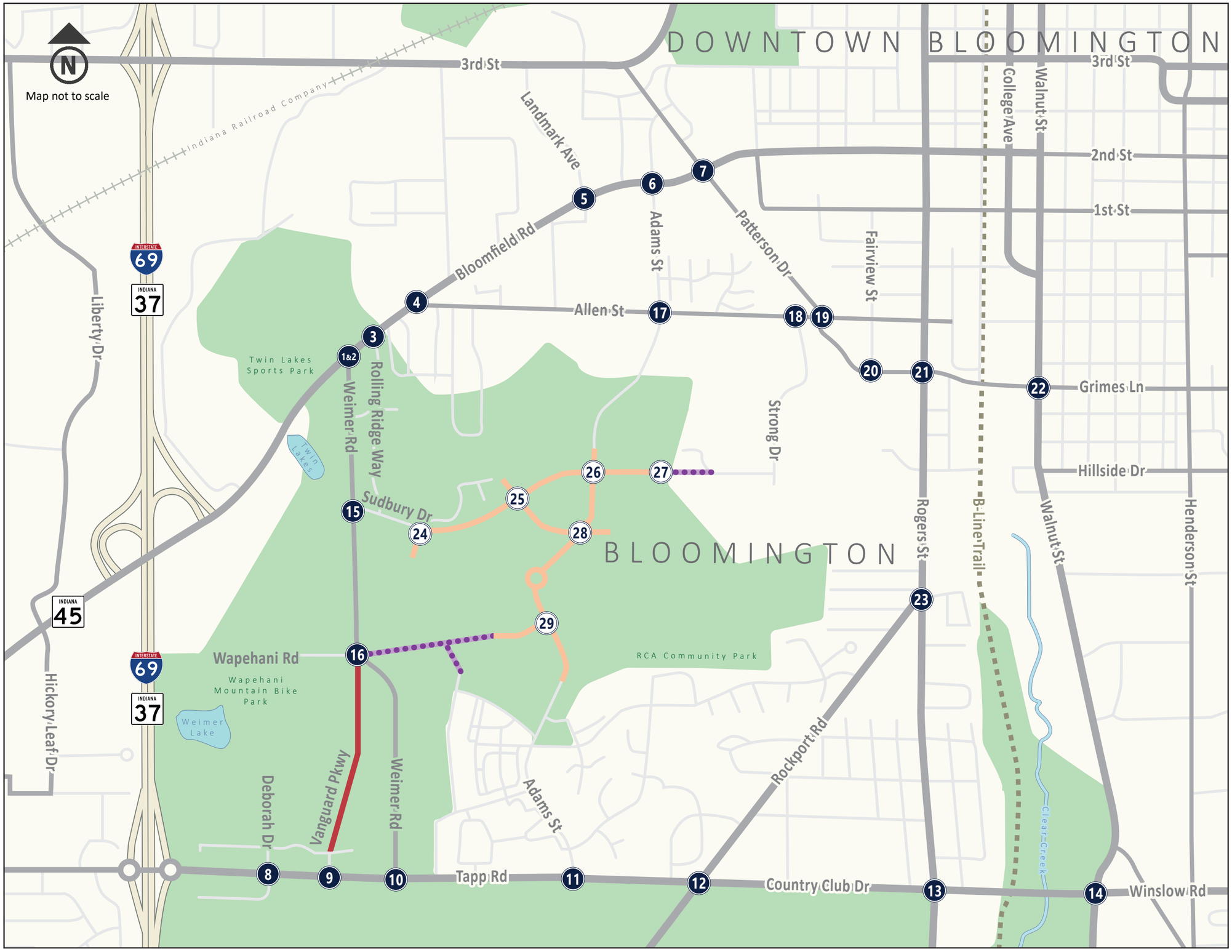
The purpose of this Traffic Impact Analysis (TIA) is to identify the potential intersection improvements needed due to the proposed Summit District Planned Unit Development (PUD).

1.2. Scope

EMCS coordinated with the City of Bloomington (City) and TRG Development to solidify the scope of this traffic impact analysis. The scope as we understand it is detailed below:

Study Intersections

1. Bloomfield Road & Recreation Center Drive (unsignalized)
2. Bloomfield Road & Weimer Road (unsignalized)
3. Bloomfield Road & Rolling Ridge Way (signalized)
4. Bloomfield Road & Allen Street (unsignalized)
5. Bloomfield Road & Landmark Avenue (signalized)
6. Bloomfield Road/2nd Street & Adams Street (signalized)
7. 2nd Street & Patterson Drive (signalized)
8. Tapp Road & Deborah Drive (signalized)
9. Tapp Road & Vanguard Parkway (unsignalized)
10. Tapp Road & Weimer Road (unsignalized)
11. Tapp Road & Adams Street (roundabout)
12. Tapp Road/Country Club Drive & Rockport Road (signalized)
13. Country Club Drive & Rogers Street (signalized)
14. Country Club Drive/Winslow Road & Walnut Street (signalized)
15. Weimer Road & Sudbury Drive (unsignalized)
16. Weimer Road & Wapehani Road (unsignalized)
17. Allen Street & Adams Street (unsignalized)
18. Allen Street & Strong Drive (unsignalized)
19. Patterson Drive & Allen Street (signalized)
20. Patterson Drive & Fairview Street (signalized)
21. Patterson Drive & Rogers Street (signalized)
22. Walnut Street & Grimes Lane (signalized)
23. Rogers Street & Rockport Road (signalized)
24. Sudbury Drive & Shasta Meadows Access (unsignalized)
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (unsignalized)
26. Sudbury Drive & Adams Street (roundabout)
27. Sudbury Drive & Sandia Place Access 1 (unsignalized)
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (roundabout)
29. Adams Street & Denali Woods Access (unsignalized)



LEGEND

Existing Road:

Proposed Road:

Future Realignment:

Future Connection:

Existing Intersection: #

1. Bloomfield Road and Recreation Center Drive
2. Bloomfield Road and Weimer Road
3. Bloomfield Road and Rolling Ridge Way
4. Bloomfield Road and Allen Street
5. Bloomfield Road and Landmark Avenue
6. Bloomfield Road/2nd Street and Adams Street
7. 2nd Street and Patterson Drive
8. Tapp Road and Deborah Drive
9. Tapp Road and Vanguard Parkway
10. Tapp Road and Weimer Road
11. Tapp Road and Adams Street
12. Tapp Road/Country Club Drive and Rockport Road
13. Country Club Drive and Rogers Street
14. Country Club Drive/Winslow Road and Walnut Street
15. Weimer Road and Sudbury Drive
16. Weimer Road and Wapehani Road
17. Allen Street and Adams Street
18. Allen Street and Strong Drive
19. Patterson Drive and Allen Street
20. Patterson Drive and Fairview Street
21. Pattersobn Drive and Rogers Street
22. Walnut Street and Grimes Lane
23. Rogers Street and Rockport Road

Proposed Intersection: #

24. Sudbury Drive and Shasta Meadows Access
25. Sudbury Drive and Whitney Glen Access/ Everest Center Access 1
26. Sudbury Drive and Adams Street
27. Sudbury Drive and Sandia Place Access 1
28. Adams Street and Sandia Place Access 2/ Everest Center Access 2
29. Adams Street and Denali Woods Access

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

emcs

Figure 1: Study Intersections and Project Area

Traffic Data and Forecast

EMCS obtained existing turning movement traffic data for the study intersections from Gewalt Hamilton Associates, Inc. (GHA). Data was collected for four hours from 7:00 AM to 9:00 AM and from 3:30 PM to 5:30 PM on Tuesday, October 24, 2023. The weather was clear, and school was in session.

EMCS identified and applied a growth rate to existing traffic volumes to obtain background traffic volumes for opening day and full build scenarios. The percentage of traffic volumes that may reroute and use the proposed roadways was also determined and added to obtain background traffic volumes.

EMCS determined the number of new vehicle trips generated to and from the proposed development, using information provided by the owner and ITE's *Trip Generation Manual, 11th Edition* [1]. The vehicle trips were then adjusted for mode split and internal trips. Then, all new trips were assigned and distributed to the surrounding roadways.

Finally, EMCS compiled all traffic data into forecasts for the following scenarios:

- Scenario 1: Existing Year 2023 volumes
- Scenario 2: Opening Day background 2029 volumes + Phase 1 site generated trips
- Scenario 3: Full Build Year background 2034 volumes + Phase 1 site generated trips
- Scenario 4: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips
- Scenario 4A: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips + proposed improvements

Traffic Analysis

EMCS completed a capacity analysis for the study intersections for all scenario traffic volumes for the two highest volume hours of the day: one during the AM peak hour and one during the PM peak hour using the software program Synchro 11 and *Highway Capacity Manual (HCM)* [2] methodologies.

Additionally, a queuing analysis at applicable intersections and a turn lane analysis were completed for publicly owned roadways.

Documentation

All data, analyses, results, and recommendations are presented in this comprehensive Traffic Impact Analysis.

2.0 Background Information

2.1. Existing Roadway

Below is a list of the roadways (which are all undivided) in the study area as classified by the City's Transportation Plan[3]. All roadway characteristics listed below are what is present within the study area.

Primary Arterial

Bloomfield Road/2nd Street is a 2-lane northeast-southwest roadway (for this study it is considered east-west) with a posted speed limit that varies from 40 to 30 miles per hour (mph).

Walnut Street is a 4-lane north-south roadway which has a posted speed limit of 30 mph.

Tapp Road/Country Club Drive/Winslow Road is a 2-lane east-west roadway, except at Deborah Drive where it has a 4-lane cross section. It has a posted speed limit of 30 mph.

Secondary Arterial

Patterson Drive/Grimes Lane is a 2-lane northwest-southeast roadway with a posted speed limit that varies between 30 and 40 mph. It is classified as a primary collector east of Walnut Street.

Rogers Street is a 2-lane north-south roadway with a posted speed limit that varies from 25 to 30 mph.

Adams Street is a 2-lane north-south roadway with a posted speed limit that varies from 25 to 30 mph. It provides access to mostly residential areas. It is split into a northern segment which terminates south of Allen Street and a southern segment which terminates north of Tapp Road. The Summit PUD will connect the two segments.

Primary Collector

Rockport Road is a 2-lane northeast-southwest roadway with a posted speed limit of 30 mph.

Allen Street is a 2-lane east-west roadway with a posted speed limit that varies from 25 to 30 mph. East of Patterson Drive it is a local street with midblock curb bump-outs, and a very low through capacity.

Weimer Road is a 2-lane north-south roadway with a speed limit of 35 mph. There are significant horizontal and vertical curves and a single-lane bridge on the southern portion of Weimer Road. The City's Transportation Plan shows a future realignment, discussed in **Section 2.5**.

Local

Sudbury Drive is a 2-lane east-west roadway which falls under the city's general 25 mph speed limit for unposted roads. It currently provides residential access to Weimer Road.

Strong Drive is a 2-lane north-south roadway with a posted speed limit of 25 mph. It currently provides access from Allen Street to an industrial area.

2.2. Existing Intersections

The geometry and traffic controls of the 23 existing intersections are shown in **Figure 2** and **Figure 3**.

2.3. Proposed Development

The 138.5-acre site is located 1.5 miles southwest of downtown Bloomington and will be constructed in five zones. TRG has provided the expected number and type of units in each zone. The zones are comprised of a mix of single family and multifamily residential housing, and ground floor commercial uses. The development will be built steadily over approximately 10 years, however for the purposes of this study, the generated traffic is split into two "phases", opening day and full build year. This is described in detail in **Section 3.3.**

2.4. Proposed Access

The proposed accesses, which are expected to be open to all modes of traffic by opening day, consists of proposed roadway connections built by the developer that will tie into the existing network in three places: Sudbury Drive just east of Weimer Road, Adams Street just south of Allen Street, and Adams Street just north of Tapp Road. These streets currently do not connect to each other and have few outlets. The proposed roadway connections will also provide improved access for the city and existing traffic in the area, especially by connecting the two segments of Adams Street. Any existing traffic which might reroute through the proposed roadway connections instead is discussed in **Section 3.2.1**. The proposed access includes six proposed internal intersections that were analyzed in this study. Each proposed intersection has one lane per approach as shown in **Figure 4.**

2.5. Weimer Realignment

The southern portion of Weimer Road currently consists of multiple horizontal and vertical curves and includes a single-lane bridge. The City Thoroughfare plan includes realigning Weimer Road to remove the single-lane bridge, but this project is dependent upon future development through this vacant area. The possible alignment will tie in to Weimer Road at Wapehani Road and utilize the existing intersection of Tapp Road & Vanguard Parkway. Additionally, an eastbound left-turn lane is anticipated to be installed at the intersection of Tapp Road & Vanguard Parkway. The old Weimer Road alignment may then be removed or disconnected. An illustration of the realignment is shown in **Figure 4**. In this analysis the proposed Weimer Road realignment is assumed to be open to traffic by the full build year (Scenario 3).

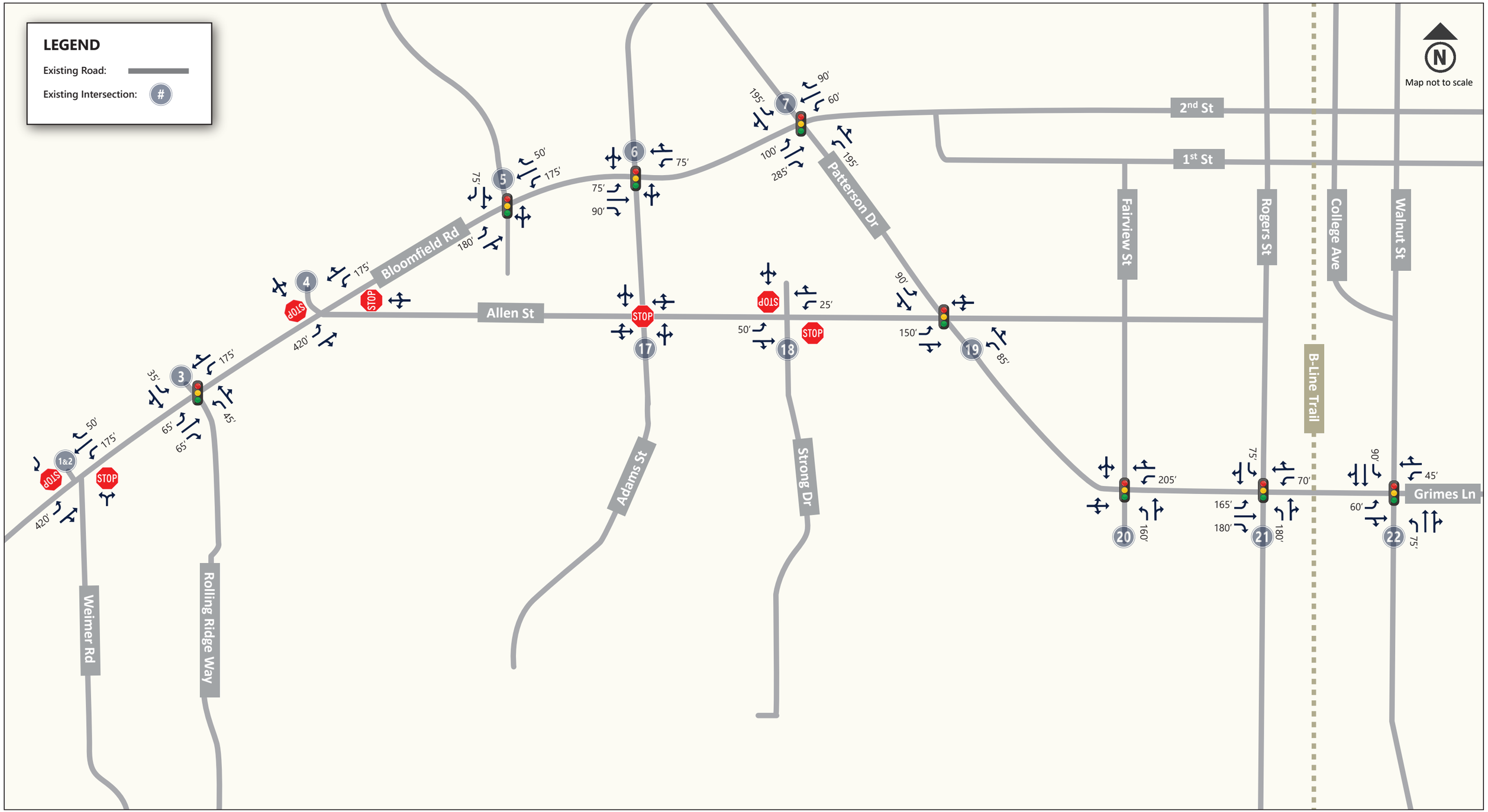


Figure 2: Existing Intersection Geometries: Bloomfield Road / 2nd Street, Allen Street, and Patterson Street

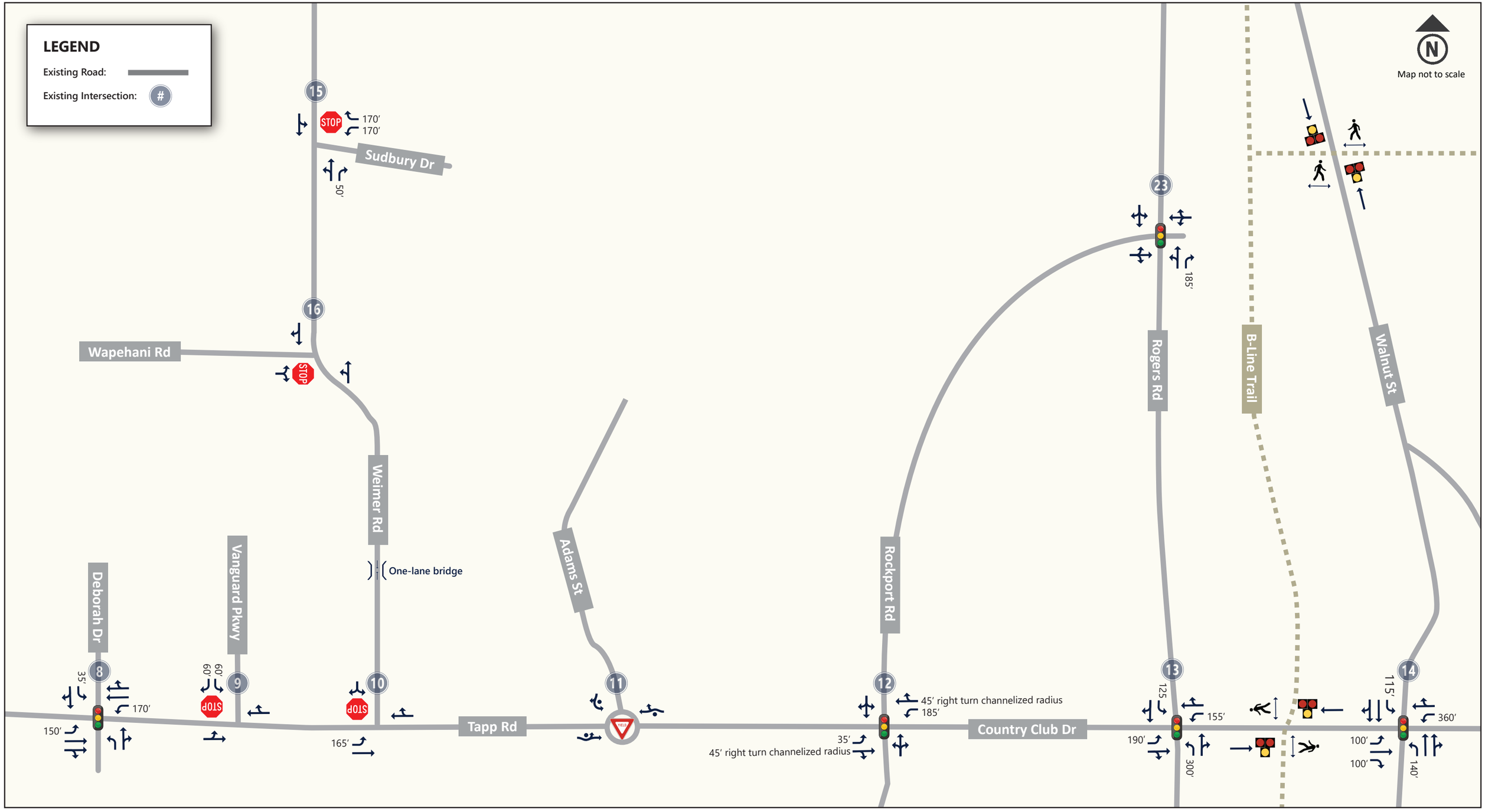


Figure 3: Existing Intersection Geometries: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

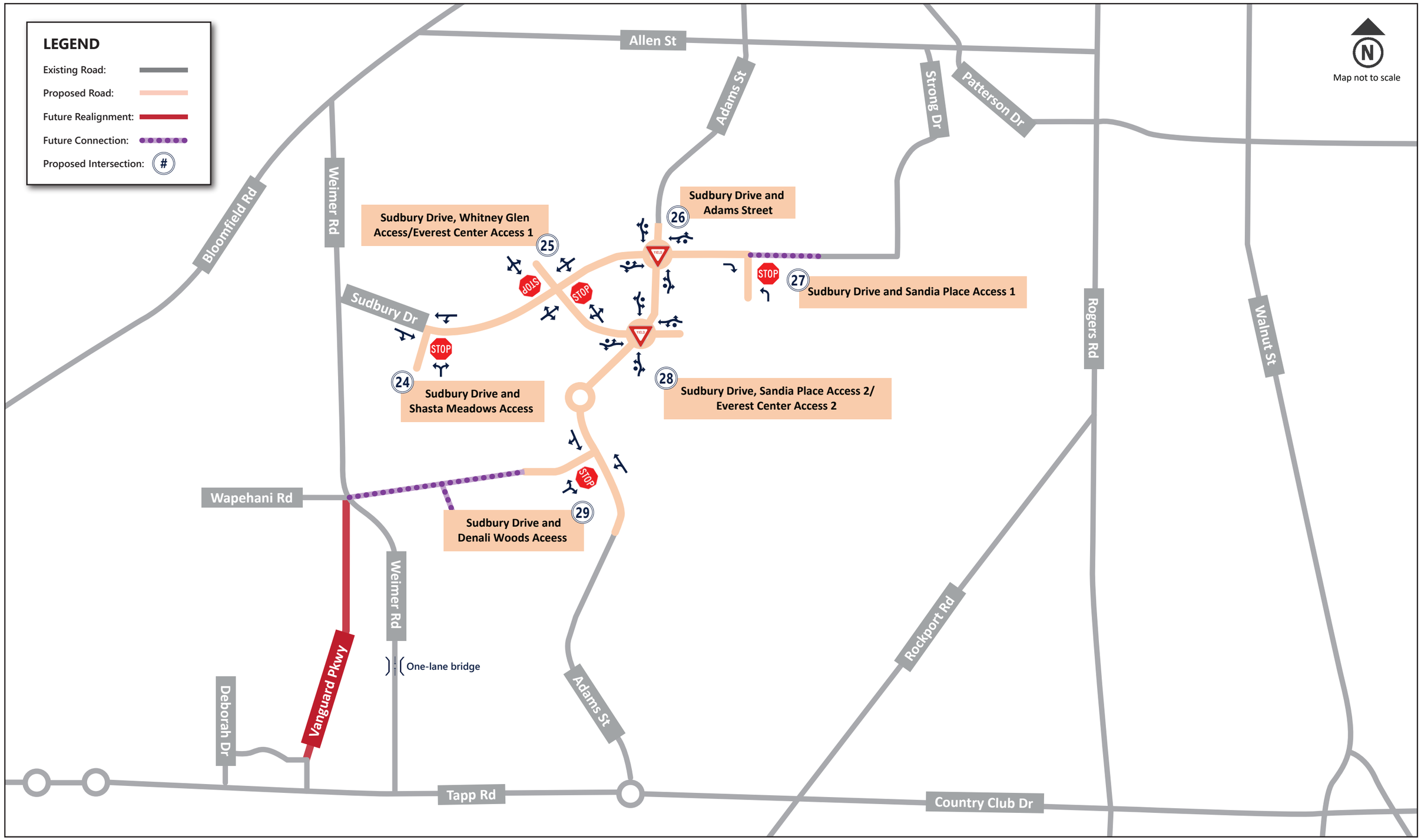


Figure 4: Proposed Intersection & Future Weimer Road Re-alignment

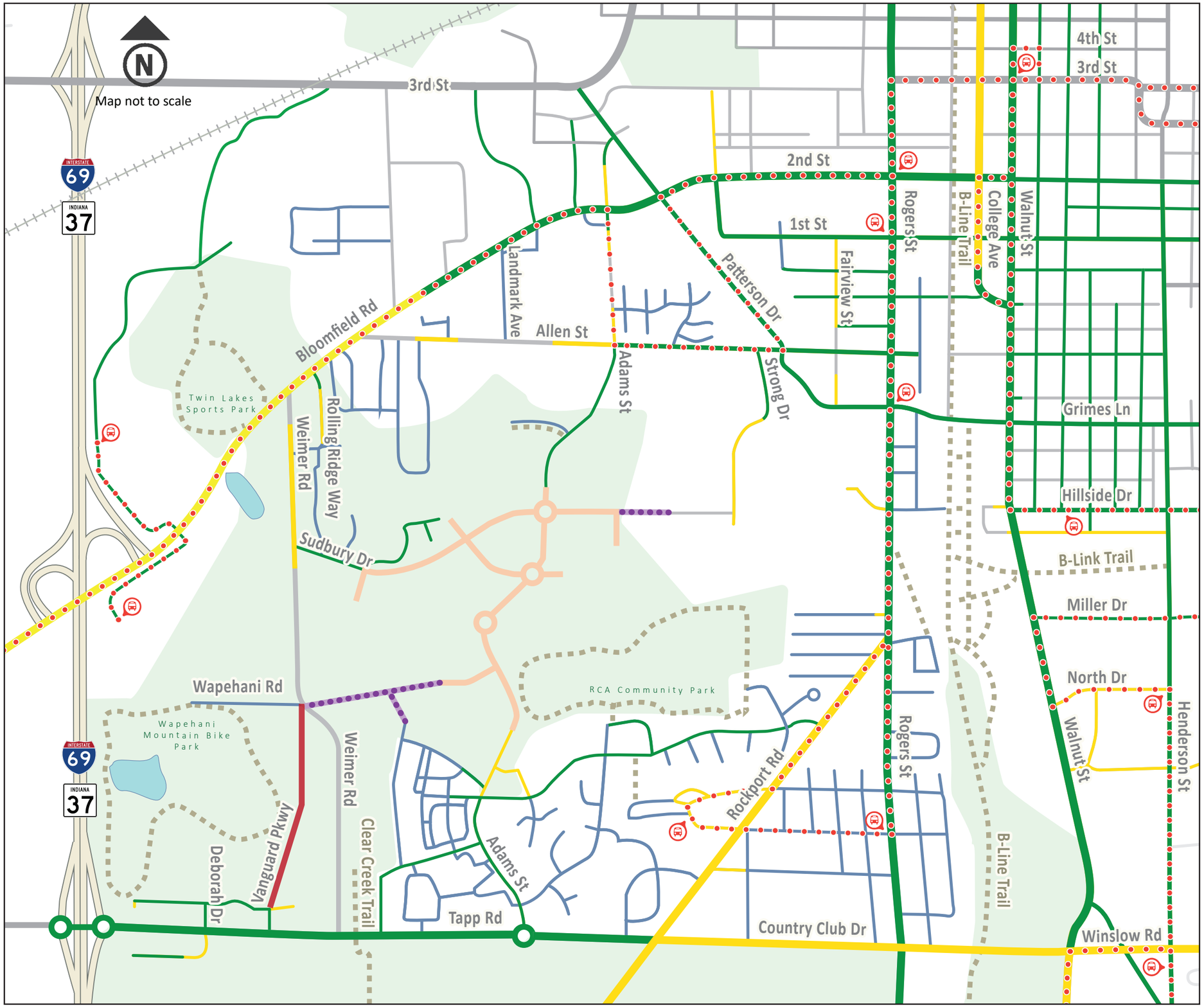
Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

2.6. Non-Motorized and Transit Access

Figure 5 shows the existing sidewalks, paths, and transit stops in the study area. This map was labeled using the City's Transportation Plan, OpenStreetMap (OSM), and satellite imagery as guides. It shows where sidewalks and off-street trails currently exist. It also shows streets which have lower volumes of vehicular traffic and are therefore generally safer for pedestrians with or without sidewalks. The figure also shows the approximate location of the proposed roadway connections for the development. The development will provide sidewalks or multi-use paths on either side of the proposed roads which will provide access in and out of the site.

There are various transit stops that are connected to the area by sidewalk, however the closest stop is approximately a mile walk from the site. Access could be improved by providing additional sidewalks or paths between the site and surrounding neighborhoods. Also, Bloomington Transit has shown interest in eventually running a bus on the proposed Adams Street from Tapp to 2nd Street.

There are various off-street trails near the proposed development, such as the Clear Creek Trail, the B-Line Trail, and the B-Link Trail. The Clear Creek Trail will be well connected to the proposed development via sidewalks. The B-Line Trail is connected to the proposed development via sidewalks; however, the most direct route on city streets from the site to the trail requires traveling north to Allen Street before heading east to access the trail. Access to the B-Line Trail could be improved by building an off-street trail to the east of the site which crosses Rogers Street at a midblock crossing between Hillside Drive Street and Rockport Road. This connection would also improve access to Rogers Street bus stops. Potential midblock crossing treatments should be further evaluated to determine the right approach for this location.



LEGEND

- Sidewalk on Both Sides:
- Partial Sidewalk:
- No Sidewalk:
- Low Volume Road:
- Bike/Pedestrian Trail:
- Bus Route:
- Bus Stop:
- Proposed Roads:
- Future Realignment:
- Future Connection:

Note: The proposed roads and future realignment are assumed to have sidewalk on both sides of the roadway

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

Figure 5: Sidewalk, Path, and Transit Map

3.0 Traffic Forecast

3.1. Existing Traffic Data

Turning movement traffic volumes, including truck percentages and peak hour factors, were obtained for all existing intersections. The counts were taken by GHA in October of 2023 on a typical weekday for four hours from 7:00 AM to 9:00 AM and 3:30 PM to 5:30 PM. Two peak hours were included in the analysis. The actual peak hour data at each intersection was used for a conservative analysis. **Table 1** shows the actual peak hours at each intersection. The existing traffic volume data are included in **Appendix B.**

Table 1: Intersection Peak Hours

Intersection	AM Peak	PM Peak
1. Bloomfield Road & Recreation Center Drive	7:45 AM - 8:45 AM	4:30 PM - 5:30 PM
2. Bloomfield Road & Weimer Road	7:45 AM - 8:45 AM	4:30 PM - 5:30 PM
3. Bloomfield Road & Rolling Ridge Way	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
4. Bloomfield Road & Allen Street	7:45 AM - 8:45 AM	4:30 PM - 5:30 PM
5. Bloomfield Road & Landmark Avenue	8:00 AM – 9:00 AM	4:15 PM - 5:15 PM
6. Bloomfield Road/2nd Street & Adams Street	8:00 AM – 9:00 AM	4:00 PM - 5:00 PM
7. 2nd Street & Patterson Drive	8:00 AM – 9:00 AM	4:15 PM - 5:15 PM
8. Tapp Road & Deborah Drive	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
9. Tapp Road & Vanguard Parkway	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
10. Tapp Road & Weimer Road	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
11. Tapp Road & Adams Street	7:30 AM - 8:30 AM	4:00 PM - 5:00 PM
12. Tapp Road/Country Club Drive & Rockport Road	7:45 AM - 8:45 AM	4:15 PM - 5:15 PM
13. Country Club Drive & Rogers Street	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
14. Country Club Drive/Winslow Road & Walnut Street	7:15 AM - 8:15 AM	4:30 PM - 5:30 PM
15. Weimer Road & Sudbury Drive	8:00 AM - 9:00 AM	3:45 PM - 4:45 PM
16. Weimer Road & Wapehani Road	7:45 AM - 8:45 AM	4:30 PM - 5:30 PM
17. Allen Street & Adams Street	7:15 AM - 8:15 AM	4:30 PM - 5:30 PM
18. Allen Street & Strong Drive	7:30 AM - 8:30 AM	4:15 PM - 5:15 PM
19. Patterson Drive & Allen Street	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
20. Patterson Drive & Fairview Street	7:15 AM - 8:15 AM	4:30 PM - 5:30 PM
21. Patterson Drive & Rogers Street	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM
22. Walnut Street & Grimes Lane	8:00 AM - 9:00 AM	4:30 PM - 5:30 PM
23. Rogers Street & Rockport Road	7:30 AM - 8:30 AM	4:30 PM - 5:30 PM

3.2. Background Traffic

The background growth rate was used to increase the existing traffic volumes at a flat rate per year to create background volumes for the opening day and full build year scenarios. Background volume represents anticipated growth in traffic independent of the proposed development's construction. The growth rate was based on historic trends in the area shown in the Indiana Department of Transportation's Traffic Count Database System[4] and a comparison of the existing traffic data to historic traffic data found in Bloomington's Synchro Model. EMCS also reviewed the City's comprehensive plan[5] to identify areas for future growth that could contribute to background growth within the area. The proposed growth rate is **0.5%/year** to represent a realistic but conservative estimate of growth in the area. See **Appendix B** for growth calculations.

3.2.1. Proposed Roadway Connections Traffic Adjustments

Once the prosed roadway connections are complete, existing traffic will be free to reroute onto Adams Street or Sudbury Street. Because traffic count volumes do not yet exist on these proposed roadways, an adjustment was made to account for rerouting which reduced some trips from the surrounding roadways. This adjustment was done in PTV Vistro 2022 using the entering and exiting volumes at Sudbury Drive, and Adams Street. It was assumed that only 25% of trips that could reroute would do so. The proposed roadway connections traffic adjustments were applied to both the opening day and the full build year scenarios. See **Figure 6** and **Figure 7** for the adjusted volumes.

3.3. Trip Generation

The site plan and schedule of completion were provided by TRG. The quantity of single-family housing (ITE Code 210), multifamily housing (ITE Code 221) and ground-floor commercial (ITE Code 821) and the anticipated construction timeline is shown in **Table 2**. For the purposes of this study, the development was analyzed at two points in time: opening day (2029), when all of zones 1, 2, and part of zones 3 & 4 will be complete; and full build year (2034), when all zones will be complete. These quantities were used to calculate the Base Vehicle Trip Generation. See **Appendix B** for full trip generation and development phasing discussion.

Table 2: Land uses and construction timeline

Zone	Neighborhood	Single-Family Units	Multifamily Units	Ground-Floor Commercial	Construction Start Year	Construction Finish Year
1	Shasta Meadows	275	275	–	2025	2028
2	Denali Woods	250	250	–	2025	2029
3	Everest Center	0	1700	65,000 sf	2027	2034
4	Sandia Place	110	990	–	2028	2032
5	Whitney Glen	200	200	–	2033	2034

Ground-floor commercial space is measured in square feet.

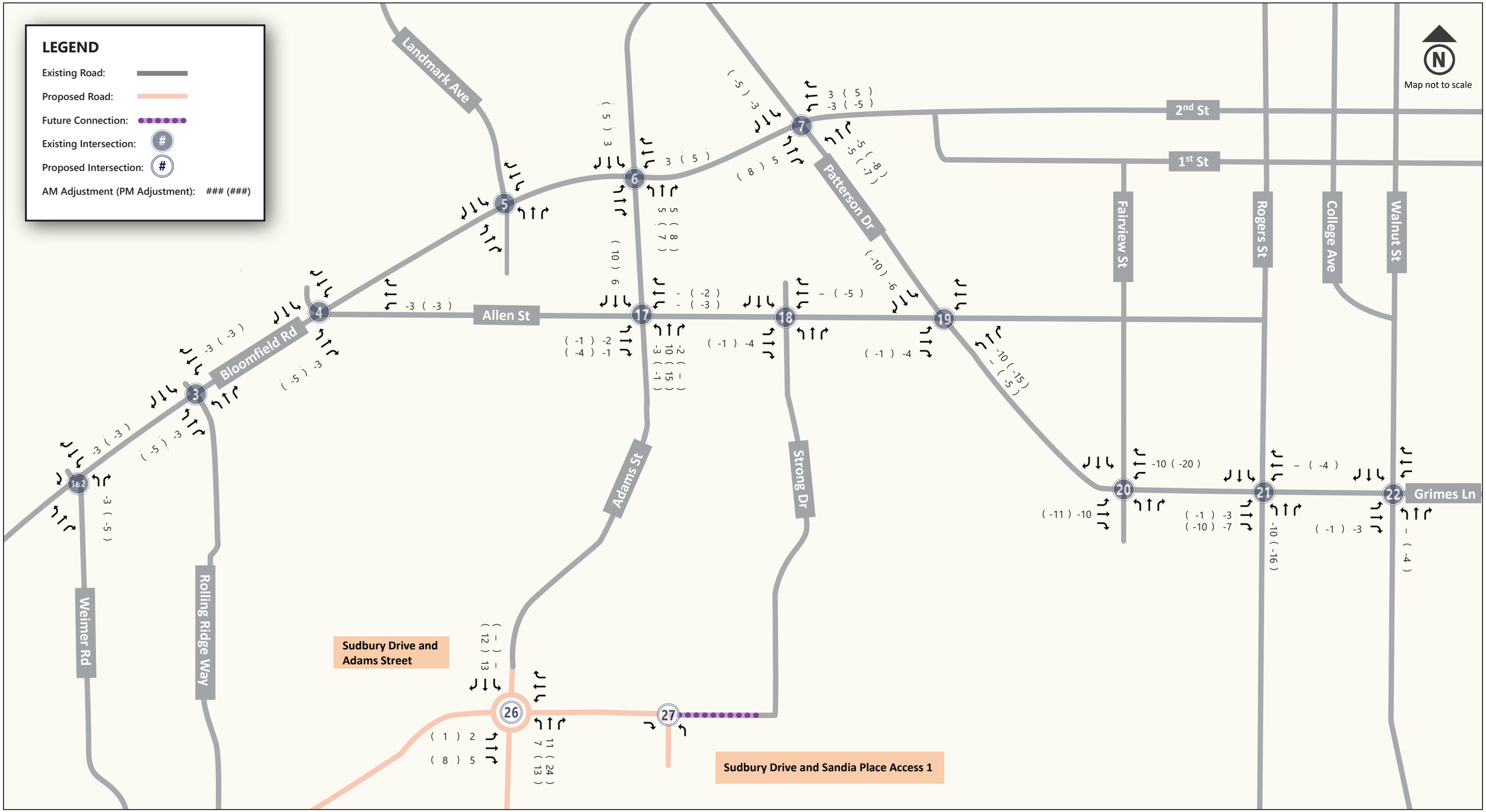


Figure 6: Connection Adjustments - Bloomfield Road, Allen Street, Patterson Drive

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

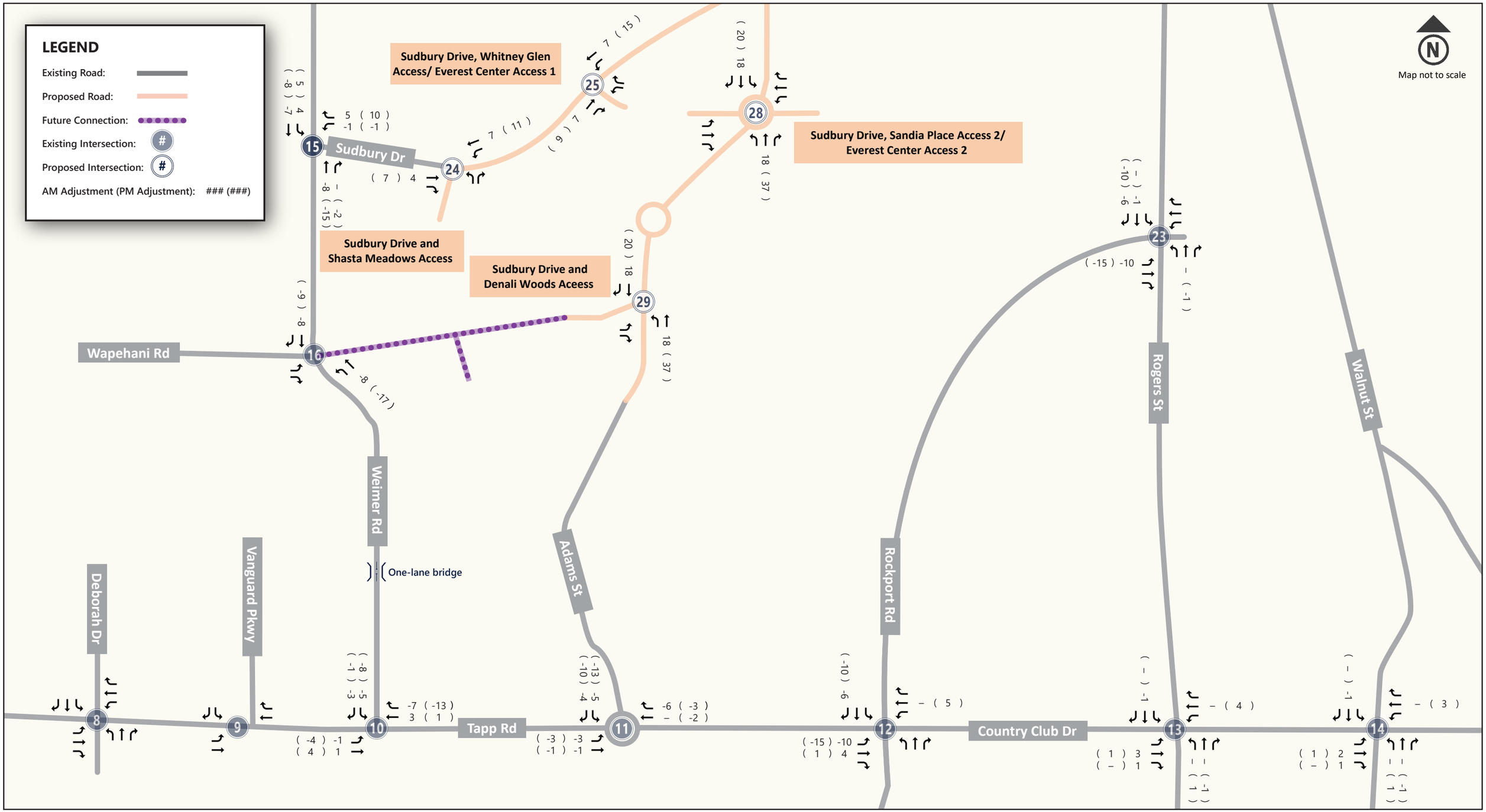


Figure 7: Connection Adjustments - Tapp Road, Sudbury Drive, Rogers Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

3.4. Internal Capture & Mode Split Adjustments

Because there will be commercial and residential uses within the same development, it can be expected that some trips will occur without using external roadways. This is called internal capture. Adjustments were made based on the ITE Trip Generation Handbook, 3rd Edition[6] to determine internal capture and vehicle occupancy.

Additionally, some entering or exiting residents or customers will likely choose to enter or exit the development using transit or non-motorized transport. This is called external mode split. A conservative assumption of 5% was made for non-motorized and transit trips. Pass-by trips were not included because the number of pass-by trips would be minimal and would be expected to be internal pass-by trips rather than external. **Table 3** contains a summary of adjusted generated trips during both peak hours. A more detailed discussion of the mode split and internal capture process as well as the full calculation of trips can be found in **Appendix B.**

Table 3: Trip Generation

Zone #	Development Phase	ITE Code	Size	Unit	AM Peak Total	AM Peak Enter	AM Peak Exit	PM Peak Total	PM Peak Enter	PM Peak Exit
	Opening Day Base Total	210 & 221	550	DU	296	74	222	365	228	137
1	Internal and Mode Split Reduction				17	4	13	25	16	9
	Opening Day New External Total	**210 & 221**	**550**	DU	**279**	**70**	**209**	**340**	**212**	**128**
	Opening Day Base Total	210 & 221	500	DU	269	67	202	333	208	125
2	Internal and Mode Split Reduction				15	4	11	23	15	8
	Opening Day New External Total	**210 & 221**	**500**	**DU**	**254**	**63**	**191**	**310**	**193**	**117**
	Opening Day Base Total	221 & 821	510 / 20	DU / 1000 SF	248	71	177	303	172	131
3	Internal and Mode Split Reduction				19	8	11	37	16	21
	Opening Day New External Total	**221 & 821**	**510 / 20**	**DU / 1000 SF**	**229**	**63**	**166**	**266**	**156**	**110**
	Full Build Year Base Total	221 & 821	1190 / 45	DU / 1000 SF	590	166	424	698	398	300
3	Internal and Mode Split Reduction				47	18	29	93	43	50
	Additional Full Build Year New External Total	**221 & 821**	**1190 / 45**	**DU / 1000 SF**	**543**	**148**	**395**	**605**	**355**	**250**
	Opening Day Base Total	210 & 221	276	DU	121	29	92	127	78	49
4	Internal and Mode Split Reduction				7	2	5	8	5	3
	Opening Day New External Total	**210 & 221**	**276**	**DU**	**114**	**27**	**87**	**119**	**73**	**46**
	Full Build Year Base Total	210 & 221	824	DU	377	88	289	372	229	143
4	Internal and Mode Split Reduction				23	6	17	32	21	11
	Additional Full Build Year New External Total	**210 & 221**	**824**	**DU**	**354**	**82**	**272**	**340**	**208**	**132**
	Full Build Year Base Total	210 & 221	400	DU	216	53	163	269	168	101
5	Internal and Mode Split Reduction				13	3	10	23	16	7
	Full Build Year New External Total	**210 & 221**	**400**	**DU**	**203**	**50**	**153**	**246**	**152**	**94**
	Opening Day	210, 221, & 821	1836 / 20	DU / 1000 SF	876	223	653	1035	634	401
1,2,3,4,5	Full Build Year	210, 221, & 821	2414 / 45	DU / 1000 SF	1100	280	820	1191	715	476
	Total New Trips	210, 221, & 821	4250 / 65	DU / 1000 SF	1976	503	1473	2226	1349	877

3.5. Trip Assignment and Distribution

Existing traffic patterns, census data, roadway characteristics, and existing and future land use data were considered when developing the overall trip distribution. EMCS coordinated with the City, and ultimately distribution percentages were agreed upon in December 2023. **Figure 8** shows the overall distribution percentages used in the analysis. The documentation for the development of the distribution percentages can be found in **Appendix B**.

To develop turning movement traffic volumes from the proposed development, the generated trips were then assigned to the study intersections using the software program PTV Vistro 2022. The site-generated trips and assignment percentages at each intersection are shown in **Appendix B.**

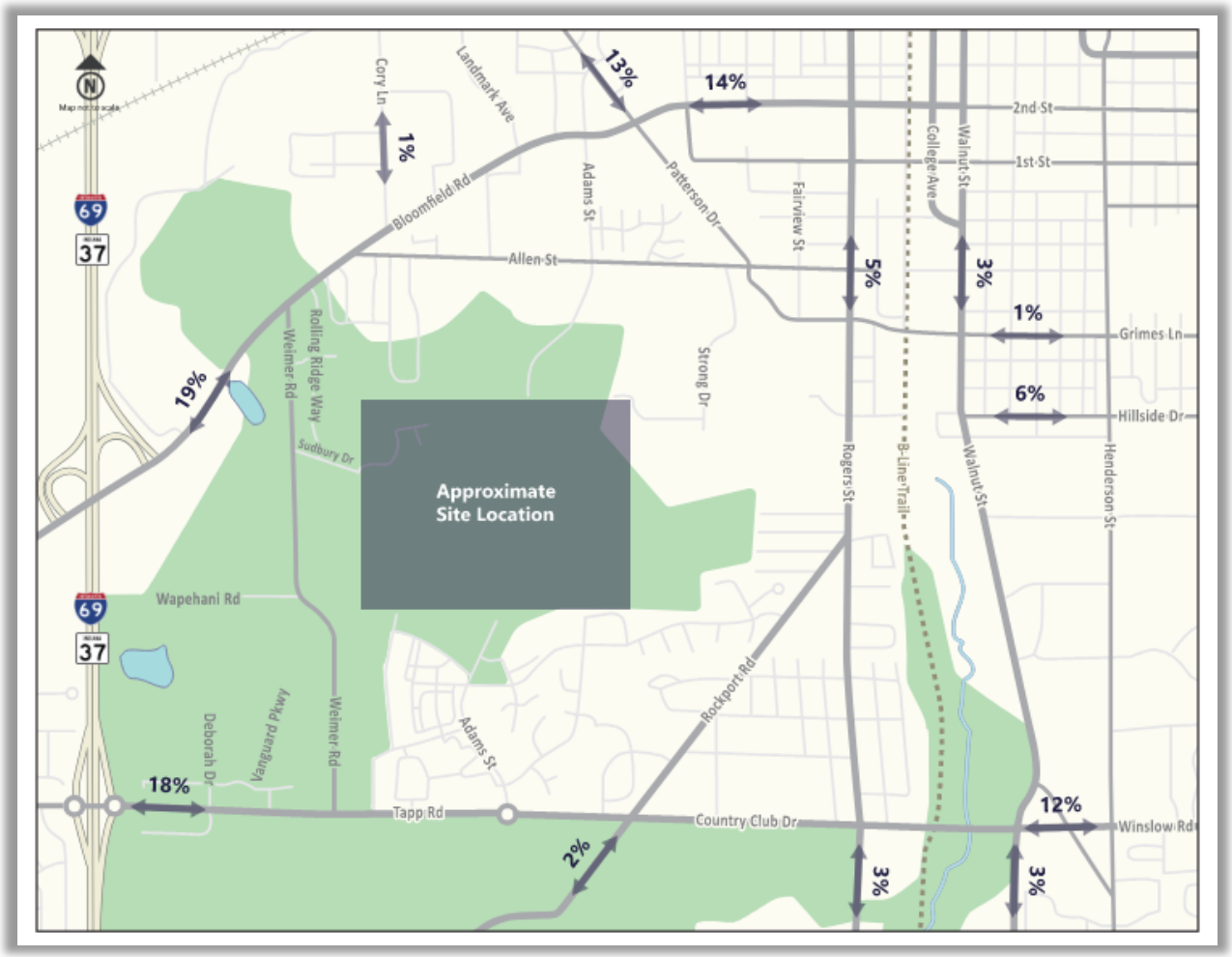


Figure 8: Assignment & Distribution Percentages

3.6. Scenario Traffic Volumes

Future vehicular traffic volumes to be generated by the proposed facilities were added to the background traffic volumes and proposed roadway connection adjustments to obtain the opening day and full build year traffic turning movement volumes. Note that traffic has been shifted for the Weimer Road realignment in **Scenarios 3** and **4** from Tapp Road & Weimer Road to Tapp Road & Vanguard Parkway. See **Section 2.5** for more details. The resulting turning movement volumes for all scenarios and peak hours are shown in **Appendix B** and in **Section 4.0**.

4.0 Traffic Analysis

4.1. Capacity Analysis

A capacity analysis was performed for all study intersections and scenarios. The capacity analysis was performed using SIDRA (Version 9.0) with the SIDRA standard capacity model for roundabouts (intersections 11, 26, and 28) and using Synchro 11 with the *HCM 6th Edition*[2] methodology for all other intersections.

The standard parameter for measuring traffic operating conditions is level-of-service (LOS). The LOS ranges from A-F with each indicating driving operations from best to worst. Each letter represents a range of the average delay per vehicle. The *HCM 6th Edition* provides LOS criteria for signalized and unsignalized intersections. These criteria are shown in **Table 4**. Roundabouts used the same LOS criteria as signalized intersections. An **LOS D or better** was assumed as the minimum level of service for the overall intersection based on guidance from the HCM and on standard industry practice. In addition, all approaches were evaluated to have a volume-to-capacity ratio (v/c) less than 1. However some communities choose to adopt a lower threshold for LOS based on community concerns for competing vehicle, pedestrian, and other road users.

Per the *HCM 6TH Edition*, at two-way stop-controlled intersections, LOS is not defined for the major-street approaches or for the overall intersection, as major-street through vehicles are assumed to experience no delay.

Capacity analysis result printouts are included in **Appendix C**. Queuing results are in **Appendix E**.

Table 4: Level of Service - Unsignalized Intersection Control Delay and Signalized Intersection Control Delay

LOS	Signalized Intersection Control Delay (sec/veh)
A	<10
B	>10 and <20
C	>20 and <35
D	>35 and <55
E	>55 and <80
F	>80

Note: Signalized delay criteria also used for roundabouts.

LOS	Unsignalized Intersection Control Delay (sec/veh)
A	<10
B	>10 and <15
C	>15 and <25
D	>25 and <35
E	>35 and <50
F	>50

The capacity analysis was performed for the AM and PM peak hours for the following scenarios:

- Scenario 1: Existing Year 2023 volumes
- Scenario 2: Opening Day background 2029 volumes + Phase 1 site generated trips
- Scenario 3: Full Build Year background 2034 volumes + Phase 1 site generated trips
- Scenario 4: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips
- Scenario 4A: Full Build Year background 2034 volumes + Phases 1 and 2 site generated trips + proposed improvements

Scenario	**1**	**2**	**3**	**4**	**4A**
Existing Year 2023 Volumes	X				
Opening Day Background 2029 Volumes		X			
Full Build Year Background 2034 Volumes			X	X	X
Site-generated Trips – Phase 1		X	X	X	X
Site-generated Trips – Phase 2				X	X
Proposed Roadway Connections		X	X	X	X
Potential Weimer Realignment			X	X	X
Proposed Improvements					X

4.2. Scenario 1: Existing Year 2023 Volumes Capacity Analysis

Table 5 summarizes capacity results for Scenario 1 with the following inputs:

- Existing signal timings provided by the City
- Existing roadway geometry (see **Section 2.2**)
- Existing Year 2023 traffic volumes (see **Figure 9** and **Figure 10**)

Table 5: Intersection LOS and Delay (sec/veh) Results – Scenario 1

Scenario 1: Existing Year 2023		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
1. Bloomfield Road & Recreation Center Drive (AM Peak)*	TWSC	A (8.9)	–	n/a	B (12.9)	–
1. Bloomfield Road & Recreation Center Drive (PM Peak)*	TWSC	B (10.5)	–	n/a	A (0)	–
2. Bloomfield Road & Weimer Road (AM Peak)*	TWSC	–	A (9.9)	C (19.9)	n/a	–
2. Bloomfield Road & Weimer Road (PM Peak)*	TWSC	–	A (9.6)	C (20.4)	n/a	–
3. Bloomfield Road & Rolling Ridge Way (AM Peak)	SIG	B (11.5)	A (5.0)	D (50.5)	D (47.7)	**B (12.5)**
3. Bloomfield Road & Rolling Ridge Way (PM Peak)	SIG	B (11.3)	B (17.4)	D (47.8)	D (47.8)	**B (17.3)**
4. Bloomfield Road & Allen Street (AM Peak)*†	TWSC	A (0)	B (11.6)	C (20.1)	A (9.8)	–
4. Bloomfield Road & Allen Street (PM Peak)*†	TWSC	B (10.8)	A (9.4)	E (42.9)	C (21.7)	–
5. Bloomfield Road & Landmark Avenue (AM Peak)	SIG	A (5.4)	A (3.2)	D (41.3)	D (45.3)	**B (10.4)**
5. Bloomfield Road & Landmark Avenue (PM Peak)	SIG	A (6.0)	A (2.6)	D (38.7)	F (103.5)	**C (27.9)**
6. Bloomfield Road/2nd Street & Adams Street (AM Peak)	SIG	A (0.8)	A (0.6)	D (49.6)	D (45.2)	**A (5.5)**
6. Bloomfield Road/2nd Street & Adams Street (PM Peak)	SIG	A (0.7)	A (1.2)	D (48.4)	D (44.3)	**A (7.4)**
7. 2nd Street & Patterson Drive (AM Peak)‡	SIG	A (1.7)	A (1.1)	D (49.5)	D (37.0)	**C (22.4)**
7. 2nd Street & Patterson Drive (PM Peak)‡	SIG	A (2.0)	A (4.9)	E (56.3)	C (31.8)	**C (22.3)**
8. Tapp Road & Deborah Drive (AM Peak)	SIG	B (11.8)	B (10.9)	B (19.2)	B (19.2)	**B (11.6)**
8. Tapp Road & Deborah Drive (PM Peak)	SIG	B (13.5)	B (13.4)	B (19.4)	C (20.6)	**B (14.1)**
9. Tapp Road & Vanguard Parkway (AM Peak)*	TWSC	A (9.3)	–	n/a	B (14.2)	–
9. Tapp Road & Vanguard Parkway (PM Peak)*	TWSC	A (9.5)	–	n/a	D (34.5)	–
10. Tapp Road & Weimer Road (AM Peak)*	TWSC	A (9.4)	–	n/a	D (28.3)	–
10. Tapp Road & Weimer Road (PM Peak)*	TWSC	A (9.7)	–	n/a	F (50.5)	–
11. Tapp Road & Adams Street (AM Peak)	RAB	A (2.8)	A (2.4)	n/a	A (4.4)	**A (2.8)**
11. Tapp Road & Adams Street (PM Peak)	RAB	A (3.5)	A (2.6)	n/a	A (5.5)	**A (3.4)**
12. Tapp Road/Country Club Drive & Rockport Road (AM Peak)§	SIG	B (11.7)	B (17.0)	B (18.8)	B (15.8)	**B (15.3)**
12. Tapp Road/Country Club Drive & Rockport Road (PM Peak)§	SIG	B (13.7)	B (16.5)	C (21.1)	C (23.3)	**B (16.7)**

Scenario 1: Existing Year 2023		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
13. Country Club Drive & Rogers Street (AM Peak)	SIG	C (29.8)	C (24.1)	D (36.9)	C (26.5)	**C (29.8)**
13. Country Club Drive & Rogers Street (PM Peak)	SIG	C (32.7)	D (45.0)	C (33.2)	D (37.9)	**D (37.8)**
14. Country Club Drive/Winslow Road & Walnut Street (AM Peak)	SIG	C (21.9)	D (53.5)	C (28.0)	C (23.7)	**C (30.3)**
14. Country Club Drive/Winslow Road & Walnut Street (PM Peak)	SIG	C (29.5)	D (41.0)	C (32.4)	D (36.1)	**C (34.9)**
15. Weimer Road & Sudbury Drive (AM Peak)*	TWSC	n/a	A (8.7)	–	A (7.3)	**–**
15. Weimer Road & Sudbury Drive (PM Peak)*	TWSC	n/a	A (9)	–	A (7.4)	**–**
16. Weimer Road & Wapehani Road (AM Peak)*	TWSC	A (9)	n/a	A (7.3)	–	**–**
16. Weimer Road & Wapehani Road (PM Peak)*	TWSC	A (8.7)	n/a	A (7.3)	–	**–**
17. Allen Street & Adams Street (AM Peak)	AWSC	A (8.6)	A (7.5)	A (7.9)	A (8.3)	**A (8.3)**
17. Allen Street & Adams Street (PM Peak)	AWSC	A (9.9)	A (8.4)	A (8.3)	A (9.1)	**A (9.2)**
18. Allen Street & Strong Drive (AM Peak)*	TWSC	A (7.3)	A (8.2)	B (11.3)	B (11.7)	**–**
18. Allen Street & Strong Drive (PM Peak)*	TWSC	A (0)	A (7.8)	B (11.5)	B (12.2)	**–**
19. Patterson Drive & Allen Street (AM Peak)‖	SIG	D (38.9)	C (29.2)	A (7.2)	A (6.7)	**B (15.1)**
19. Patterson Drive & Allen Street (PM Peak)‖	SIG	D (42.4)	C (32.2)	A (0.9)	A (7.7)	**B (14.9)**
20. Patterson Drive & Fairview Street (AM Peak)¶	SIG	A (5.8)	A (0.7)	D (36.1)	D (40.7)	**A (4.1)**
20. Patterson Drive & Fairview Street (PM Peak)¶	SIG	A (8.7)	A (0.7)	D (38.2)	D (42.8)	**A (8.4)**
21. Patterson Drive & Rogers Street (AM Peak)	SIG	A (8.9)	C (29.3)	D (44.0)	C (27.0)	**C (29.8)**
21. Patterson Drive & Rogers Street (PM Peak)	SIG	B (10.3)	C (31.8)	D (36.6)	D (51.2)	**C (31.8)**
22. Walnut Street & Grimes Lane (AM Peak)	SIG	C (24.9)	C (27.4)	C (27.8)	C (28.0)	**C (27.3)**
22. Walnut Street & Grimes Lane (PM Peak)	SIG	E (64.4)	D (36.0)	C (21.2)	C (32.2)	**D (35.3)**
23. Rogers Street & Rockport Road (AM Peak)#	SIG	A (9.8)	A (7.4)	A (8.8)	A (7.8)	**A (8.8)**
23. Rogers Street & Rockport Road (PM Peak)#	SIG	B (16.2)	B (12.6)	A (6.3)	B (14.2)	**B (12.8)**

SIG: signal, RAB: roundabout, TWSC: two-way stop-controlled, AWSC: all-way stop-controlled

*For two-way stop-control (TWSC), major street results are shown for left-turning movements.

†At this intersection, Allen Street was considered northbound.

‡At this intersection, Patterson Drive was considered northbound/southbound.

§At this intersection, Rockport Road was considered northbound/southbound.

||At this intersection, Patterson Drive was considered northbound/southbound.

¶At this intersection, Patterson Drive was considered eastbound/westbound.

#At this intersection, Rockport Road was considered eastbound/westbound.

Note: n/a means the approach does not exist.

Figure 9: Turning Movements Scenario 1: Bloomfield Road / 2nd Street, Allen Street, and Patterson Street

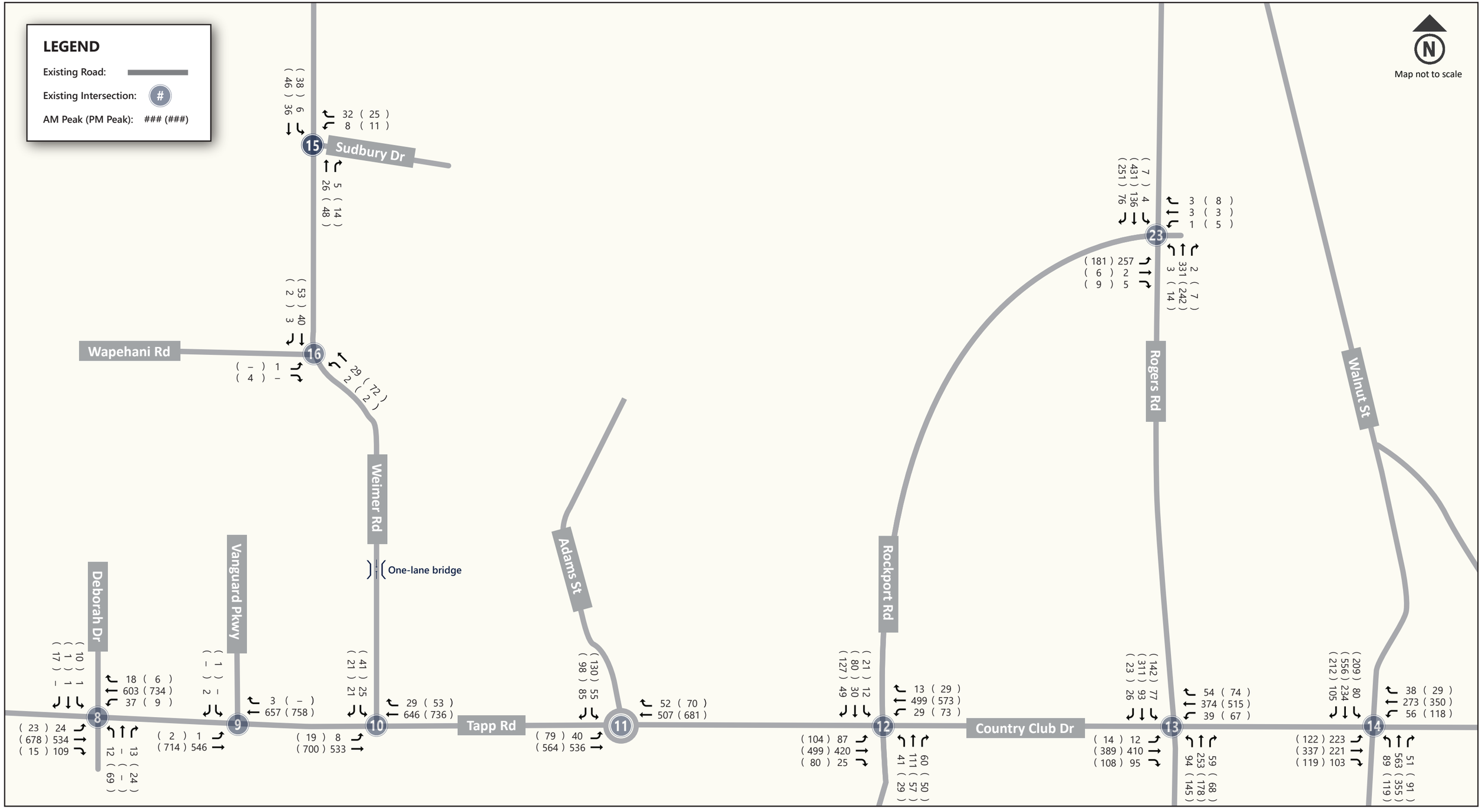


Figure 10: Turning Movements Scenario 1: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

4.3. Scenario 2: Opening Day Background 2029 Volumes + Site Generated Trips Due to Phase 1 of the Proposed Developments Capacity Analysis

Table 6 summarizes capacity results for Scenario 2 with the following inputs:

- Existing intersection geometry (see **Section 2.2**)
- Proposed roadway connections and adjustments (see **Sections 2.4** and **3.2.1**)
- Existing signal timings provided by the City
- Opening day background 2029 volumes + site generated trips due to Phase 1 of the proposed development (see **Figure 11** and **Figure 12**)

Table 6: Intersection LOS and Delay (Sec/veh) Results – Scenario 2

Scenario 2: Opening Day 2029 - Phase 1		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
1. Bloomfield Road & Recreation Center Drive (AM Peak)*	TWSC	A (9.5)	–	n/a	B (14.8)	–
1. Bloomfield Road & Recreation Center Drive (PM Peak)*	TWSC	B (11)	–	n/a	A (0)	–
2. Bloomfield Road & Weimer Road (AM Peak)*	TWSC	–	B (10.4)	F (88.6)	n/a	–
2. Bloomfield Road & Weimer Road (PM Peak)*	TWSC	–	B (10.8)	F (107.7)	n/a	–
3. Bloomfield Road & Rolling Ridge Way (AM Peak)	SIG	B (13.8)	A (5.2)	D (50.6)	D (47.7)	**B (13.9)**
3. Bloomfield Road & Rolling Ridge Way (PM Peak)	SIG	B (12.5)	C (22.2)	D (47.9)	D (48.0)	**C (20.3)**
4. Bloomfield Road & Allen Street (AM Peak)*†	TWSC	A (0)	B (13)	C (22.6)	B (10)	–
4. Bloomfield Road & Allen Street (PM Peak)*†	TWSC	B (11.3)	A (9.6)	F (53.1)	C (24.5)	–
5. Bloomfield Road & Landmark Avenue (AM Peak)	SIG	A (6.1)	A (3.7)	D (40.7)	D (44.9)	**B (10.4)**
5. Bloomfield Road & Landmark Avenue (PM Peak)	SIG	A (6.2)	A (3.0)	D (38.7)	F (112.1)	**C (28.9)**
6. Bloomfield Road/2nd Street & Adams Street (AM Peak)	SIG	A (1.4)	A (0.8)	D (48.1)	D (38.5)	**B (10.3)**
6. Bloomfield Road/2nd Street & Adams Street (PM Peak)	SIG	A (1.2)	A (1.5)	D (49.0)	D (39.7)	**B (10.9)**
7. 2nd Street & Patterson Drive (AM Peak)‡	SIG	A (2.5)	A (1.1)	D (51.2)	D (36.9)	**C (21.2)**
7. 2nd Street & Patterson Drive (PM Peak)‡	SIG	A (1.9)	A (7.4)	E (59.5)	C (32.9)	**C (22.6)**
8. Tapp Road & Deborah Drive (AM Peak)	SIG	B (11.9)	B (11.5)	B (19.9)	B (19.9)	**B (11.9)**
8. Tapp Road & Deborah Drive (PM Peak)	SIG	B (14.0)	B (13.7)	C (20.7)	C (22.0)	**B (14.5)**
9. Tapp Road & Vanguard Parkway (AM Peak)*	TWSC	A (10)	–	n/a	C (16.4)	–
9. Tapp Road & Vanguard Parkway (PM Peak)*	TWSC	A (9.9)	–	n/a	E (46.9)	–
10. Tapp Road & Weimer Road (AM Peak)*	TWSC	B (10.1)	–	n/a	F (94.9)	–
10. Tapp Road & Weimer Road (PM Peak)*	TWSC	B (10.5)	–	n/a	F (>180)	–

Scenario 2: Opening Day 2029 - Phase 1		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
11. Tapp Road & Adams Street (AM Peak)	RAB	A (3.8)	A (2.6)	n/a	A (5.3)	**A (3.6)**
11. Tapp Road & Adams Street (PM Peak)	RAB	A (4.5)	A (3.9)	n/a	A (6.3)	**A (4.5)**
12. Tapp Road/Country Club Drive & Rockport Road (AM Peak)§	SIG	B (16.6)	C (21.5)	B (19.8)	B (16.4)	**B (18.9)**
12. Tapp Road/Country Club Drive & Rockport Road (PM Peak)§	SIG	B (17.5)	C (27.2)	C (21.2)	C (23.4)	**C (22.6)**
13. Country Club Drive & Rogers Street (AM Peak)	SIG	D (42.2)	C (25.8)	D (42.0)	C (29.2)	**D (36.0)**
13. Country Club Drive & Rogers Street (PM Peak)	SIG	D (42.8)	F (84.0)	D (36.5)	D (41.0)	**D (54.7)**
14. Country Club Drive/Winslow Road & Walnut Street (AM Peak)	SIG	C (24.1)	E (65.1)	C (29.0)	C (24.7)	**C (33.6)**
14. Country Club Drive/Winslow Road & Walnut Street (PM Peak)	SIG	C (33.3)	D (50.8)	C (33.2)	D (39.8)	**D (39.4)**
15. Weimer Road & Sudbury Drive (AM Peak)*	TWSC	n/a	B (10)	–	A (7.5)	**–**
15. Weimer Road & Sudbury Drive (PM Peak)*	TWSC	n/a	B (11.4)	–	A (8)	**–**
16. Weimer Road & Wapehani Road (AM Peak)*	TWSC	A (9.6)	n/a	A (7.5)	–	**–**
16. Weimer Road & Wapehani Road (PM Peak)*	TWSC	A (8.9)	n/a	A (7.4)	–	**–**
17. Allen Street & Adams Street (AM Peak)	AWSC	B (10.3)	A (9.1)	B (10.8)	A (9.3)	**B (10.2)**
17. Allen Street & Adams Street (PM Peak)	AWSC	B (13.6)	B (12.3)	B (11.5)	B (13.1)	**B (12.7)**
18. Allen Street & Strong Drive (AM Peak)*	TWSC	A (7.4)	A (8.5)	B (12.4)	B (13.1)	**–**
18. Allen Street & Strong Drive (PM Peak)*	TWSC	A (0)	A (8)	B (12.9)	B (14)	**–**
19. Patterson Drive & Allen Street (AM Peak)‖	SIG	D (37.7)	C (25.6)	C (22.4)	A (9.3)	**C (23.3)**
19. Patterson Drive & Allen Street (PM Peak)‖	SIG	D (43.2)	C (29.4)	A (1.4)	A (9.4)	**B (16.2)**
20. Patterson Drive & Fairview Street (AM Peak)¶	SIG	A (6.4)	A (0.8)	D (36.1)	D (40.7)	**A (4.4)**
20. Patterson Drive & Fairview Street (PM Peak)¶	SIG	A (9.3)	A (0.7)	D (38.2)	D (42.8)	**A (8.4)**
21. Patterson Drive & Rogers Street (AM Peak)	SIG	B (11.9)	C (32.4)	D (46.3)	C (26.5)	**C (31.2)**
21. Patterson Drive & Rogers Street (PM Peak)	SIG	B (13.1)	D (35.9)	D (36.7)	E (57.0)	**C (34.9)**
22. Walnut Street & Grimes Lane (AM Peak)	SIG	C (22.3)	C (27.8)	C (32.3)	C (28.8)	**C (29.3)**
22. Walnut Street & Grimes Lane (PM Peak)	SIG	E (69.1)	D (37.1)	C (24.9)	D (38.3)	**D (39.8)**
23. Rogers Street & Rockport Road (AM Peak)#	SIG	A (10.0)	A (7.4)	A (9.1)	A (8.0)	**A (9.1)**
23. Rogers Street & Rockport Road (PM Peak)#	SIG	B (16.6)	B (12.9)	A (6.3)	B (15.2)	**B (13.5)**
24. Sudbury Drive & Shasta Meadows Access (AM Peak)	TWSC	–	A (7.4)	B (11.2)	n/a	**–**
24. Sudbury Drive & Shasta Meadows Access (PM Peak)	TWSC	–	A (7.9)	B (11.9)	n/a	**–**

Scenario 2: Opening Day 2029 - Phase 1		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (AM Peak)	TWSC	A (0)	A (7.4)	A (9.5)	A (0)	–
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (PM Peak)	TWSC	A (0)	A (7.5)	A (9.9)	A (0)	–
26. Sudbury Drive & Adams Street (AM Peak)	RAB	A (4.9)	A (3)	A (2.9)	A (2.3)	**A (3.2)**
26. Sudbury Drive & Adams Street (PM Peak)	RAB	A (4.2)	A (2.7)	A (2.9)	A (2.3)	**A (2.9)**
27. Sudbury Drive & Sandia Place Access 1 (AM Peak)	TWSC	–	A (0)	A (8.7)	n/a	–
27. Sudbury Drive & Sandia Place Access 1 (PM Peak)	TWSC	–	A (0)	A (8.7)	n/a	–
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (AM Peak)	RAB	A (3.8)	A (5.2)	A (2.4)	A (2.2)	**A (3.1)**
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (PM Peak)	RAB	A (4.1)	A (5.1)	A (3.1)	A (2.4)	**A (3.1)**
29. Adams Street & Denali Woods Access (AM Peak)	TWSC	B (11.3)	n/a	A (7.6)	–	–
29. Adams Street & Denali Woods Access (PM Peak)	TWSC	B (12.2)	n/a	A (7.8)	–	–

SIG: signal, RAB: roundabout, TWSC: two-way stop-controlled, AWSC: all-way stop-controlled

*For two-way stop-control (TWSC), major street results are shown for left-turning movements.

†At this intersection, Allen Street was considered northbound.

‡At this intersection, Patterson Drive was considered northbound/southbound.

§At this intersection, Rockport Road was considered northbound/southbound.

||At this intersection, Patterson Drive was considered northbound/southbound.

¶At this intersection, Patterson Drive was considered eastbound/westbound.

#At this intersection, Rockport Road was considered eastbound/westbound.

Note: n/a means the approach does not exist.

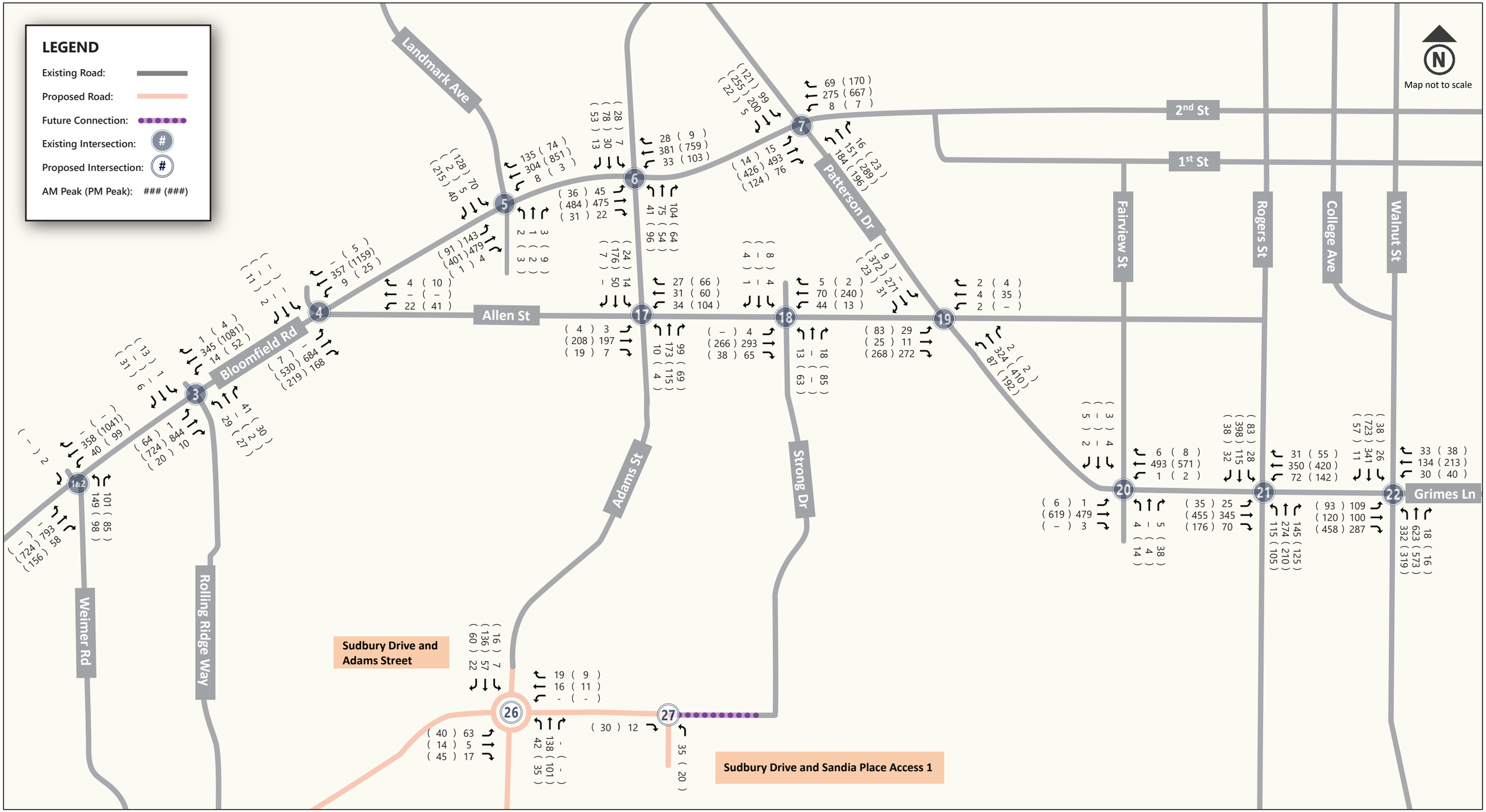


Figure 11: Turning Movements Scenario 2: Bloomfield Road / 2nd Street, Allen Street, and Patterson Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

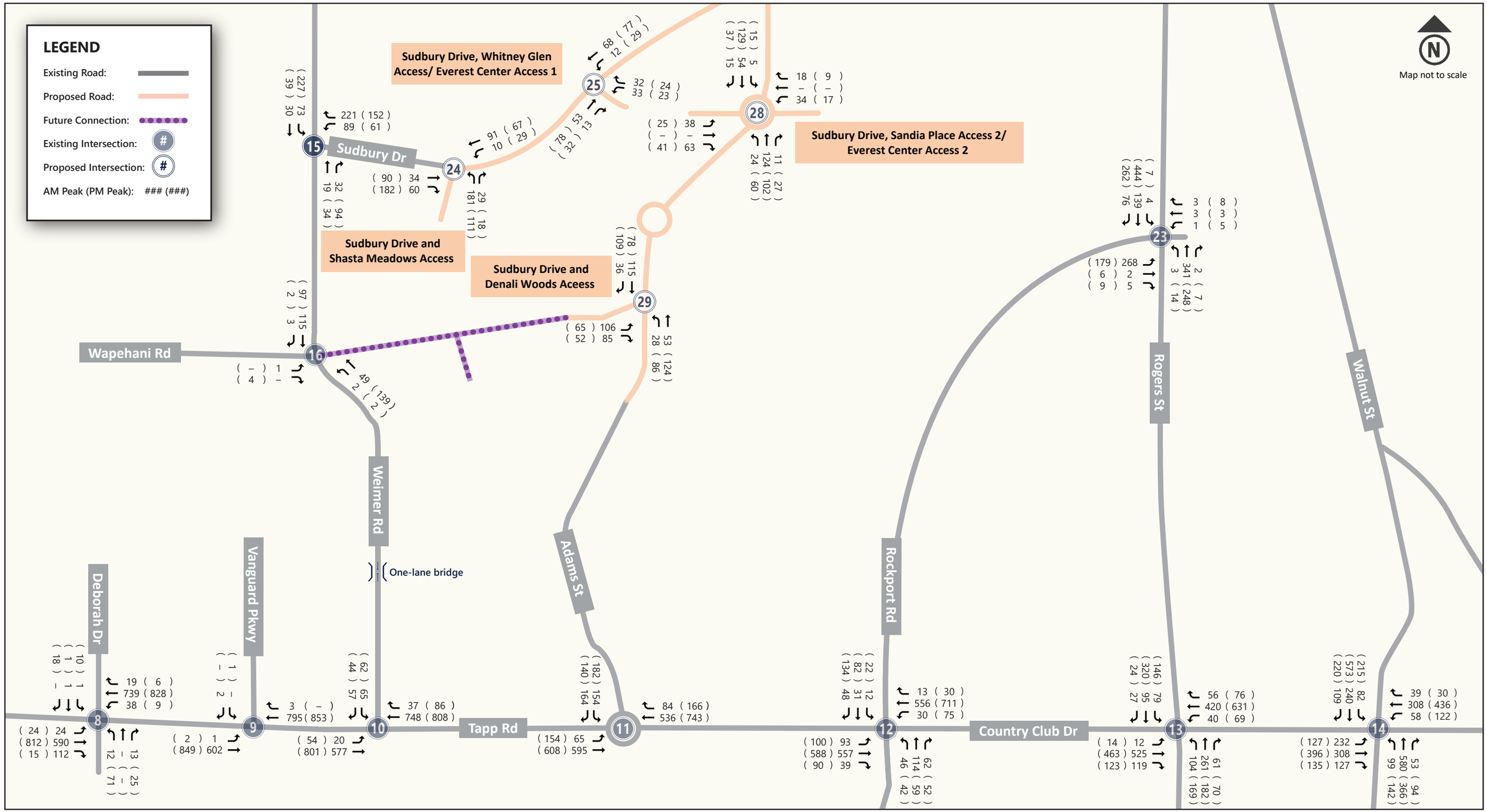


Figure 12: Turning Movements Scenario 2: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

4.4. Scenario 3: Full Build Year Background 2034 Volumes+ Site Generated Trips Due to Phase 1 of the Proposed Developments Capacity Analysis

Table 7 summarizes capacity results for Scenario 3 with the following inputs:

- Existing signal timings provided by the City
- Existing intersection geometry (see **Section 2.2**)
- Proposed roadway connections (see **Sections 2.4** and **3.2.1**)
- Weimer Road realignment (see **Section 3.6**)
- Full build year background 2034 volumes + site generated trips due to Phase 1 of the proposed development (see **Figure 13** and **Figure 14**)

Table 7: Intersection LOS and Delay (sec/veh) Results – Scenario 3

Scenario 3: Full Build Year 2034 - Background		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
1. Bloomfield Road & Recreation Center Drive (AM Peak)*	TWSC	A (9.6)	–	n/a	C (15)	–
1. Bloomfield Road & Recreation Center Drive (PM Peak)*	TWSC	B (11.2)	–	n/a	A (0)	–
2. Bloomfield Road & Weimer Road (AM Peak)*	TWSC	–	B (10.5)	F (97.4)	n/a	–
2. Bloomfield Road & Weimer Road (PM Peak)*	TWSC	–	B (10.9)	F (120.9)	n/a	–
3. Bloomfield Road & Rolling Ridge Way (AM Peak)	SIG	B (14.7)	A (5.3)	D (50.7)	D (47.7)	**B (14.6)**
3. Bloomfield Road & Rolling Ridge Way (PM Peak)	SIG	B (13.0)	C (24.1)	D (48.0)	D (48.2)	**C (21.5)**
4. Bloomfield Road & Allen Street (AM Peak)*†	TWSC	A (0)	B (13.3)	C (23.7)	B (10)	–
4. Bloomfield Road & Allen Street (PM Peak)*†	TWSC	B (11.5)	A (9.7)	F (59.3)	D (25.9)	–
5. Bloomfield Road & Landmark Avenue (AM Peak)	SIG	A (6.5)	A (4.0)	D (40.2)	D (44.4)	**B (10.7)**
5. Bloomfield Road & Landmark Avenue (PM Peak)	SIG	A (6.3)	A (3.3)	D (38.7)	F (118.5)	**C (30.5)**
6. Bloomfield Road/2nd Street & Adams Street (AM Peak)	SIG	A (1.4)	A (0.9)	D (48.2)	D (38.4)	**B (10.2)**
6. Bloomfield Road/2nd Street & Adams Street (PM Peak)	SIG	A (1.3)	A (1.6)	D (49.1)	D (39.5)	**B (10.8)**
7. 2nd Street & Patterson Drive (AM Peak)‡	SIG	A (2.6)	A (1.4)	D (53.3)	D (36.7)	**C (21.8)**
7. 2nd Street & Patterson Drive (PM Peak)‡	SIG	A (2.3)	A (8.9)	E (60.2)	C (32.7)	**C (23.3)**
8. Tapp Road & Deborah Drive (AM Peak)	SIG	B (12.1)	B (11.7)	B (20.0)	C (20.1)	**B (12.1)**
8. Tapp Road & Deborah Drive (PM Peak)	SIG	B (14.1)	B (13.8)	C (21.0)	C (22.2)	**B (14.7)**
9. Tapp Road & Vanguard Parkway (AM Peak)*	TWSC	B (10.2)	–	n/a	F (56)	–
9. Tapp Road & Vanguard Parkway (PM Peak)*	TWSC	B (10.6)	–	n/a	F (130.5)	–
10. Tapp Road & Weimer Road (AM Peak)*	TWSC	A (0)	–	n/a	A (0)	–
10. Tapp Road & Weimer Road (PM Peak)*	TWSC	A (0)	–	n/a	A (0)	–

Scenario 3: Full Build Year 2034 - Background		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
11. Tapp Road & Adams Street (AM Peak)	RAB	A (3.8)	A (2.6)	n/a	A (5.4)	**A (3.7)**
11. Tapp Road & Adams Street (PM Peak)	RAB	A (4.7)	A (4.2)	n/a	A (6.5)	**A (4.8)**
12. Tapp Road/Country Club Drive & Rockport Road (AM Peak)§	SIG	B (17.2)	C (23.2)	C (20.1)	B (16.6)	**B (19.8)**
12. Tapp Road/Country Club Drive & Rockport Road (PM Peak)§	SIG	B (18.3)	C (30.2)	C (21.2)	C (23.4)	**C (24.2)**
13. Country Club Drive & Rogers Street (AM Peak)	SIG	D (45.7)	C (26.9)	D (43.0)	C (29.4)	**D (37.8)**
13. Country Club Drive & Rogers Street (PM Peak)	SIG	D (45.4)	F (96.9)	D (37.9)	D (41.8)	**E (60.1)**
14. Country Club Drive/Winslow Road & Walnut Street (AM Peak)	SIG	C (25.0)	E (70.1)	C (29.9)	C (25.1)	**D (35.2)**
14. Country Club Drive/Winslow Road & Walnut Street (PM Peak)	SIG	C (34.1)	D (52.4)	C (33.9)	D (41.5)	**D (40.7)**
15. Weimer Road & Sudbury Drive (AM Peak)*	TWSC	n/a	B (10)	–	A (7.5)	**–**
15. Weimer Road & Sudbury Drive (PM Peak)*	TWSC	n/a	B (11.5)	–	A (8)	**–**
16. Weimer Road & Wapehani Road (AM Peak)*	TWSC	A (9.6)	n/a	A (7.5)	–	**–**
16. Weimer Road & Wapehani Road (PM Peak)*	TWSC	A (8.9)	n/a	A (7.4)	–	**–**
17. Allen Street & Adams Street (AM Peak)	AWSC	B (10.4)	A (9.1)	B (10.9)	A (9.3)	**B (10.3)**
17. Allen Street & Adams Street (PM Peak)	AWSC	B (13.9)	B (12.5)	B (11.6)	B (13.2)	**B (12.9)**
18. Allen Street & Strong Drive (AM Peak)*	TWSC	A (7.4)	A (8.5)	B (12.6)	B (13.2)	**–**
18. Allen Street & Strong Drive (PM Peak)*	TWSC	A (0)	A (8)	B (13.1)	B (14.4)	**–**
19. Patterson Drive & Allen Street (AM Peak)‖	SIG	D (37.8)	C (25.4)	C (22.8)	A (9.6)	**C (23.5)**
19. Patterson Drive & Allen Street (PM Peak)‖	SIG	D (43.3)	C (29.1)	A (1.5)	A (9.6)	**B (16.3)**
20. Patterson Drive & Fairview Street (AM Peak)¶	SIG	A (6.5)	A (0.8)	D (36.1)	D (40.7)	**A (4.5)**
20. Patterson Drive & Fairview Street (PM Peak)¶	SIG	A (9.5)	A (0.7)	D (38.2)	D (42.8)	**A (8.5)**
21. Patterson Drive & Rogers Street (AM Peak)	SIG	B (12.2)	C (32.5)	D (49.6)	C (26.5)	**C (32.5)**
21. Patterson Drive & Rogers Street (PM Peak)	SIG	B (13.5)	D (36.3)	D (37.6)	E (60.5)	**D (36.1)**
22. Walnut Street & Grimes Lane (AM Peak)	SIG	C (22.8)	C (28.0)	C (34.3)	C (29.0)	**C (30.4)**
22. Walnut Street & Grimes Lane (PM Peak)	SIG	E (72.5)	D (37.5)	C (26.3)	D (40.3)	**D (41.7)**
23. Rogers Street & Rockport Road (AM Peak)#	SIG	B (10.1)	A (7.5)	A (9.3)	A (8.2)	**A (9.2)**
23. Rogers Street & Rockport Road (PM Peak)#	SIG	B (17.0)	B (13.2)	A (6.4)	B (16.8)	**B (14.5)**
24. Sudbury Drive & Shasta Meadows Access (AM Peak)	TWSC	–	A (7.4)	B (11.2)	n/a	**–**
24. Sudbury Drive & Shasta Meadows Access (PM Peak)	TWSC	–	A (7.9)	B (11.9)	n/a	**–**

Scenario 3: Full Build Year 2034 - Background		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (AM Peak)	TWSC	A (0)	A (7.4)	A (9.5)	A (0)	–
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (PM Peak)	TWSC	A (0)	A (7.5)	A (9.9)	A (0)	–
26. Sudbury Drive & Adams Street (AM Peak)	RAB	A (4.9)	A (3)	A (2.9)	A (2.3)	**A (3.2)**
26. Sudbury Drive & Adams Street (PM Peak)	RAB	A (4.2)	A (2.7)	A (2.9)	A (2.3)	**A (2.9)**
27. Sudbury Drive & Sandia Place Access 1 (AM Peak)	TWSC	–	A (0)	A (8.7)	n/a	–
27. Sudbury Drive & Sandia Place Access 1 (PM Peak)	TWSC	–	A (0)	A (8.7)	n/a	–
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (AM Peak)	RAB	A (3.8)	A (5.2)	A (2.4)	A (2.2)	**A (3.1)**
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (PM Peak)	RAB	A (4.1)	A (5.1)	A (3.1)	A (2.4)	**A (3.1)**
29. Adams Street & Denali Woods Access (AM Peak)	TWSC	B (11.3)	n/a	A (7.6)	–	–
29. Adams Street & Denali Woods Access (PM Peak)	TWSC	B (12.2)	n/a	A (7.8)	–	–

SIG: signal, RAB: roundabout, TWSC: two-way stop-controlled, AWSC: all-way stop-controlled

*For two-way stop-control (TWSC), major street results are shown for left-turning movements.

†At this intersection, Allen Street was considered northbound.

‡At this intersection, Patterson Drive was considered northbound/southbound.

§At this intersection, Rockport Road was considered northbound/southbound.

||At this intersection, Patterson Drive was considered northbound/southbound.

¶At this intersection, Patterson Drive was considered eastbound/westbound.

#At this intersection, Rockport Road was considered eastbound/westbound.

Note: n/a means the approach does not exist.

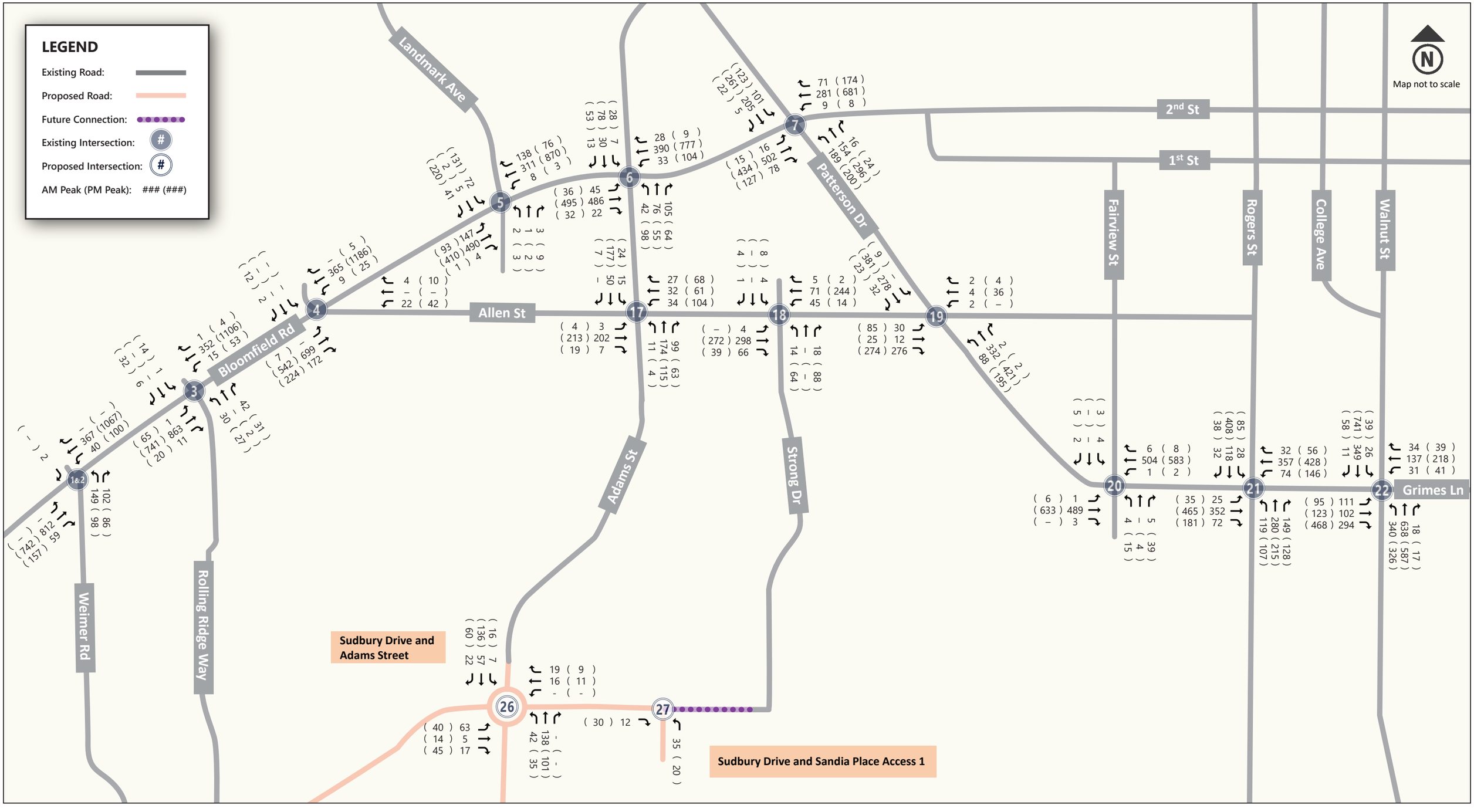


Figure 13: Turning Movements Scenario 3: Bloomfield Road / 2nd Street, Allen Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

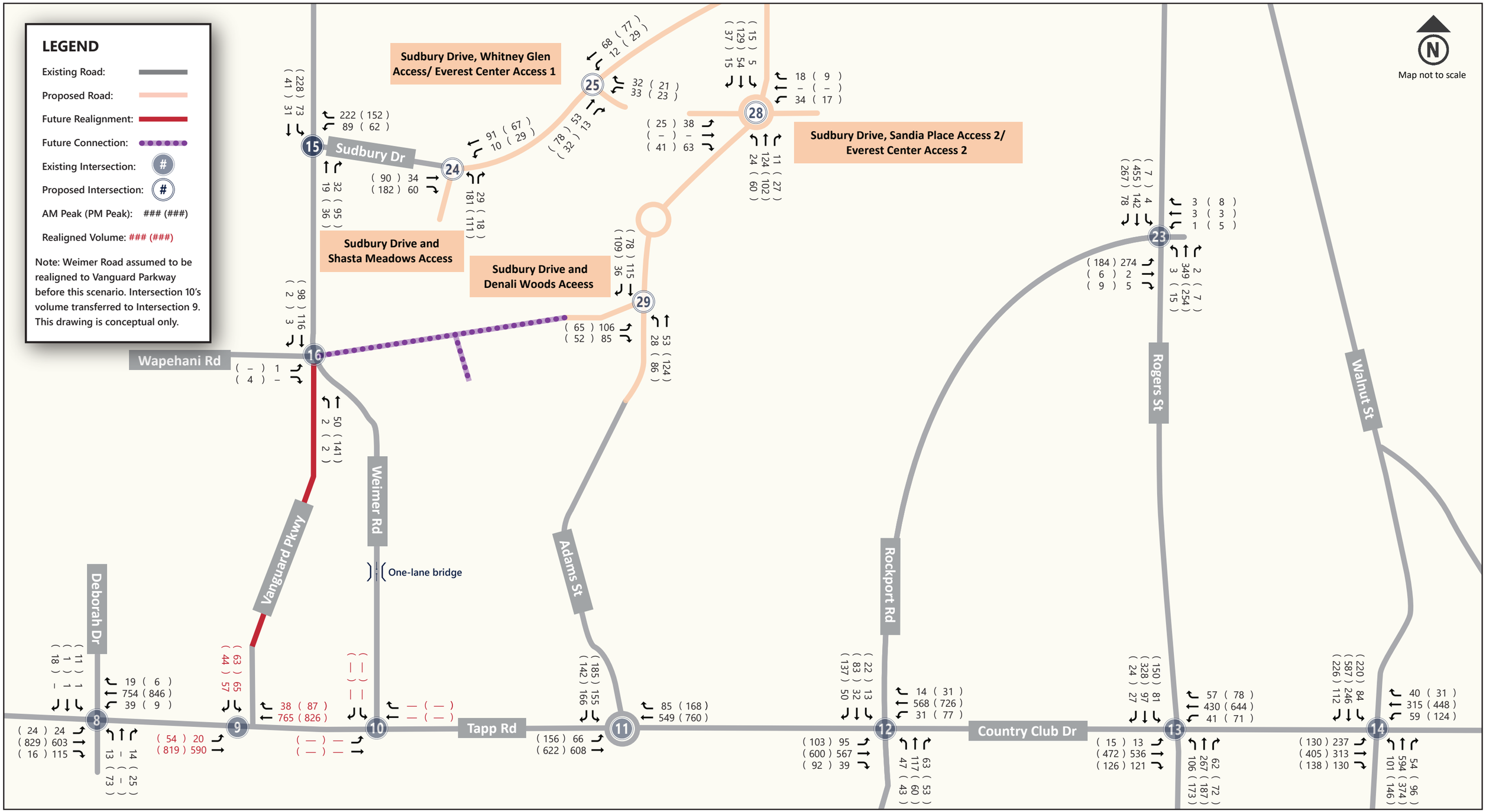


Figure 14: Turning Movements Scenario 3: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

4.5. Scenario 4: Full Build Year Background 2034 Volumes + Site Generated Trips due to Phases 1 & 2 of the Proposed Development Capacity Analysis

Table 8 summarizes capacity results for Scenario 4 with the following inputs:

- Existing intersection geometry (see **Section 2.2**)
- Proposed roadway connections (see **Sections 2.4** and **3.2.1**)
- Weimer Road realignment (see **Section 3.6**)
- Existing signal timings provided by the City
- Full build year background 2034 volumes + site generated trips due to Phases 1 & 2 (see **Figure 15** and **Figure 16**)

Table 8: Intersection LOS and Delay (sec/veh) Results – Scenario 4

Scenario 4: Full Build Year 2034 - Phases 1 & 2		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
1. Bloomfield Road & Recreation Center Drive (AM Peak)*	TWSC	B (10.4)	–	n/a	C (18)	–
1. Bloomfield Road & Recreation Center Drive (PM Peak)*	TWSC	B (11.7)	–	n/a	A (0)	–
2. Bloomfield Road & Weimer Road (AM Peak)*	TWSC	–	B (10.9)	F (>180)	n/a	–
2. Bloomfield Road & Weimer Road (PM Peak)*	TWSC	–	B (11.9)	F (>180)	n/a	–
3. Bloomfield Road & Rolling Ridge Way (AM Peak)	SIG	B (15.0)	A (5.3)	D (50.7)	D (47.7)	**B (14.8)**
3. Bloomfield Road & Rolling Ridge Way (PM Peak)	SIG	B (13.1)	C (24.6)	D (48.0)	D (48.2)	**C (21.8)**
4. Bloomfield Road & Allen Street (AM Peak)*†	TWSC	A (0)	B (13.5)	C (23.8)	B (10.1)	–
4. Bloomfield Road & Allen Street (PM Peak)*†	TWSC	B (11.5)	A (9.8)	F (60.2)	D (26.1)	–
5. Bloomfield Road & Landmark Avenue (AM Peak)	SIG	A (6.5)	A (4.0)	D (40.2)	D (44.4)	**B (10.7)**
5. Bloomfield Road & Landmark Avenue (PM Peak)	SIG	A (6.3)	A (3.0)	D (38.7)	F (118.5)	**C (30.4)**
6. Bloomfield Road/2nd Street & Adams Street (AM Peak)	SIG	A (2.1)	A (1.2)	F (93.6)	C (31.9)	**C (27.8)**
6. Bloomfield Road/2nd Street & Adams Street (PM Peak)	SIG	A (1.7)	A (1.3)	F (89.3)	D (37.9)	**C (20.6)**
7. 2nd Street & Patterson Drive (AM Peak)‡	SIG	A (4.2)	A (1.6)	D (53.0)	D (36.7)	**C (20.7)**
7. 2nd Street & Patterson Drive (PM Peak)‡	SIG	A (2.9)	B (18.5)	E (60.1)	C (32.7)	**C (25.8)**
8. Tapp Road & Deborah Drive (AM Peak)	SIG	B (12.0)	B (12.8)	C (21.1)	C (21.2)	**B (12.6)**
8. Tapp Road & Deborah Drive (PM Peak)	SIG	B (14.7)	B (13.9)	C (22.5)	C (23.8)	**B (15.1)**
9. Tapp Road & Vanguard Parkway (AM Peak)*	TWSC	B (11)	–	n/a	F (89.9)	–
9. Tapp Road & Vanguard Parkway (PM Peak)*	TWSC	B (11.3)	–	n/a	F (>180)	–
10. Tapp Road & Weimer Road (AM Peak)*	TWSC	A (0)	–	n/a	A (0)	–
10. Tapp Road & Weimer Road (PM Peak)*	TWSC	A (0)	–	n/a	A (0)	–

Scenario 4: Full Build Year 2034 - Phases 1 & 2		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
11. Tapp Road & Adams Street (AM Peak)	RAB	A (8.2)	A (3)	n/a	A (9.2)	**A (6.8)**
11. Tapp Road & Adams Street (PM Peak)	RAB	A (8.7)	C (21.5)	n/a	A (9.7)	**B (14.5)**
12. Tapp Road/Country Club Drive & Rockport Road (AM Peak)§	SIG	D (40.2)	C (31.4)	C (20.7)	B (17.0)	**C (32.8)**
12. Tapp Road/Country Club Drive & Rockport Road (PM Peak)§	SIG	C (24.7)	E (70.7)	C (21.6)	C (23.4)	**D (44.4)**
13. Country Club Drive & Rogers Street (AM Peak)	SIG	F (101.6)	C (29.2)	D (43.1)	C (30.0)	**E (59.5)**
13. Country Club Drive & Rogers Street (PM Peak)	SIG	E (72.2)	F (149.0)	D (42.5)	D (42.3)	**F (87.0)**
14. Country Club Drive/Winslow Road & Walnut Street (AM Peak)	SIG	C (24.1)	F (91.8)	C (30.1)	C (25.6)	**D (39.2)**
14. Country Club Drive/Winslow Road & Walnut Street (PM Peak)	SIG	D (41.0)	E (76.3)	C (34.6)	D (44.7)	**D (49.1)**
15. Weimer Road & Sudbury Drive (AM Peak)*	TWSC	n/a	B (11.6)	–	A (7.6)	**–**
15. Weimer Road & Sudbury Drive (PM Peak)*	TWSC	n/a	C (16.3)	–	A (8.6)	**–**
16. Weimer Road & Wapehani Road (AM Peak)*	TWSC	A (9.9)	n/a	A (7.5)	–	**–**
16. Weimer Road & Wapehani Road (PM Peak)*	TWSC	A (9)	n/a	A (7.5)	–	**–**
17. Allen Street & Adams Street (AM Peak)	AWSC	B (14.7)	B (12.9)	F (65)	B (12.8)	**E (42.6)**
17. Allen Street & Adams Street (PM Peak)	AWSC	E (44)	F (60.4)	F (80.8)	F (125.5)	**F (81.7)**
18. Allen Street & Strong Drive (AM Peak)*	TWSC	A (7.4)	A (9)	B (14.9)	C (16)	**–**
18. Allen Street & Strong Drive (PM Peak)*	TWSC	A (0)	A (8.3)	C (16.3)	C (18.6)	**–**
19. Patterson Drive & Allen Street (AM Peak)‖	SIG	D (40.7)	C (21.7)	C (28.6)	B (13.9)	**C (29.3)**
19. Patterson Drive & Allen Street (PM Peak)‖	SIG	D (46.6)	C (25.9)	A (3.7)	B (11.9)	**B (19.0)**
20. Patterson Drive & Fairview Street (AM Peak)¶	SIG	A (7.5)	A (0.8)	D (36.1)	D (40.7)	**A (5.1)**
20. Patterson Drive & Fairview Street (PM Peak)¶	SIG	B (10.5)	A (0.7)	D (38.2)	D (42.8)	**A (8.5)**
21. Patterson Drive & Rogers Street (AM Peak)	SIG	B (15.6)	C (34.8)	D (49.6)	C (26.8)	**C (32.8)**
21. Patterson Drive & Rogers Street (PM Peak)	SIG	B (15.5)	D (35.7)	D (38.0)	F (82.0)	**D (41.3)**
22. Walnut Street & Grimes Lane (AM Peak)	SIG	C (24.7)	C (28.2)	D (38.6)	C (29.2)	**C (32.9)**
22. Walnut Street & Grimes Lane (PM Peak)	SIG	E (76.1)	D (38.1)	C (33.7)	E (62.5)	**D (52.2)**
23. Rogers Street & Rockport Road (AM Peak)#	SIG	B (10.1)	A (7.5)	A (9.3)	A (8.2)	**A (9.2)**
23. Rogers Street & Rockport Road (PM Peak)#	SIG	B (17.0)	B (13.2)	A (6.4)	B (16.8)	**B (14.5)**
24. Sudbury Drive & Shasta Meadows Access (AM Peak)	TWSC	–	A (7.6)	C (15.5)	n/a	**–**
24. Sudbury Drive & Shasta Meadows Access (PM Peak)	TWSC	–	A (8.5)	C (16.9)	n/a	**–**

Scenario 4: Full Build Year 2034 - Phases 1 & 2	Eastbound	Westbound	Northbound	Southbound	Overall Intersection
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (AM Peak) TWSC	A (7.6)	A (7.5)	B (14)	B (14.6)	–
25. Sudbury Drive & Whitney Glen Access/Everest Center Access 1 (PM Peak) TWSC	A (7.8)	A (8)	C (17.8)	C (18.8)	–
26. Sudbury Drive & Adams Street (AM Peak) RAB	A (5.5)	A (4.4)	A (3.9)	A (3)	**A (4.2)**
26. Sudbury Drive & Adams Street (PM Peak) RAB	A (5.7)	A (3.6)	A (4.1)	A (3.2)	**A (4)**
27. Sudbury Drive & Sandia Place Access 1 (AM Peak) TWSC	–	A (0)	A (9.4)	n/a	–
27. Sudbury Drive & Sandia Place Access 1 (PM Peak) TWSC	–	A (0)	A (9.2)	n/a	–
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (AM Peak) RAB	A (5)	A (6.2)	A (3.8)	A (3.4)	**A (4.7)**
28. Adams Street & Sandia Place Access 2/Everest Center Access 2 (PM Peak) RAB	A (5)	A (6.3)	A (4.6)	A (4.2)	**A (4.7)**
29. Adams Street & Denali Woods Access (AM Peak) TWSC	C (19.1)	n/a	A (8.4)	–	–
29. Adams Street & Denali Woods Access (PM Peak) TWSC	C (20.3)	n/a	A (8.4)	–	–

SIG: signal, RAB: roundabout, TWSC: two-way stop-controlled, AWSC: all-way stop-controlled

*For two-way stop-control (TWSC), major street results are shown for left-turning movements.

†At this intersection, Allen Street was considered northbound.

‡At this intersection, Patterson Drive was considered northbound/southbound.

§At this intersection, Rockport Road was considered northbound/southbound.

||At this intersection, Patterson Drive was considered northbound/southbound.

¶At this intersection, Patterson Drive was considered eastbound/westbound.

#At this intersection, Rockport Road was considered eastbound/westbound.

Note: n/a means the approach does not exist.

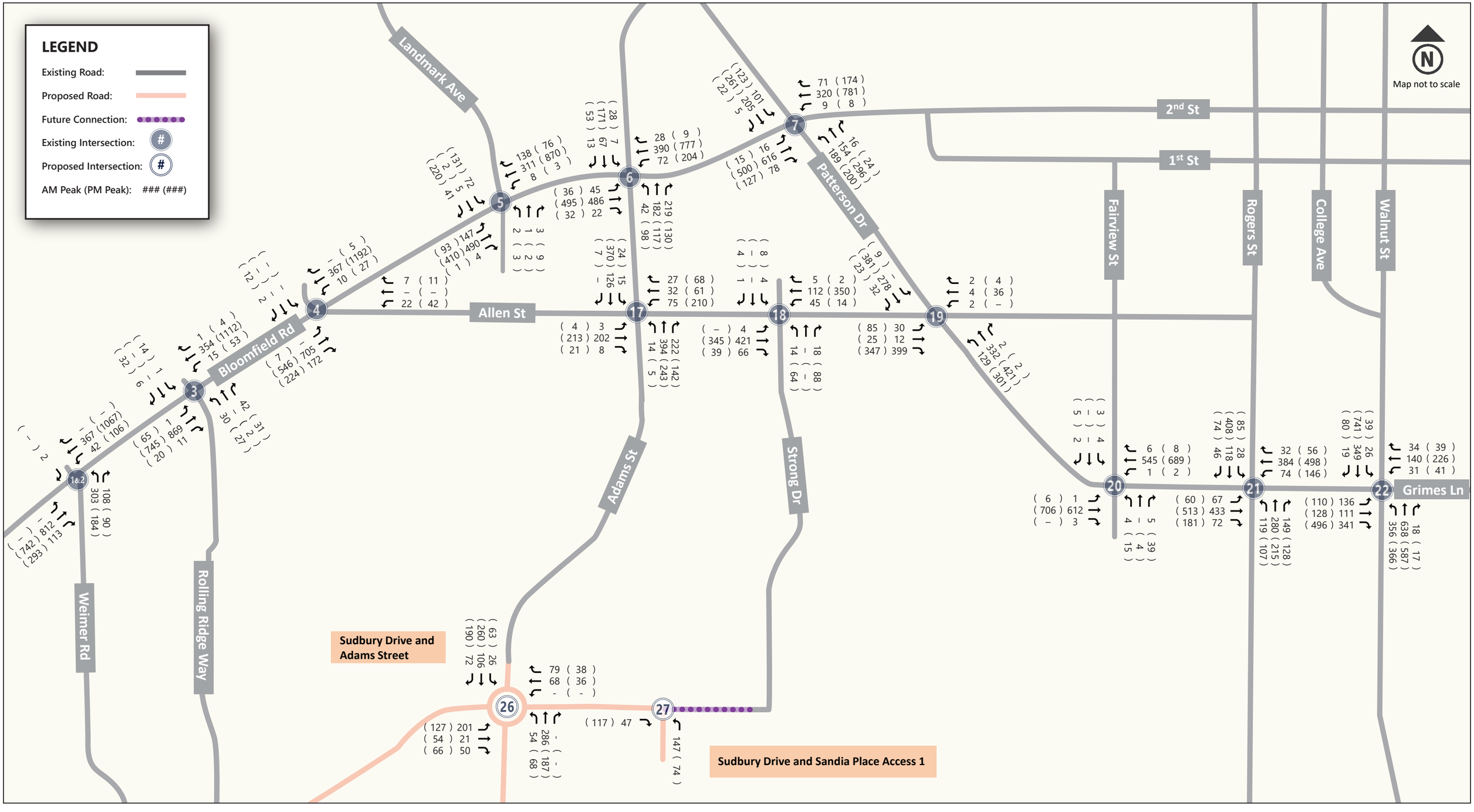


Figure 15: Turning Movements Scenario 4: Bloomfield Road / 2nd Street, Allen Street, and Patterson Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

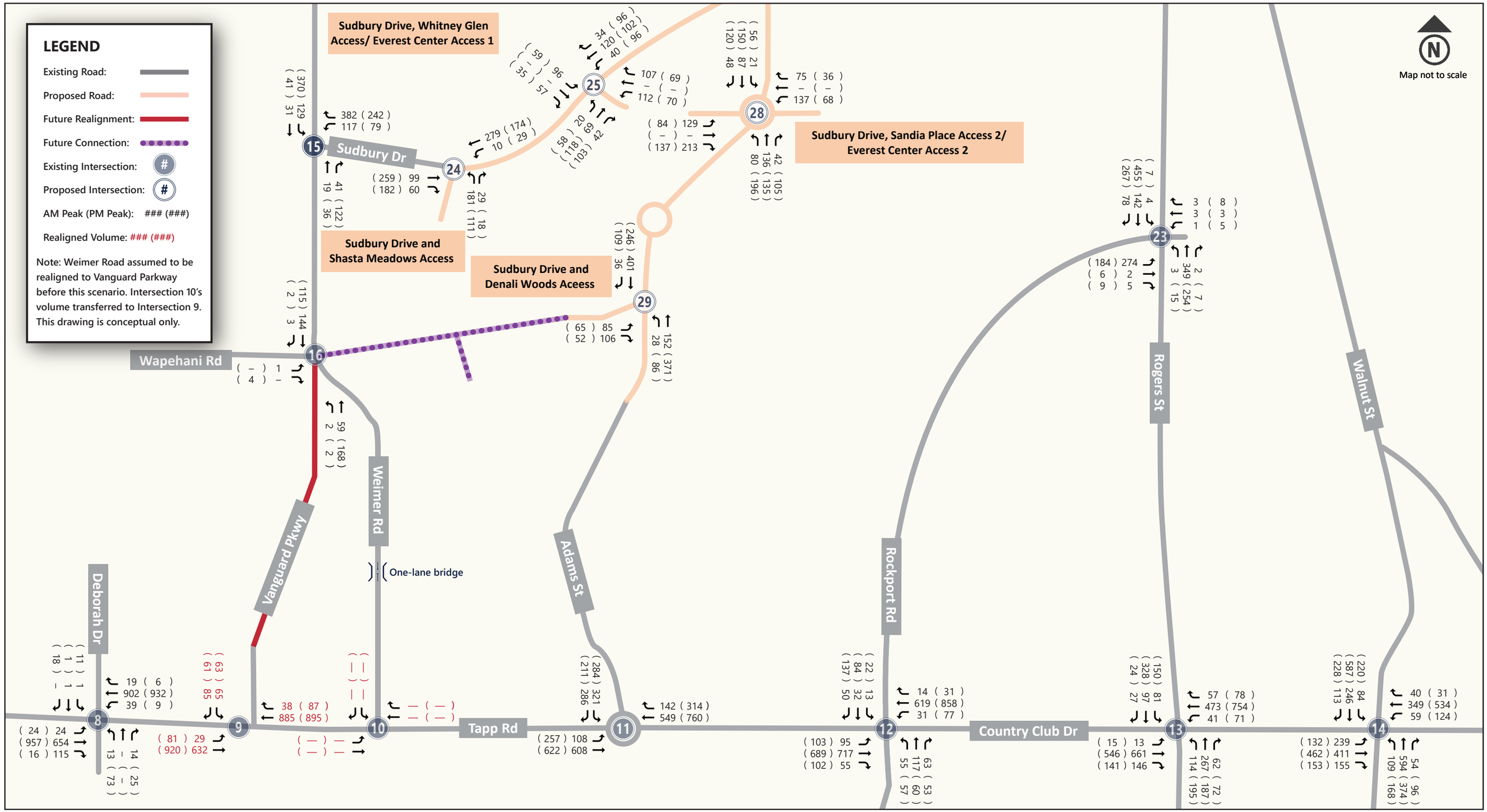


Figure 16: Turning Movements Scenario 4: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

4.6. Turn Lane Warrant Analysis

Turn lane warrants were analyzed for the proposed development access points that are two-way stop-controlled intersections (TWSC). The following section discusses more.

4.6.1. Right-turn Lane Warrant

The *Indiana Design Manual* (*IDM*)[7] states that a right-turn lane should be installed at an unsignalized intersection on a 2-lane urban or rural highway which satisfies the criteria shown in **Figure 17**. This applies to both Bloomfield Road and to Tapp Road/Country Club Drive/Winslow Road. It also states that a right-turn lane should be considered at an intersection where a capacity analysis determines that a right-turn lane is necessary to meet the level-of-service criteria. It also states that a right-turn lane should be considered for uniformity of intersection design along the highway if other intersections have right-turn lanes.

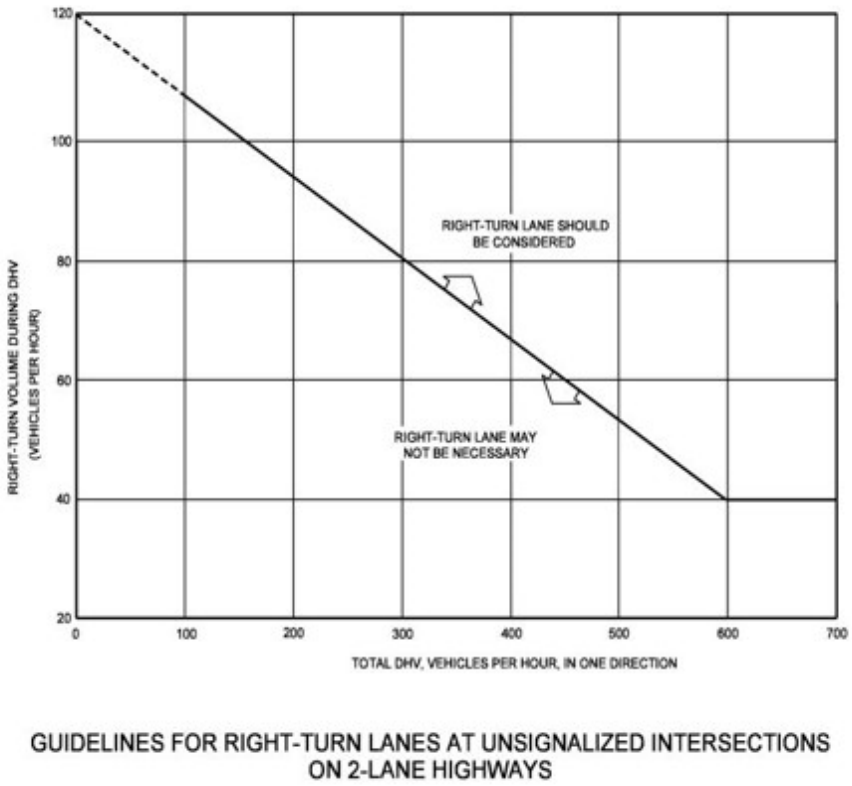


Figure 17: Guidelines for Right-Turn Lanes on 2-Lane Highways

4.6.2. Left-turn Lane Warrant

The *IDM*[5] states that a left-turn lane should be constructed at an unsignalized intersection on a 2-lane urban or rural highway which satisfies the criteria shown in **Figure 18**. It also states that a left-turn lane should be considered at an intersection where a capacity analysis determines a left-turn lane is necessary to meet the level-of-service criteria.

Tapp Road operates at a speed of 30 mph which is not shown in the figure below. Since the operating speed of 30 mph is not shown in **Figure 18** the advancing volumes were interpolated.

A summary of all turn lane warrants can be found in **Table 9**. The full turn lane analysis can be found in **Appendix D**.

Operating Speed (mph)	Opposing Volume (veh/h)	Advancing Volume (veh/h)			
		5% Left Turns	10% Left Turns	20% Left Turns	30% Left Turns
40	800	330	240	180	160
	600	410	305	225	200
	400	510	380	275	245
	200	640	470	350	305
	100	720	515	390	340
50	800	280	210	165	135
	600	350	260	195	170
	400	430	320	240	210
	200	550	400	300	270
	100	615	445	335	295
60	800	230	170	125	115
	600	290	210	160	140
	400	365	270	200	175
	200	450	330	250	215
	100	505	370	275	240

VOLUME GUIDELINES FOR LEFT-TURN LANE ON TWO-LANE HIGHWAY

Figure 18: Guidelines for Left-Turn Lanes

Table 9: Turn Lane Warrant Summary

		Approach	Right-Turn Lane	Warranted Scenarios	Approach	Left-Turn Lane	Warranted Scenarios
Bloomfield Road & Weimer Road	AM Peak	East-bound	MET	Scenarios 2-4	West-bound	N/A	—
	PM Peak	East-bound	MET	Scenarios 2-4	West-bound	N/A	—
Tapp Road & Vanguard	AM Peak	West-bound	NOT MET	—	East-bound	MET	Scenarios 1-4
	PM Peak	West-bound	MET†	Scenarios 3-4*	East-bound	MET	Scenarios 1-4
Weimer Road & Sudbury Drive	AM Peak	North-bound	N/A	—	South-bound	NOT MET	—
	PM Peak	North-bound	N/A	—	South-bound	MET†	Scenario 4
Bloomfield Road & Allen Street	AM Peak	East-bound	MET	Scenarios 1-4	West-bound	N/A	—
	PM Peak	East-bound	MET	Scenarios 1-4	West-bound	N/A	—

Notes:
All the evaluated approaches were major approaches to two-way stop-controlled intersections.
N/A means the warrant was not evaluated because a turn lane already exists.
* Warrant MET in 3-4 because of Weimer Road realignment.
† Warranted turn lane NOT analyzed in the improvement scenario.

4.7. Proposed Improvements

To achieve acceptable LOS at all study intersections, improvements were identified for the full build scenario. Proposed improvements were analyzed and documented as Scenario 4A. The needed improvements are summarized in are summarized in **Table 11**, and described in **Section 4.7.1**. The capacity analysis results for the improved intersections. Full reports are available in **Appendix C**.

Table 10: Needed Improvements – By Development Phase

Existing Year 2023 — Without Development	
Intersection	**Improvement**
4. Bloomfield Road & Allen Street	Install EB Right- & NB Left-Turn Lanes
5. Bloomfield Road & Landmark Avenue	Adjust Signal Timings
13. Country Club Drive & Rogers Street	Adjust Signal Timings, Install WB Right-Turn Lane

Opening Day 2029 — With Phase 1 (1836 Units)	
Intersection	**Improvement**
2. Bloomfield Road & Weimer Road	Install Traffic Signal, Install NB & EB Right-Turn Lanes
9. Tapp Road & Vanguard Parkway*	Install Left-Turn Acceleration Lane and EB Left-Turn Lane

*Only recommended provided Weimer Road is realigned to Vanguard Parkway

Full Build Year 2034 — With Phase 1 (1836 Units)	
Intersection	**Improvement**
22. Walnut Street & Grimes Lane	Adjust Signal Timings

Full Build Year 2034 — With Phases 1 & 2 (2414 Additional Units)	
Intersection	**Improvement**
6. Bloomfield Road/2nd Street & Adams Street	Adjust Signal Timings
12. Tapp Road/Country Club Drive & Rockport Road	Adjust Signal Timings
14. Country Club Drive/Winslow Road & Walnut Street	Adjust Signal Timings
15. Weimer Road & Sudbury Drive	Install SB Left-Turn Lane
17. Allen Street & Adams Street	Install Turn Lanes on All Approaches
21. Patterson Drive & Rogers Street	Adjust Signal Timings

4.7.1. Proposed Improvement Descriptions

Bloomfield Road & Recreation Center Drive / Weimer Road– This intersection can be improved by installing a traffic signal and a northbound right-turn lane. An exclusive eastbound right-turn lane is also warranted and was analyzed. The available data showed that a signal may be warranted in Scenarios 2-4 based on a preliminary peak hour volume warrant. Ideally, Recreation Center Drive should align with Weimer Road.

Bloomfield Road & Allen Street– Operations at this intersection will improve if an exclusive northbound left-turn lane and an exclusive eastbound right-turn lane are added to the existing lane configuration. However, it will still operate below the acceptable level of service during the PM peak hour of all scenarios. The available data showed that a signal would likely not be warranted in any scenario.

Bloomfield Road & Landmark Street– This intersection can be improved by adjusting the traffic signal timings to give more time to the northbound and southbound phases.

Bloomfield Road/2nd Street & Adams Street– This intersection can be improved by adjusting the traffic signal timings to give more time to the northbound and southbound phases.

Tapp Road & Vanguard Parkway– This intersection can be improved by adding an exclusive eastbound left-turn lane and by allowing the southbound left-turning movement to make a two-stage turn. This could be accomplished by building a left-turn acceleration lane. In addition, the available data showed that a signal would likely not be warranted with the proposed development. A roundabout would operate well at this location, however, since the adjacent intersections are signalized, a roundabout would not be the most ideal configuration.

Tapp Road/Country Club Drive & Rockport Road– This intersection can be improved by coordinating it with Country Club Drive & Rogers Street and by optimizing the splits, phasing, offsets, and cycle lengths.

Country Club Drive & Rogers Street–The westbound right-turn movement at this intersection has a volume-to-capacity ratio (v/c) >1 in the PM peak hour of Scenario 1, and the level of service is below acceptable levels during both peak hours of Scenario 4. Field observations and turn movement count videos showed that the whole westbound approach is affected, with queues spilling back to Walnut Street during every cycle for at least 15 minutes in the PM peak hour. Because the westbound approach is currently at or above capacity, the demand may not be fully reflected in the existing turn movement counts. The level of service and the delay can be improved by coordinating this intersection with Country Club Drive/Winslow Road & Walnut Street, adding a westbound right-turn lane, installing flashing yellow arrow signal heads, and by optimizing splits, phasing offsets, and cycle lengths.

Country Club Drive/Winslow Road & Walnut Street– This intersection can be improved by coordinating Country Club Drive & Rogers Street to match this intersection, installing flashing yellow arrow signal heads, and by optimizing the splits, phasing, offsets, and cycle lengths.

Weimer Road & Sudbury Drive– An exclusive southbound left-turn lane was warranted at this intersection and is recommended. The level of service with the added left-turn lane was not analyzed.

Allen Street & Adams Street– This intersection can be improved by adding an exclusive northbound right-turn lane, an exclusive westbound left-turn lane, an exclusive southbound left-turn lane, and exclusive eastbound right-turn lane. However, with all turn lanes added it will still operate below the acceptable level of service. Alternatively, a future connection to Strong Drive would improve this intersection to an acceptable level of service. A signal or a roundabout at this intersection would also improve it to an acceptable level of service.

Patterson Drive & Rogers Street– This intersection can be improved by adjusting the traffic signal timings to give the southbound through phase more time.

Walnut Street & Grimes Lane– This intersection can be improved by adjusting the traffic signal timings to give the eastbound through phase more time.

Table 11: Intersection LOS and Delay (sec/veh) Results – Scenario 4A Potential Improvements

Scenario 4A: Full Build Year 2034 - Phases 1 & 2 - Improvements		Eastbound	Westbound	Northbound	Southbound	Overall Intersection
2. Bloomfield Road & Weimer Road (AM Peak)	SIG	B (17.0)	B (11.4)	D (40.5)	n/a	**C (21.3)**
2. Bloomfield Road & Weimer Road (PM Peak)	SIG	A (7.2)	B (10.8)	D (47.5)	n/a	**B (13.8)**
4. Bloomfield Road & Allen Street (AM Peak)*†	TWSC	A (0)	B (13.5)	C (19.1)	B (10.1)	–
4. Bloomfield Road & Allen Street (PM Peak)*†	TWSC	B (11.5)	A (9.8)	F (51.9)	D (26.1)	–
5. Bloomfield Road & Landmark Avenue (AM Peak)	SIG	A (3.7)	A (0.3)	D (46.4)	D (49.5)	**A (8.7)**
5. Bloomfield Road & Landmark Avenue (PM Peak)	SIG	A (8.4)	A (3.6)	C (34.5)	D (54.6)	**B (16.7)**
6. Bloomfield Road/2nd Street & Adams Street (AM Peak)	SIG	A (2.8)	A (2.0)	D (45.1)	D (27.1)	**C (15.1)**
6. Bloomfield Road/2nd Street & Adams Street (PM Peak)	SIG	A (1.9)	B (2.0)	E (50.2)	C (32.9)	**C (13.8)**
9. Tapp Road & Vanguard Parkway (AM Peak)*	TWSC	B (11)	–	n/a	D (27.4)	–
9. Tapp Road & Vanguard Parkway (PM Peak)*	TWSC	B (11.3)	–	n/a	D (30.6)	–
12. Tapp Road/Country Club Drive & Rockport Road (AM Peak)§	SIG	D (40.2)	C (31.4)	C (20.7)	B (17.0)	**C (32.8)**
12. Tapp Road/Country Club Drive & Rockport Road (PM Peak)§	SIG	B (16.2)	A (3.3)	D (45.4)	D (48.8)	**B (16.3)**
13. Country Club Drive & Rogers Street (AM Peak)	SIG	D (49.6)	C (21.4)	E (70.0)	D (39.8)	**D (46.2)**
13. Country Club Drive & Rogers Street (PM Peak)	SIG	C (23.9)	D (51.4)	E (72.5)	D (47.5)	**D (47.3)**
14. Country Club Drive/Winslow Road & Walnut Street (AM Peak)	SIG	B (17.8)	D (54.8)	D (36.6)	C (28.8)	**C (32.9)**
14. Country Club Drive/Winslow Road & Walnut Street (PM Peak)	SIG	D (36.9)	E (63.2)	D (38.5)	D (49.4)	**D (47.6)**
17. Allen Street & Adams Street (AM Peak)	AWSC	C (15.1)	B (11.7)	C (21.3)	B (12.1)	**C (17.8)**
17. Allen Street & Adams Street (PM Peak)	AWSC	D (28.3)	C (20.9)	C (21.7)	F (65.2)	**E (35.6)**
21. Patterson Drive & Rogers Street (AM Peak)	SIG	B (15.6)	C (34.8)	D (49.6)	C (26.8)	**C (32.8)**
21. Patterson Drive & Rogers Street (PM Peak)	SIG	B (16.1)	D (41.3)	D (39.8)	E (62.8)	**D (39.0)**
22. Walnut Street & Grimes Lane (AM Peak)	SIG	C (24.7)	C (28.2)	D (38.6)	C (29.2)	**C (32.9)**
22. Walnut Street & Grimes Lane (PM Peak)	SIG	E (65.1)	D (35.7)	D (40.7)	E (64.3)	**D (52.7)**

SIG: signal, RAB: roundabout, TWSC: two-way stop-controlled, AWSC: all-way stop-controlled

*For two-way stop-control (TWSC), major street results are shown for left-turning movements.

†At this intersection, Allen Street was considered northbound.

§At this intersection, Rockport Road was considered northbound/southbound.

Note: n/a means the approach does not exist.

5.0 Findings & Recommendations

All six proposed internal intersections operate at or above acceptable levels of service during both peak hours of all scenarios with the proposed lane configurations. The following existing intersections operate at or above acceptable levels of service during both peak hours of all scenarios and do **not** need improvements:

- Bloomfield Road & Rolling Ridge Way
- 2nd Street & Patterson Drive
- Tapp Road & Deborah Drive
- Tapp Road & Adams Street
- Weimer Road & Sudbury Drive
- Weimer Road & Wapehani Road
- Allen Street & Strong Drive
- Patterson Drive & Allen Street
- Patterson Drive & Fairview Street
- Rogers Street & Rockport Road

The following existing intersections need improvements:

Bloomfield Road & Recreation Center Drive / Weimer Road– The northbound approach to this intersection operates below the acceptable level of service during both peak hours of Scenarios 2, 3, & 4, starting on opening day 2029 with approximately 45% of units constructed. A traffic signal may be warranted based on available data and a preliminary peak hour volume warrant once the development is approximately 45% constructed. The installation of a new **traffic signal** and the addition of a northbound **right-turn lane** are recommended. An exclusive eastbound **right-turn lane** is also warranted and recommended. If a traffic signal is constructed, it is recommended that Weimer Road and the Recreation Center Drive align and that the signal is coordinated with others along Bloomfield.

Bloomfield Road & Allen Street– The Allen Street approach to this intersection operates below acceptable levels of service during the PM peak hour of all scenarios. Adding an exclusive **left-turn lane** to the Allen Street approach and an exclusive **right-turn lane** to the Bloomfield Road eastbound approach are recommended. With these improvements the Allen Street approach will still be below the acceptable level of service during the PM peak hour. However, the available data showed that a traffic signal would likely not be warranted in any scenario. If the demand increases significantly above what is expected in this study, a signal warrant should be evaluated.

Bloomfield Road & Landmark Street– The southbound approach to this intersection operates below acceptable levels of service in the PM peak hour during all scenarios. **Optimized splits** are recommended.

Bloomfield Road/2nd Street & Adams Street– This intersection operates below acceptable levels of service during both peak hours of Scenario 4 when 100% of units are constructed and with the current signal timings. **Optimized splits** are recommended.

Tapp Road & Vanguard Parkway– This intersection operates below acceptable levels of service during both peak hours of Scenarios 3 and 4, starting in 2034 with no more than 45% of units built and with the volume from the Weimer Road realignment. Building a **left-turn acceleration lane** for the southbound left-turning movement could improve operations by allowing left-turning vehicles to make a two-stage turn if necessary. Adding an exclusive eastbound **left-turn lane** is also warranted and recommended. An exclusive westbound right-turn lane is warranted but not recommended since it would not be needed if this intersection eventually becomes signalized. These improvements should be implemented concurrently with the realignment. The available data showed that a traffic signal would likely not be warranted with the proposed development. However, the installation of a traffic signal or a roundabout would improve operations at this intersection. Volumes at this intersection should be monitored and reanalyzed after the Weimer Road realignment project is constructed.

Tapp Road & Weimer Road– The southbound approach to this intersection operates below acceptable levels of service during the PM peak hour of Scenario 1 (existing 2023), and both peak hours of Scenario 2 (2029 with 45% of units constructed). However, since Weimer Road is expected be realigned to Vanguard Parkway before Scenarios 3 and 4, **no additional improvements** at the intersection with Tapp Road are recommended.

Tapp Road/Country Club Drive & Rockport Road– The eastbound through movement has a volume-to-capacity ratio (v/c) >1 in Scenario 4, when 100% of units are built. **Coordination** with Country Club Drive & Rogers Street; as well as **optimized** splits, phasing, offsets, and cycle lengths are recommended.

Country Club Drive & Rogers Street– The westbound right-turning movement at this intersection has a volume-to-capacity ratio (v/c) >1 in the PM peak hour of Scenario 1 (existing 2023), and the level of service is below acceptable levels during both peak hours of Scenario 4 (2034 with 100% of units constructed). **Coordination** with Country Club Drive/Winslow Road & Walnut Street, adding an exclusive westbound **right-turn lane**, installing **flashing yellow arrow** signal heads, and **optimized** splits, phasing, offsets, and cycle lengths are recommended. After implementation of optimized traffic signal timings, this intersection should be observed for increased volume due to latent demand and signal timings should be adjusted accordingly.

Country Club Drive/Winslow Road & Walnut Street– The westbound approach to this intersection operates below the acceptable level of service in the PM peak hour during all scenarios. **Coordinating** Country Club Drive & Rogers Street with this intersection, installing **flashing yellow arrow** signal heads, and **optimized** splits, phasing, offsets, and cycle lengths are recommended.

Weimer Road & Sudbury Drive– This intersection operates at or above the acceptable level of service in all scenarios. However, an exclusive southbound **left-turn lane** is warranted at this intersection in the PM peak hour of Scenario 4 (2034 with 100% of units constructed) and is recommended.

Allen Street & Adams Street– This intersection operates below the acceptable level of service in both peaks of Scenario 4 when 100% of units are constructed. Building an exclusive northbound **right-turn lane**, an exclusive westbound **left-turn lane**, an exclusive southbound **left-turn lane**, and exclusive eastbound **right-turn lane** are recommended. With these improvements it will still operate below the acceptable level of service during the PM peak hour. Alternatively, a future connection to Strong Drive would improve this intersection to an acceptable level of service. A signal or a roundabout at this intersection would also improve it to an acceptable level of service.

Patterson Drive & Rogers Street– The southbound approach of this intersection operates below the acceptable level of service in the PM peak hour during Scenario 4 when 100% of units are constructed. **Optimized splits** are recommended.

Walnut Street & Grimes Lane– The eastbound through and right-turning movements at this intersection have a volume-to-capacity ratio (v/c) >1 in Scenarios 3 and 4, starting in 2034 with at least 45% of units constructed. **Optimized splits** are recommended.

References

1. Trip Generation Manual. 11th ed., Institute of Transportation Engineers, 2021.
2. Highway Capacity Manual: A Guide for Multimodal Mobility Analysis. Transportation Research Board, 2022.
3. City of Bloomington Transportation Plan, 2019. https://bloomington.in.gov/transportation/plan
4. Indiana Department of Transportation, Traffic Count Database System. https://www.in.gov/indot/resources/traffic-data/
5. City of Bloomington Comprehensive Plan, 2018 https://bloomington.in.gov/planning/comprehensive-plan
6. Hooper, K. G., & Institute Of Transportation Engineers. (2017). Trip generation handbook. (3rd Edition). Institute Of Transportation Engineers.
7. Indiana Design Manual, 2013. https://www.in.gov/indot/design_manual/design_manual_2013.htm

Memorandum

To: Travis Vencel, Sullivan Development LLC

Andrew Cibor, City of Bloomington

From: Amanda Johnson, EMCS

Date: 04/18/2024

RE: Summit PUD

EMCS Inc. completed a traffic impact analysis for the Summit District PUD. The most recent update was dated 3/18/2024. This memorandum serves as a supplemental document to detail the analysis and results of additional analysis scenarios as requested by the City of Bloomington. All traffic volumes and methodologies described in the original analysis are still relevant except where superseded within the following sections. The topics of discussion included within this memorandum include:

- Potential Hotel in commercial land use
- Weimer Road Analysis
- Deborah Road Analysis
- Weimer Road & Bloomfield Avenue
- Bloomfield Road & Allen Road
- Turn lanes at internal intersections
- Sensitivity analysis for all improvements
- Mode Split comparison

Hotel Land Use

Since the PUD and zoning allows for a potential hotel within the commercial areas of the development, the impact of a hotel was investigated. A potential 100 room hotel was included in the Everest Center section of the PUD. The following table includes the ITE trip generation for a hotel.

ITE Land Use Code	Size	AM Enter	AM Exit	PM Enter	PM Exit
310	100 Rooms	26	20	30	29

For the purpose of this study, internal trip and mode split trip reductions were not applied. It is anticipated that traffic will access the site from both Adams Street and Sudbury Drive (via Weimer Road). The resulting additional traffic is shown in green boxes on the following pages.

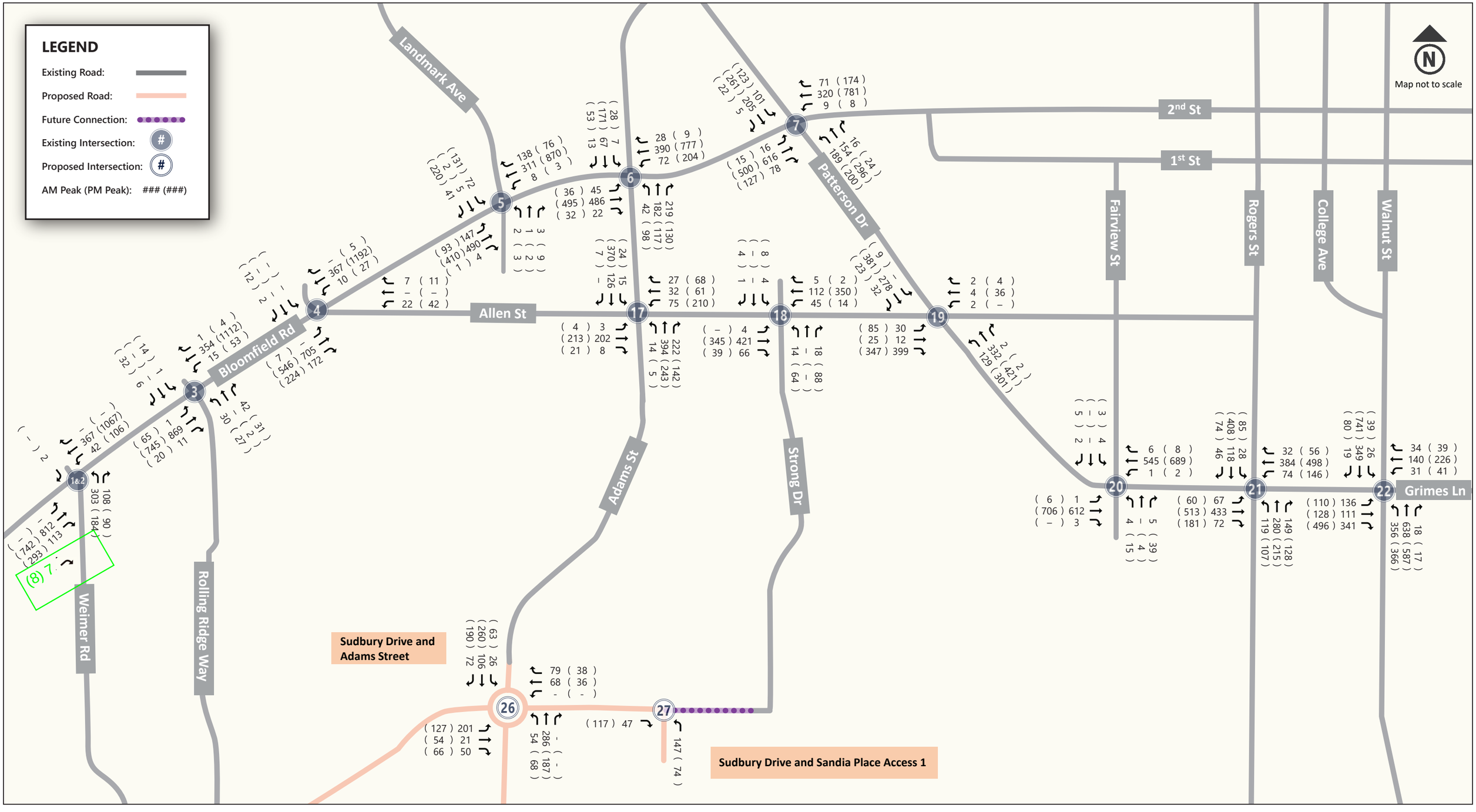


Figure 15: Turning Movements Scenario 4: Bloomfield Road / 2nd Street, Allen Street, and Patterson Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

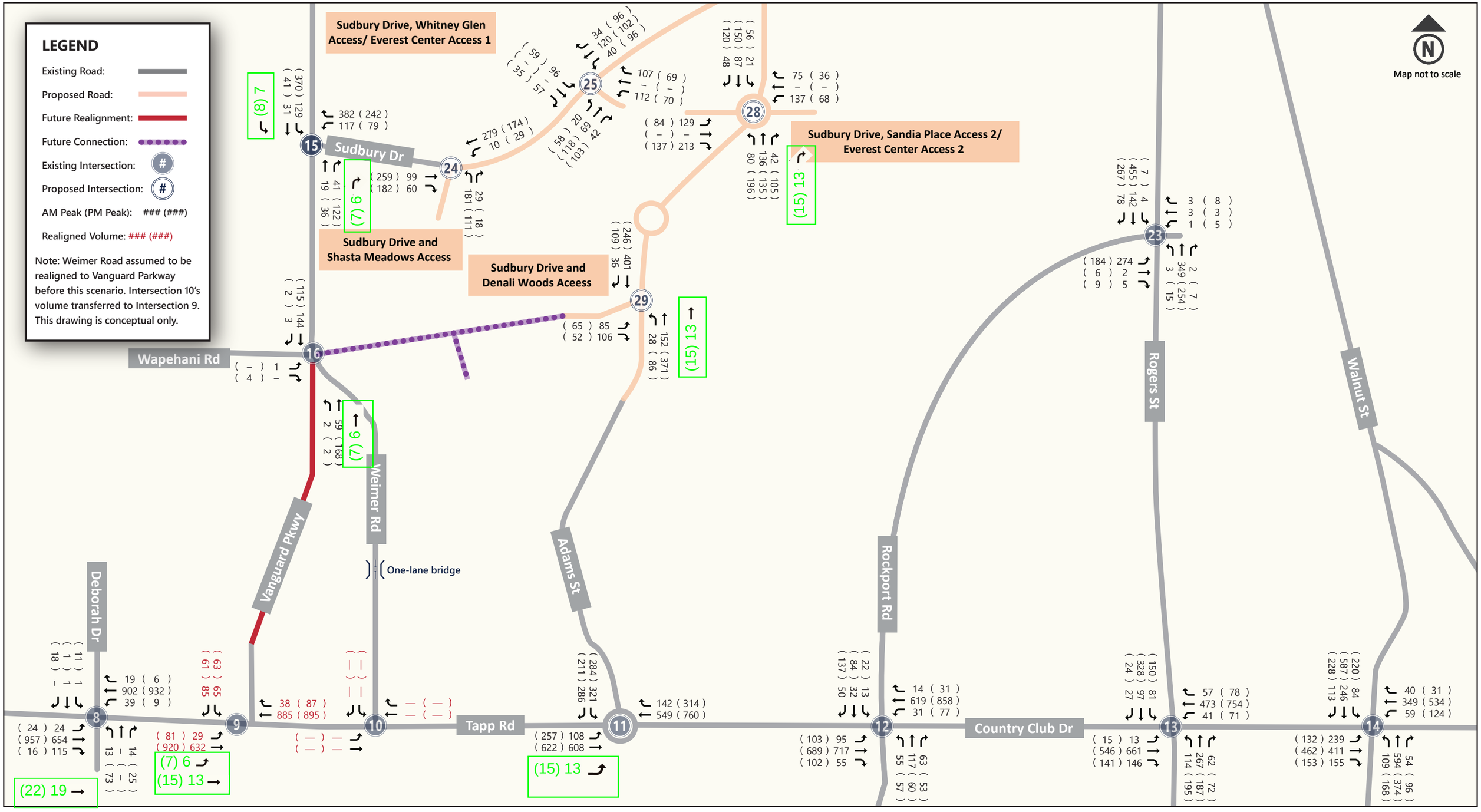


Figure 16: Turning Movements Scenario 4: Tapp Road / Country Club Drive / Winslow Road, Weimer Road, Rockport Road, Rogers Street, and Walnut Street

Disclaimer: Refer to Appendix A for the detailed internal network. The internal network is proposed to be a grid-like network. For the purposes of this study, the internal network was simplified down to 6 key internal intersections (Intersections 24-29). Traffic was not assigned to "Future Connections."

Weimer Road Analysis

The current alignment of Weimer Road includes two low speed horizontal curves and a single lane bridge near the southern terminus of the project. The Bloomington Transportation Plan shows this roadway ultimately being aligned with Vanguard Pkwy. Although the timing of this improvement is still unknown, it was assumed that in the full build scenario, this realignment would have been constructed. As a part of this memorandum, further consideration was given to Weimer Road in it's current configuration.

Figure 1 Weimer Road

Although not much guidance is available for two-lane, one-way operations, an outdated FHWA publication cites rural one-lane two-way facilities should not be used on roadways with higher

than 1,500 vpd. Under existing conditions, the ADT is ~1,400 per day. **By the time any development is constructed along Weimer Road, this volume threshold will be exceeded**. In addition, EMCS prepared a traffic simulation using SimTraffic to simulate the one-lane bridge. Although not an exact model, the simulation did show some queueing vehicles. Ultimately, the one-lane two-way operation is less of a capacity issue and more of a safety concern. While still in operation, at a minimum, signage announcing the one-lane bridge should be posted. Consideration should be given to widening the bridge or installing a traffic signal on either end to control the bridge.

Figure 2 Example of Signal Controlled Single Lane Bridge

Finally, the intersection of Wemer Road & Tapp Road experiences heavy delay during the PM peak hour with existing traffic volumes and conditions, specifically along the southbound approach. As vehicles wait longer for gaps, they begin to accept smaller gaps, leading to potential crashes. This intersection is in need of improvements **under existing conditions** and the need will only grow as traffic is added to Weimer Road.

Deborah Drive

There is an existing traffic signal at Debora Drive & Tapp Road serving development to the north and south of Tapp Road. If Weimer Road is realigned with Vanguard Pkwy, consideration

should be given to uninstalling a traffic signal at Deborah Drive. A traffic signal or roundabout could be installed at Vanguard Pkwy. Vanguard Pkwy is the ideal location for a controlled intersection since it will connect to Weimer Road in the north, and the City of Bloomington Transportation Plan indicates a future connection to the south.

If the traffic signal at Deborah Drive is removed, exiting left-turning traffic should be restricted. This configuration lends itself well to a left-in/right-in/right-out access at Deborah Drive and a roundabout at Vanguard Pkwy. A roundabout would provide access for any left-turning traffic and would not be in conflict (as a traffic signal might) with other roundabouts along Tapp Road. A single lane roundabout operates at or above acceptable levels of service for scenarios at Vanguard Pkwy & Tapp Road.

Figure 3 Potential Deborah Drive RIRO and Vanguard Pkwy Roundabout

Weimer Road & Bloomfield Avenue

The intersection of Weimer Road & Bloomfield Avenue is currently a two-way stop-controlled intersection. The north leg leads to a parking lot for the Twin Lakes Sports Park and Recreation Center. Ideally, these two approaches should be aligned. In addition, a second entrance to Twin Lakes Sports Park/Roling Ridge Way & Bloomfield Avenue currently exists as a traffic signal. Weimer Road is listed as a Primary Connector in the Transportation Plan, while Rolling Ridge Way does not appear in the Transportation Plan. The existing traffic signal is less than 400 feet from Weimer Road which causes concern with any new traffic signal or roundabout controlled intersection at Weimer Road & Bloomfield Avenue while maintaining a traffic signal at Rolling Ridge Way.

If the traffic signal was removed and the Twin Lakes Sports Park access realigned, a traffic signal or a roundabout would operate at or above acceptable levels of service at the intersection of Weimer Road & Bloomfield Avenue. Existing traffic along Rolling Ridge Way would also be able to use a proposed controlled access at Weimer Road & Bloomfield Avenue through the connection of Rolling Ridge Way to Weimer Road. Finally, any existing cut-through traffic from Weimer Road, through the apartment complex, to the traffic signal at Rolling Ridge Way would be eliminated.

Bloomfield Avenue & Allen Road

The intersection of Bloomfield Avenue & Allen Road is currently a two-way stop-controlled intersection. Allen Road has sight distance constraints with trees and roadway curvature. The proposed Summit District PUD will connect with Allen Street via Adams Road. While the capacity analysis does not indicate improvements are required until Scenario 4 (full build out of Summit District), consideration should be given to tree clearing at a minimum, and realignment of Allen Street to intersect at a perpendicular angle.

The capacity analysis has shown that improvements are needed in the full build scenario, however, if other improvements are installed at Weimer Road & Bloomfield Avenue, less traffic might be attracted to this intersection, lessening the need for additional improvements.

Turn Lanes at Internal Intersections

A turn lane warrant analysis based on methodology set forth in INDOT driveway permit manual was completed at each internal intersection. The capacity analysis showed that no turn lanes were required at any internal intersections. Based on the turn lane warrant analysis, the following turn lanes should be included:

	Intersection	Right-Turn Warranted?	Left-Turn Warranted?
26	Sudbury & Adams	Southbound	Eastbound
24	Sudbury & Shasta	Eastbound	No
25	Sudbury & Everest Center 1	No	No
28	Sudbury & Sandia/Everest	Northbound, Southbound. Eastbound	No
29	Adams & Denali	Southbound	Northbound

Mode Split Sensitivity

The Traffic Impact Analysis and associated Appendices detail the decision making in determining a 5% mode split reduction. While this assumption was made with guidance from ITE Trip Generation Manual, a sensitivity analysis was conducted to simulate what might

happen if no bus, carpool, or walking/biking modes were utilized within the development and if additional improvements would be required at study intersections if the anticipated mode split was not realized.

In the PM peak, a total of 241 trips (out of 2,467 – less than 10%) were removed due to mode split and internal capture calculations. If these reductions were not included, the maximum impact would be at Weimer Road & Bloomfield Avenue – along with internal intersections.

Summary

The addition of a **hotel land use** within the Everest Center development area would increase peak hour traffic volumes by less than 60 trips each. Once these trips are distributed to the study area roadways, the impact to operations and level of service is negligible.

The **Weimer Road Realignment** is included in the Bloomington Transportation Plan, but there is not currently a timeline for this project. This analysis shows that the existing conditions are not favorable and that as soon as any development is constructed with Summit District (or other developments), the operations along Weimer Road will deteriorate causing additional delay and safety concerns. An improvement to Weimer Road should be made in conjunction with development of the Sudbury District – ideally a realignment, but at a minimum expansion to a two-lane bridge.

The intersection of **Weimer Road & Bloomfield Avenue** should be converted to either a traffic signal or a roundabout in conjunction with construction of the Summit District development. Both options would operate well at this location, but a traffic signal may be desired due to grade differences through the intersection which would lead to a costly roundabout. The existing traffic signal at Rolling Ridge Way would need to be decommissioned. This would also require a traffic signal warrant to ensure both the new signal is warranted and that the existing signal would not be warranted, assuming some diversion of existing traffic to an improved Weimer Road & Bloomfield Avenue intersection.

The intersection of **Bloomfield Avenue & Allen Road** operates well from a capacity analysis standpoint until the full build out scenario of Summit District. However, there are existing sight distance concerns at the intersection. Aligning Allen Road to perpendicularly connect with Bloomfield Avenue and tree clearing would improve sight distance at the intersection and should be considered for existing conditions. Although the full build scenario shows increased delay on Allen Road during the peak hours, it is anticipated that it will dissipate quickly. Additionally, a traffic signal or roundabout at Weimer Road & Bloomfield Avenue would provide a controlled option for exiting traffic.

An analysis of **turn lane warrants** at internal intersections was completed and shows that additional turn lanes should be included at Sudbury & Adams, Sudbury & Shasta, Sudbury & Sandia/Everest, and Adams & Denali.

Finally, a **mode split sensitivity** analysis was completed assuming all vehicular trips will access the site. While a 0% mode split is not anticipated for this site, this analysis was prepared to demonstrate a worst case scenario to confirm no additional improvements are needed. The sensitivity analysis shows that all intersections operate above acceptable levels of service with a 10% volume increase at each intersection with the proposed conditions – with the exception of Allen & Adams which continues to operate below acceptable levels of service during the PM peak hour as described in the full report.

To: Traffic Commission
From: Ryan Robling
Mtg Date: October 20, 2025
Subject: Matlock Heights Parking Restrictions

Location:

Matlock Heights Neighborhood. Bounded by - North: Glendora Dr. and Fritz Dr., South: State Road 45/46 Bypass, East: Dunn St., West: Walnut St.

Background:

The Department of Public Works and the Planning and Transportation Department received a request from residents of the Matlock Heights neighborhood regarding vehicular access concerns related to on-street parking. Residents reported that, during Indiana University home football games, parked vehicles on both sides of the neighborhood's streets restrict the available roadway width, creating difficulties for neighborhood residents and emergency vehicles.

All roadways within the neighborhood are classified as Neighborhood Residential Streets in the City's Transportation Plan, though they were developed prior to the Plan's adoption. The design parameters for Neighborhood Residential Streets include two 10 foot travel lanes without a centerline and optional on-street parking. The existing streets within the neighborhood appear to provide two 11-travel lanes, without a centerline. On-street parking is limited to one side of the street for a number of the streets within the neighborhood.

This request was previously submitted to the Parking Commission, but the Commission was dissolved prior to a resolution.

Staff Response:

The Department of Public Works instituted these short-term solutions for the remaining IU football home games this season:

- Have Parking Services staff place the temporary parking signs at the problematic locations provided, with some temporary spray paint in the grass noting the location of where the sign should be placed for subsequent weeks.

- The signs would be posted with a general "Emergency No Parking on Gameday" sign with language that can be reused for each of the following gamedays. Homeowners would then store the signs until the next game and put them back out 24 hours before gameday.
- With limited staffing on busy gamedays (especially evening games) we'll ask that both Parking Enforcement Officers and Community Resource Officers with the Bloomington Police Department alternate scheduled monitoring of the neighborhood for safety concerns when available. Otherwise we do need to rely on the neighborhood to utilize 911 when the signs are not adhered to and roads are completely blocked to public safety vehicles.

Commission Consideration and Action:

After consideration of the Transportation Inquiry, the Commission may take one of the following actions:

a. determine that no further action is warranted at this time;

b. request additional study or information; or

c. request that a future petition or resolution addressing the issues raised be placed on a subsequent agenda. In this event, the Commission shall identify a clear and actionable outcome, directive, or policy objective to be developed or prepared for future consideration.

To: Traffic Commission
From: Residents of Matlock Heights
Mtg Date: October 20, 2025
Subject: Matlock Heights Parking Restrictions

The location of the safety issue:
Matlock Heights Neighborhood from Saville Ave to East Glendora Drive, including: Barbra Drive, North Fritz Drive, North Laverne Drive, and East Gilbert Drive.

The reason for the safety issue:
The streets in this neighborhood were designed in the 1950s and not wide enough to accommodate cars parked on both sides of the street. Cars, much less emergency vehicles (ambulances, fire trucks, rescue vehicles) can not fit down the streets with cars parked side by side on each side of the street. This has only become an issue on Indiana University game days with the influx of 50,000+ people and nowhere for that many people to park close enough to the stadium.

The necessary improvements needed to rectify the safety problem:
"No Parking This Side Game Day" signs similar to other major college towns needed for the Matlock Heights Neighborhood on these street locations:

- On the South side of East Glendora Drive (the north side has a drop off that would be dangerous to cars/people, would also match the other streets in the neighborhood).
- On the East Side of North Barbra Drive
- On the East Side of North Fritz Drive (half this street already has no parking signs up to Saville on the East side)
- On the East Side of North Laverne Drive (east side to match the rest of neighborhood)
- On the South Side of East Gilbert Drive (would match the other streets as well)

Photos and other messages on the safety issue:
From Shelby VanDerMoere Bloomington Fire Department, MIH, and EMT:
(VIA email from a year ago as well to the City's Public Works)

> My name is Shelby, and I am the Program Manager for the Mobile Integrated Health Team at the Bloomington Fire Department. This past weekend, I had the opportunity to meet with the Matlock Heights neighborhood. During our discussion, it was brought to my attention that during the IU game this past weekend, both sides of the streets in this neighborhood were used for parking.

This is a major concern as a small car was not even able to get through, let alone an emergency vehicle.

The city also clearly thought this was a big enough safety issue to come out before all the subsequent home games last year after the fire department and our neighborhood brought the issue to their attention and staked the streets with temporary no parking signs for the day of the game.

Photo examples of the safety issue attached.


STOP


AIRSTREAM

To: Traffic Commission
From: Ryan Robling
Mtg Date: October 20, 2025
Subject: N Walnut & Blue Ridge Intersection Area

Location:

Intersection of N. Walnut St. and E. Blue Ridge Dr.

Background:

The Engineering and Planning & Transportation Departments received a traffic inquiry from residents of the Blue Ridge neighborhood. The inquiry raised concerns about the difficulty of making left turns from E. Blue Ridge Dr. onto N. Walnut St., challenges in turning into the neighborhood from N. Walnut St., the frequency of speeding vehicles, the number of crashes at the intersections, and the frequency of near-misses. This portion of N. Walnut St. is designated as a Suburban Connector in the Transportation Plan. Target Speeds on Suburban Connectors is 25-35 mph, with a typical Auto Traffic Volume (ADT) of 15,000-30,000.

The neighborhood has collected signatures for a petition, which is attached to this inquiry. The petition contains the following request:

1. Install a sensor-activated traffic light to regulate traffic flow and reduce speeding
2. Convert the middle lane on North Walnut Street into a dedicated turn lane for vehicles accessing the chiropractic office parking lot and other nearby properties
3. Implement traffic calming measures, such as clear signage and speed reduction devices, to discourage speeding and improve safety

This request was previously submitted to the Traffic Commission, once in 2016 but no further action took place and again in 2024 but the Commission was dissolved prior to a resolution.

Staff Response:

There have been no FSI (fatal and serious injury) crashes on this portion of N. Walnut St. at or near the intersection of E. Blue Ridge Dr. since 2019. Since 2019, there have been two FSI crashes roughly 1,000 feet south along N. Walnut St. near the drive entrance to the Speedway gas station.

The posted speed on this portion of N. Walnut St. is 45 mph. Updated speed data was collected in September 2024.

For northbound traffic:

- The mean speed (average) was 48.5 mph
- The 85th percentile speed was 53 mph

For southbound traffic:

- The mean speed (average) was 49.8 mph
- The 85th percentile speed was 54 mph

The most recent traffic volume counts:

- 2024 N. Walnut St. – 13,642 Average Annual Daily Traffic (AADT)
- 2017 N. Walnut St. – 15,319 AADT
- 2011 N. Walnut St. – 10,521 AADT
- 2002 N. Walnut St. – 15,790 AADT
- 2024 E. Blue Ridge Dr. – 749 AADT
- 2003 E. Blue Ridge Dr. – 922 AADT

In order to install a traffic signal, an intersection must meet specific warrants outlined in the Manual on Uniform Traffic Control Devices (MUTCD). After completing the traffic analysis, the Engineering Department determined that the intersection of N. Walnut St. and E. Blue Ridge Dr. did not meet the warrants for traffic signals. In order to make safety adjustments to the intersection, the City incorporated intersection changes into the N. Walnut resurfacing project (Bypass to Old 37), which is currently under construction.

To improve safety at the intersection of N. Walnut St. and E. Blue Ridge Dr., a left-turn lane will be installed for southbound traffic turning into the Blue Ridge neighborhood (sheet 12 of 20 in the project plans illustrates the new striping plan at the intersection; traffic signal warrants were not met). Walnut St. will also be modified to include a single southbound travel lane throughout the project limits to replace the current configuration,

which opens from one lane to two lanes and then merges back to one lane. Maintaining a single southbound lane provides space for the left-turn lane, eliminates a merge location, and discourages high speeds by removing the opportunity to pass other vehicles. Maintaining a single southbound lane also provides an opportunity to remove excess pavement.

Commission Consideration and Action:

After consideration of the Transportation Inquiry, the Commission may take one of the following actions:

a. determine that no further action is warranted at this time;
b. request additional study or information; or
c. request that a future petition or resolution addressing the issues raised be placed on a subsequent agenda. In this event, the Commission shall identify a clear and actionable outcome, directive, or policy objective to be developed or prepared for future consideration.

A letter to the City of Bloomington Transportation Commission:

SUBJECT: Citizen Petition - Safety Improvements for North Walnut Street & East Blue Ridge Drive Intersection

To the Bloomington Transportation Commission:

Please find attached the citizen petition originally presented to the Bloomington Traffic Commission in August 2024, along with photographs of the proposed changes and supporting documentation.

LOCATION: Intersection of North Walnut Street and East Blue Ridge Drive, including the adjacent chiropractic office entrance

DESCRIPTION OF CONCERN: This intersection presents ongoing safety hazards for Blue Ridge residents, visitors, and patrons of the nearby chiropractic office. The primary issues include:

- **Excessive traffic speeds:** Vehicles traveling both directions on North Walnut Street consistently exceed posted speed limits
- **Poor sightlines:** The roadway configuration creates visibility issues where the path appears clear when beginning a turn, but high-speed traffic suddenly appears
- **Dangerous turning conditions:** Left turns onto and off of North Walnut Street are particularly hazardous due to the combination of speed and visibility issues
- **Peak period complications:** During IU games and peak commuter hours, safe turns from the neighborhood become nearly impossible
- **Unsafe workarounds:** Some residents have resorted to using the bike lane as a right-turn lane to avoid aggressive northbound traffic

FREQUENCY: Daily occurrence, worsening during high-traffic periods

RELEVANT HISTORY: This has been a persistent problem for decades, with at least one documented fatality. Our family has experienced these dangerous conditions throughout our 22 years in this community. Accident report documentation has been previously provided to the city through the Bloomington Police Department.

REQUESTED IMPROVEMENTS: The 136 signatories to this petition request the following traffic safety measures:

1. Dedicated left-turn lanes into the Blue Ridge community and visitor center entrance
2. Dedicated left-turn lane into the chiropractic office parking area
3. Shared bike and right-turn lane for safe access from North Walnut Street to East Blue Ridge Drive
4. Sensor-activated traffic signal to ensure safe turns onto North Walnut Street

Petition to Install a Sensor-Activated Traffic Light and Dedicated Turn Lane at the Intersection of E. Blue Ridge Dr. and N. Walnut St. in Bloomington, IN

To the Office of the Mayor, City Council and Transportation Department of Bloomington, Indiana:

We, the undersigned residents of the Blue Ridge community and other concerned citizens in Bloomington, hereby petition for the installation of a sensor-activated traffic light and a dedicated turn lane on North Walnut Street at the intersection of East Blue Ridge Drive and North Walnut Street.

1. As members of the Blue Ridge community, we have witnessed a significant increase in speeding, accidents, and near-misses at this intersection. The lack of proper traffic control and the current lane configuration on North Walnut Street have contributed to limited visibility and dangerous situations for motorists entering and exiting the addition as well as the nearby chiropractic office parking lot.

To address these issues, we propose the following:

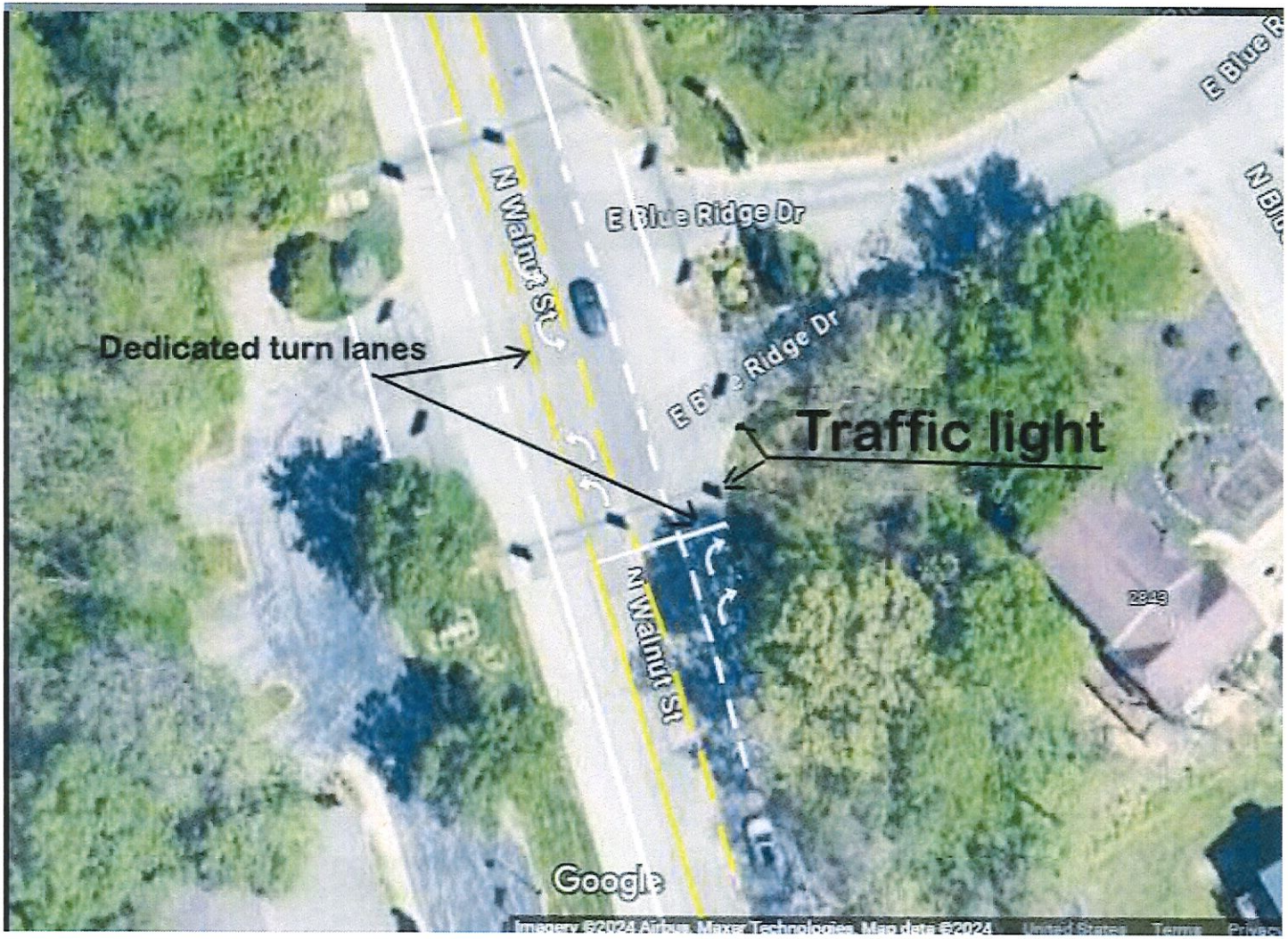
1. Install a sensor-activated traffic light to regulate traffic flow and reduce speeding
2. Convert the middle lane on North Walnut Street into a dedicated turn lane for vehicles accessing the chiropractic office parking lot and other nearby properties
3. Implement traffic calming measures, such as clear signage and speed reduction devices, to discourage speeding and improve safety

By implementing these changes, the city can:

1. Significantly reduce the risk of accidents and injuries at this intersection
2. Improve visibility and safety for motorists turning onto and off of North Walnut Street from nearby properties
3. Discourage speeding and create a safer environment for all Blue Ridge residents
4. Provide safer access for visitors to the City's visitor center, ensuring they can comfortably navigate the area

We, the Blue Ridge community, urge the City Council and Transportation Department to prioritize the safety of our residents and visitors by promptly addressing these issues. The installation of a sensor-activated traffic light, dedicated turn lane on North Walnut Street, and traffic calming measures at the intersection of E. Blue Ridge Dr. and N. Walnut St. will demonstrate the city's commitment to creating a safer community for all residents and guests, including those in the Blue Ridge neighborhood and those visiting our city.

Sincerely, The undersigned residents of the Blue Ridge community, Bloomington, IN


E Blue Ridge Dr
N Walnut St
Dedicated turn lanes
E Blue Ridge Dr
Traffic light
N Walnut St
2849
Google

Dedicated Yurn Lanes
Traffic light

Restaurants
Hotels
Things to do
Museums
Transit
Indiana Chiropractic and Rehab
Sensory Massage
Dedicated turn lanes

Signature:	Print Name:	Address:
	James A. Ferguson	3233 N. Ramble Rd W.
	James A. Glazier	3233 N Ramble Rd W.
	Sarah G. McNeill	3221 N. Ramble Rd W.
	ERIC RODKIN	3222 N. RAMBLE RD. W
	Deanna McAllister	3275 N Ramble Rd W
	Dawn Gray	3323 N. Ramble Rd Ct.
	Anthony Armstrong	3328 N Ramble Rd Ct.
	Stan Wasserman	3260 N Ramble Rd E
	Rahul Dhal	214 E. Reagan Dr.
	Ishasti Gangopadhyay	214 E. Reagan Dr.
	Enid Zimmerman	3240 N. Ramble Rd. E.
	RON BADER	3251 N. RAMBLE RD. EAST
	Glenn Anderson	310 KENLER DR
	Rob Hopkins	301 Kenler Dr
	Britt Grannan	219 Kenler Dr.
	Michael Molenda	218 Kenler Dr.
	David Rodgers	3255 N. Ramble Rd W.
	James Andrews	3111 N Ramble Rd W
	Patricia Andrews	3111 N. Ramble Rd. W.
	Cindy Stark	3103 N Ramble Rd W.
	BARBARA WISKOPF	3051 N RAMBLE RD W
	PAT DAQUISTA	3043 N Ramble Rd W
	Katherine Putman	2975 N Ramble Rd W.
	CAROL ISAACS	2959 N. RAMBLE RD W.

Signaute:	Print Name:	Address:
Patricia Caruso Mitchell	PATRICIA CARUSO MITCHELL	4319 E RAMP CREEK, BLMGTON, IN 47401
Carol Mart	Carol Martin	4101 Stoutes Ck Rd - B/gtn - 47401
Carl Sh	Carl Short	3811 E. Morningside Drive Apt 64
A. M. Mickley	Aaron M. Mickley	5701 W. St. Rd. 45 Bloomington, IN 47403
[illegible]	Justin Harris	2757 E ST Rd 46 Spencer IN 47460
Bill Sl	Bill Slus	
M. Key	MICHAEL KEARNEY	1745 W Lanam Ct. Blgn IN 47404
Christina Yamamoto	Christina Yamamoto	5713 W Tensley Rd Bloomington 47403
Marilyn Clark	MARILYN CLARK	4231 W Cherry Orchard Ct 47403
Constance Bla	Constance Bla	1300 S. Brooke, Bl'gtn
Melodie Abrahams	Melodie Abrahams	
Stacy Gano	Stacy Gano	4219 W Primrose Ln 47403
Bobbie Treadway	Bobbie Treadway	5359 S. Ison Rd, Blgn 47403
[illegible]	Sarah Craig	4387 S. Darrell Dr. 47403
Katara Mitchell	Katara Mitchell	7748 S. Zikes Rd 47401
[illegible]	Missy Shahadey	3713 N. Woodview Hills Dr. 47459
Jeremy Weber	Jeremy Weber	1421 E. Bethel Ln 47408
Julie Robertson	Julie Robertson	4040 N. Killian Ct Blgtn
Valerie Bruce	Valerie Bruce	4218 E Morningside Dr 47408
[illegible]	Brit Moreland	1032 E. Jennifer Ct. 47401
Alma Makurat	Alma Makurat	2700 N. Russell Rd. Blgtn 47408

Signature:	Print Name:	Address:
[signature]	DAN WHETHAM	4279 Harrington St. B'ton 47404
[signature]	Tim Lewis	8229 N. Cortland Dr 47408
[signature]	Corey Tritt	2350 N Gettys Creek Rd
Lucy Mobley	Lucy Mobley	4350 N. Ridgewood Dr. Bloomington, IN 47404
[signature]	Jennifer Tomlinson	4802 S. Old State Rd. 37 IB Blgtn 47401
[signature]	JoAnn Jaffe	103 E. Vermilya Ave Bloomington, IN 47401
Yvonne C Oliger	Yvonne Oliger	3510 Greasy Creek Rd. Nashville, In 47448
[signature]	Maria Wade	2106 Isabel Ct 47403
[signature]	Shanna Miller	1530 W Lawson Rd 47404
[signature]	Audrey Craft	6138 W Corral Way Drive
[signature]	Rebecca Haagsma	1622 17th St. Bedford, In 47421
Holden	Mikehawk	1234 Your mommas house
[signature]	Celina Jaffe	917 W. 3rd St. 47404
Kelly Mann	Kelly Mann	1606 E Woodland Dr. 47408
[signature]	Melinda Fair	Martinsville IN 46151
Marcy Meyer	Marcy Meyer	6767 S. Harmony Rd, Blgtn 47403
Randy Arnold		
[signature]	Randy Arnold	2414 E. Rechter Rd, B'ton, IN 47401
[signature]	Michael Gestwean	3954 N. Wintersweet Dr. 47404
Jennifer Mobley	Jennifer Mobley	5101 W. St. Rd. 45 Blmgtn. 47403
ERIC EVAN	[signature]	1235 E. MAIN ST 47403
Mindy Moore	Mindy Moore	5029 N Brummetts Cr 47408
Sierra Leake	[signature]	3529 W. Springwood Ct. 47404
LISA Allen	[signature]	7049 W. Alfred 47429

Signature:	Print Name:	Address:
	Kelsey Porter	103 E. Dewey Dr. Ellettsville, IN 47429
	Myrissa Mitchell	8764 Mid view Dr Unionville IN 47468
	David Cach	2008 N. Smith Rd 47408
	Erik Weitnauer	3108 N Rumble Rd E 47408 IN
	William Morton	307 E. Oliver Dr. Blmgtn IN 47408
	Tim Nancy	2671 State Penny Rd. Solsberry 47459
	DUNCAN ADAM	7365 BELLSVILLE PIKE NASHVILLE
	Kyle Lockman	6078 E. State Road 54 Bloomfield
	Collin Hartman	730 S Forest Dr, Terre Haute IN
	ANGELA HAYS	2608 S. ROBINS BOW BLOOMINGTON IN 47401
	S Elaine Hacker	59 E Sumner Martinsville IN 46151
	Kristin Myers	4723 E. Donington Dr. Bloomington IN 47401
	Tristan Stanford	2042 W. Stanton Ct, Bloomington IN 47401
	Jan Laswell	306 E Oliver E. Drive
	James Laurence Laswell	306 E. Oliver Dr. 47408
	Samantha Morris	3409 S. Tulip Ave 47403
	Jessica Bartlett	1018 N Lindbergh Dr
	Teddie Gambler	7689 S. Ketcham Rd Bloomington
	Robert Thomas	4510 N Mayo Ct Bloo
	Alex Yamamoto	1125 W Blackberry Ct
	Elizabeth Bowden	5002 W De Ann Dr.
	Craig Stewart	1910 E 1st Street Bloomington IN
	Julie Baker	556 S. Poplar DR. Ellettsville
	Dave Jenkins	24 ORCHARD RD LOGOOTEE IN

Signature:	Print Name:	Address:
C. Cu...	—	2937 N Ramble Rd
Thomas Nisonger	2927 N Ramble Rd W	Thomas Nisonger
Chris Baltis	CHRIS BALTIS	2831 N BLUE SLOPES DR
Parker Trulock	Parker Trulock	2807 N. Blue Slopes Dr.
Tiffani Sinn Trulock	Tiffani Sinn Trulock	2807 N. Blue Slopes Dr
Andrew Carlson	Andrew Carlson	2801 N Blue Slopes Dr.
Marilyn Uselding	MARILYN Uselding	2800 N Blue Slopes Dr.
Ed Rens	Ed Rens	2820 N. Blue Slopes Dr.
Sarah Greene	Sarah Greene	2834 N Blue Slopes Dr
D Rhodes	DAVID RHODES	2834 N BLUE SLOPES DR
Sandy Thompson	SANDY THOMPSON	2840 N. Blue Slopes Dr.
Ron Thompson	RON THOMPSON	2840 N Blue Slopes Dr
Sarah Barnett	Sarah Barnett	2846 N Blue Slopes Dr.
Cole H...	Cole Holmstrom	2854 N. Blue Ridge Dr.
[illegible]	Olivia Zackel	2854 N. Blue Ridge Dr.
Scott Bischoff	SCOTT BISCHOFF	2930 N Ramble Rd W
Ed Damrik	ED DAMRIK	206 E Rusgak Dr
Lori Bischoff	Lori Bischoff	2930 N Ramble Rd W.
Marilyn Horlander	MARILYN HORLANDER	3242 N. Ramble Rd W
Robert Horlander	ROBERT HORLANDER	3242 N. Ramble Rd W
Carole AC Canfield	Carole AC Canfield	3052 N Ramble Rd W.
Douglas A Kuehl	Douglas A Kuehl	408 E LAKEWOOD DR
Karen Watkins	KAREN WATKINS	328 E BLUE RIDGE DR
Marilyn Bauch	Marilyn Bauchat	510 E Lakewood Dr

Signature:	Print Name:	Address:
	Enid Zimmerman	3240 N. Ramble Rd. East
	Diann Lock	3280 N Ramble Rd E
	Ted Lock	" " " "
	Amy Henn	2975 N. Lakewood Ct.
	Ben Mentz	460 E Kenwood Pl
	MATT FIELDS	2941 N RAMBLE RD E 47408
	Nancy Deckard	327 E Lakewood Dr 47408

Signaute:	Print Name:	Address:
George J. Dreher	GEORGE DREHER	2983 RAMBLE ROAD WEST
Murphy Smith	Murphy Smith	2705 N Blue Ridge Ct
D. Paul Kern	D. Paul Kern	2711 Blue Ridge Ct

Signature:	Print Name:	Address:
M A Kuemper	MAGGIE KUEMPER	7808 E ANDERSON RD UNIONVILLE 47468

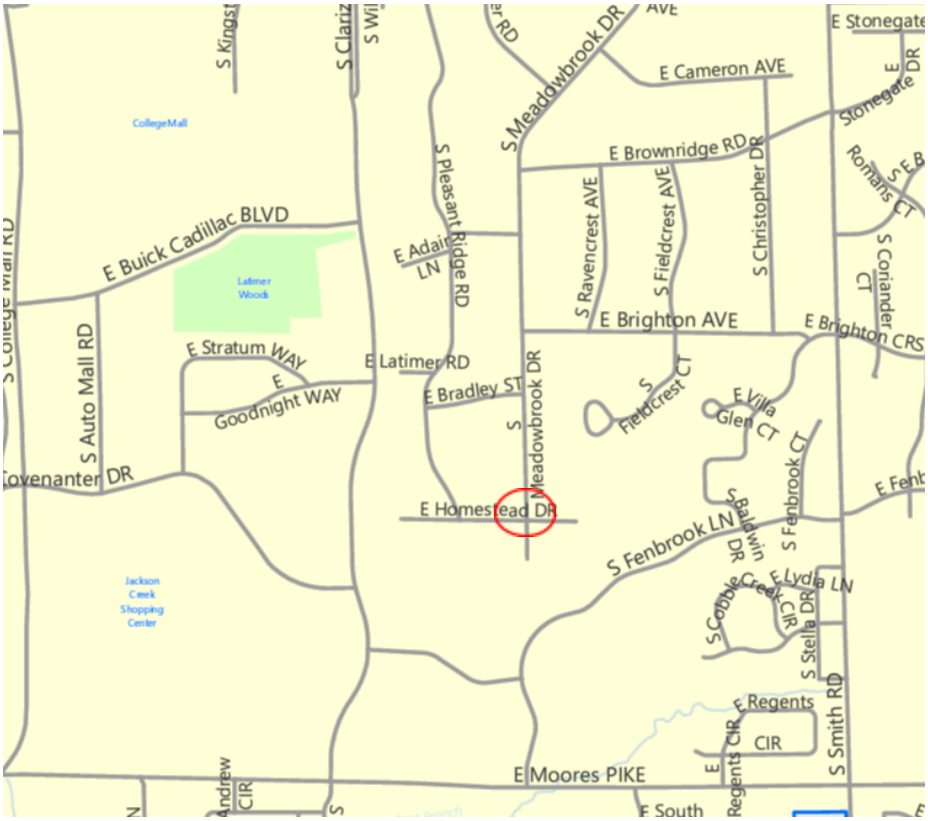
CITY OF BLOOMINGTON

TRAFFIC COMMISSION **Case #:** TC-24-06
Traffic Inquiry **Date:** August 28, 2024

FROM: Ryan Robling, Planning Services Manager, Planning and Transportation Department

REGARDING: 4-Way Stop Request at the Intersection of S. Meadowbrook Dr. and E. Homestead Dr.

Location: Intersection of S. Meadowbrook Dr. and E. Homestead Dr.



Background: The Engineering and Planning & Transportation Departments received a traffic inquiry from residents in the Hoosier Acres neighborhood. The inquiry addressed concerns regarding speeding vehicles, vehicles failing to stop at the currently posted stop signs, and the number of near misses. The residents have witnessed delivery trucks and school buses, in particular, moving through the intersection in an unsafe manner.

Staff Response: The Engineering and Planning & Transportation Departments have begun reviewing the request and have put together the following data:

- There have been no FSI (fatal and serious injury) or non-FSI crashes at or around the intersection of S. Meadowbrook Dr. and E. Homestead Dr. since 2018.

- There have been 2 non-FSI crashes, both identified as “unsafe backing,” at or around the intersection of S. Meadowbrook Dr. and E. Homestead Dr. since 2007.
- There is appropriate “Dead End” signage before the intersection.
- The posted speed on S. Meadowbrook Dr. is 25 MPH.
    - There is no posted speed on E. Homestead Dr.; however the speed limit is 25 MPH.

While staff supports efforts to improve intersection safety, we're not certain that a 4-way stop will meaningfully improve the safety of this intersection. Other traffic calming measures might be more effective.

Recommendation: Staff requests that the Traffic Commission identify if this traffic inquiry needs further analysis before a future case can be heard. Staff also asks the Commission to specify the types of data and information they would like to review, as well as any traffic calming alternatives they believe should be considered.

City of Bloomington Traffic Commission Minutes
January 15, 2017 in the Council Chambers, City Hall

Traffic Commission minutes are transcribed in a summarized outline manner. Audio recordings of the meeting are available in the Planning and Transportation Department for reference.

Attendance
Traffic Commission: James Batcho, Andrew Cibor, Markeus Farrand, Larry Haywood, Judi Maki, Abigail Pietsch, Sarah Ryterband, and Joe VanDeventer

Others in Attendance: Sandi Clothier (Near West Side Neighborhood), Emily Sprouts (Near West Side Neighborhood), Sara Gomez (staff), Daniel Backler (staff), and Scott Robinson (Staff)

I. Call to Order (~4:35 PM)

II. Nominations and Elections of 2017 Chair and Vice Chair* - Mr. Cibor motioned that Ms. Ryterband serve as the Chair and Mr. Farrand serve as the Vice Chair. Ms. Maki seconded the motion. **The motion passed 8-0.**

III. Approval of Minutes – December 14, 2016. Mr. Haywood wanted staff to check the recording to see if a vote was taken on the last agenda item. The approval of the December minutes will be considered at the next meeting.

IV. Public Comment – none.

V. Communications from Commission – none.

VI. Reports from Staff

A. 90 Day Orders – Mr. Robinson said copies of the 90 Day orders are included in the packet for reference and reflect past recommendations of the Commission.

B. 2017 Meeting Schedule – Mr. Robinson included the schedule again in the meeting packet for reference.

VII. Old Business – none.

VIII. New Business

A. Walnut Street and Blue Ridge Drive – intersection analysis – Ms. Gomez explained staff evaluated this intersection based on past guidance from the Commission and a request from a resident. She reviewed the information included in the packet. Mr. Cibor said the data and analysis does not show any immediate concerns and suggests this intersection continue to be monitored through annual crash reports.

B. Longview Avenue and Pete Ellis Drive – intersection stop control and speed limit* - Ms. Gomez explained this item is in response to a resident's request to consider a traffic light at this intersection. She reviewed the crash and traffic data included in the packet. The posted speed limit signs also do not reflect what is listed in Title 15. Commission members discussed issues of congestion, safety, speed, and possible solutions. The rail road crossing and the John Hinkle Place intersection also create traffic concerns. Flashing red and yellow warning lights, cross traffic does not stop signs, and marked crosswalks were discussed as options. Mr. Robinson explained this intersection has been discussed at the Bicycle and Pedestrian Safety Commission for safety concerns and the challenges to cross Pete Ellis Drive. Longview is a priority corridor for bicyclists and pedestrians. Mr. VanDeventer explained the traffic signals at 3rd Street and 10th Street are operated by the State which would make coordination with City traffic signals difficult. Mr. Cibor motioned to approve staff's recommendations and Mr. Haywood seconded. Ms. Ryterband motioned to amend the first motion and change the posted speed limit to 25 MPH speed as reflected in Title 15. Ms. Maki seconded. **The second motion passed 5-3**. There was no further discussion. **The revised motion passed 8-0**.

C. Kirkwood Avenue and Madison Street – intersection stop control* - Mr. Backler reviewed the staff report. He explained that while the data does not meet the typical traffic warrants for stop control, other site conditions fall within engineering judgment to consider. Commission members discussed the crash data, sight distances, on-street parking, the comparison to other intersections, and the behavior of travelers along Kirwood Avenue. Discussion ensued around the context of the area, along with the B-Line trail, and the design and operation/function of the roadway. The consensus on these other considerations did agree with staff's recommendations. Mr. Farrand motioned to approve an all way stop as detailed in the staff report. Ms. Maki seconded. **The motion passed 5-3.**

D. Rogers Street – on-street parking consideration at 6th Street and 8th Street – remove on-street parking* - Mr. Backler provided an overview of the staff report and discussed the traffic volume, crash data, and sight distance information. Mr. Haywood agreed the crash data and sight distance supports removing parking. Ms. Clothier explained she has lived in the neighborhood for over 20 years and is very familiar with this area. It has changed a lot over time and the traffic speeds and volumes have increased. The hill on Rogers Street also creates sight distance concerns for crossing Rogers Street, especially for pedestrians and bicyclists. She would also like to see marked crosswalks to help improve the intersections. Ms. Sprouts said her family also lives in the neighborhood and vehicles park here for long periods of time. The parked vehicles

create poor sight distances and is a safety concern when trying to cross Rogers Street. She also thinks marked crosswalks will help by keeping the intersection open when traffic backs up along Rogers Street. Mr. VanDeventer motioned to approve staff's recommendations and Ms. Ryterband seconded. She also noted that staff should look at the 4th and Rogers improved crossing concept as a future possibility for these intersections. **The motion passed 8-0**.

IX. Traffic Inquiries – none

X. Adjournment (~5:50 PM)

Next meeting – February 22, 2017

**Action requested*

MEMORANDUM

To: Traffic Commission

From: Neil Kopper, PE

Date: December 14, 2016

Re: N. Walnut and E. Blue Ridge intersection

Background

The Traffic Commission previously received an email from a citizen representing the neighborhood association requested investigation of the E. Blue Ridge and N. Walnut intersection [in response to complaints from residents and concerns about crashes]. The concerned citizen also presented their complaint to traffic commission.

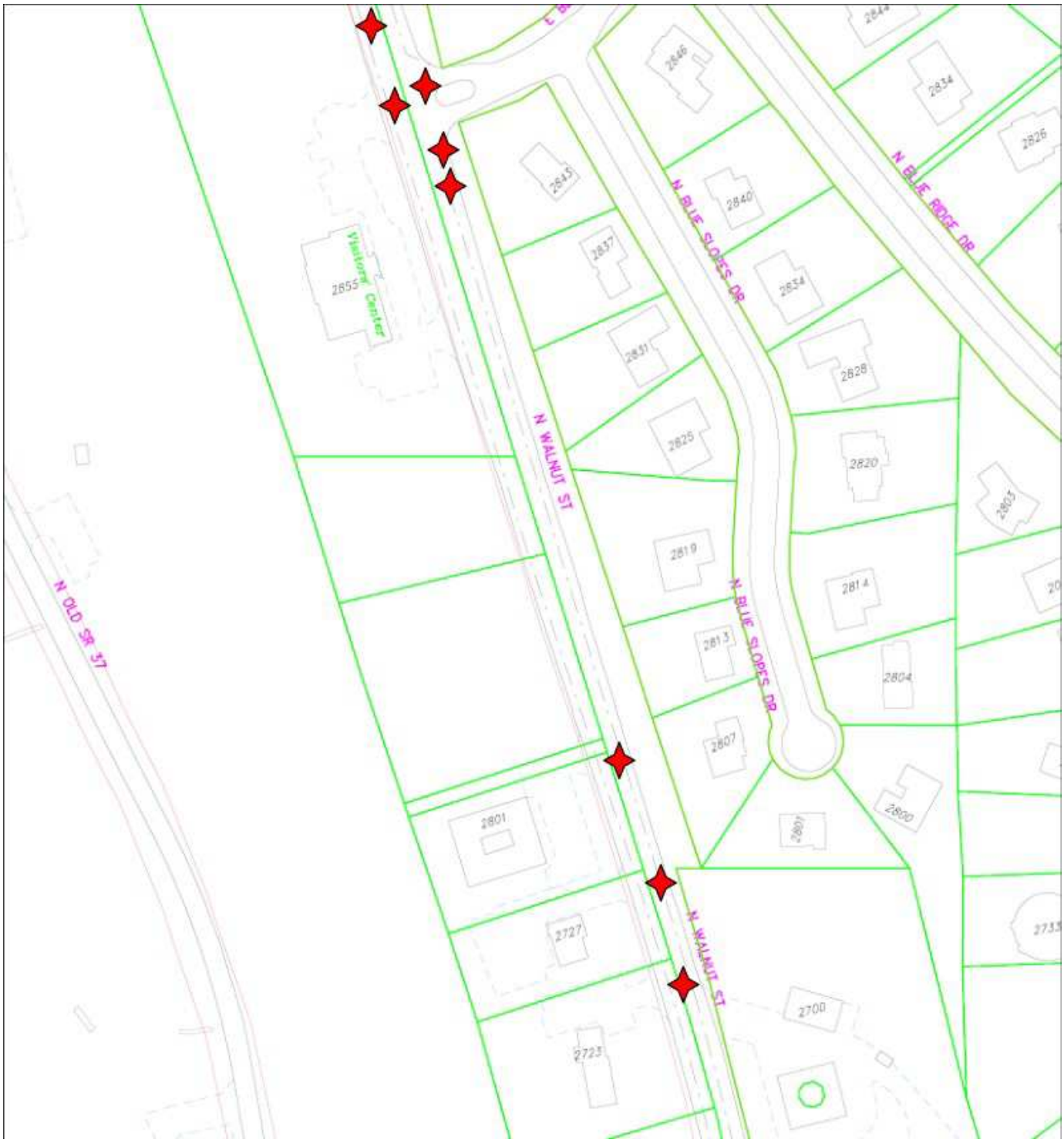
Traffic Commission requested staff gather data at this location. Crash data shows 3 crashes related to the intersection between 2014 and 2016 (see specifics on page 3). According to data collected in 2013, the average speed was 36 mph and the 85th percentile speed was 42 mph with a posted speed limit of 40 mph south of Blue Ridge and 45 mph north of Blue Ridge. The average daily traffic count in 2013 was 8,222. There are alternative routes available to exit or enter the neighborhood via N. Dunn St. (see map on page 4).

Recommendations

Crash history and speeds do not seem atypical in this context. This location could continue to be monitored, but doesn't stand out as a high-priority intersection. Staff would like to hear the traffic commission's recommendation based on this available data.

View of south N. Walnut St from E Blue Ridge Dr.

View of north N. Walnut St from E Blue Ridge Dr.



3 Crashes reported between 2014 and 2016 related to the intersection:

-4/22/2015- D1 didn't see D2 when they pulled onto N Walnut from E Blue Ridge
-1/22/2016- Rear end on N Walnut as turning onto E Blue Ridge
-4/8/2016- D1 making left turn (south) onto Walnut from Blue Ridge and struck D2 traveling north on N Walnut

5 crashes not related to intersection

There are two alternate routes to exit or enter the neighborhood from N. Dunn St.

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: NB

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	1	9	13	8	9	1	0	0	41
1:00	0	0	0	0	0	1	3	3	5	2	0	0	0	14
2:00	0	0	0	0	1	1	2	10	4	3	0	0	0	21
3:00	0	0	0	0	0	2	2	3	3	0	0	1	0	11
4:00	3	0	0	0	0	1	4	7	12	8	2	0	0	37
5:00	0	0	0	0	0	0	10	26	26	17	8	0	2	89
6:00	6	1	0	0	0	6	19	68	77	23	4	0	1	205
7:00	17	3	3	0	5	12	50	105	97	31	4	0	2	329
8:00	7	3	0	3	9	8	36	109	115	22	4	0	3	319
9:00	3	1	3	3	14	12	59	134	84	20	2	0	0	335
10:00	0	2	2	3	8	8	58	125	85	13	5	0	0	309
11:00	5	0	0	0	1	5	56	131	118	29	3	2	2	352
12:00 PM	4	1	1	0	6	11	41	144	97	29	7	1	0	342
1:00	1	1	1	5	4	18	83	158	127	24	9	1	1	433
2:00	10	3	0	2	5	10	59	211	155	40	12	1	1	509
3:00	8	3	2	7	9	23	81	247	176	47	7	0	0	610
4:00	8	3	2	2	6	19	112	285	175	69	8	0	0	689
5:00	24	3	0	3	9	17	75	252	227	53	6	0	0	669
6:00	2	0	0	2	7	11	70	179	116	36	7	0	0	430
7:00	2	2	0	0	0	6	48	138	123	35	3	1	0	358
8:00	0	0	0	0	1	16	60	151	66	16	3	1	0	314
9:00	1	0	0	0	1	12	43	71	63	18	0	0	0	209
10:00	0	0	0	0	1	6	17	36	40	7	2	0	0	109
11:00	0	0	0	0	0	0	8	33	20	3	1	1	0	66
Total	101	26	14	30	87	206	1005	2639	2019	554	98	9	12	6800

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: NB

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	3	8	14	9	0	1	0	1	36
1:00	0	0	0	0	0	0	5	10	5	1	0	0	0	21
2:00	0	0	0	0	0	1	7	7	3	1	2	0	0	21
3:00	0	0	0	0	0	0	3	5	9	2	1	0	0	20
4:00	1	0	0	0	0	1	5	15	11	7	0	0	1	41
5:00	0	0	0	0	0	0	8	25	30	8	3	1	0	75
6:00	2	0	0	0	0	0	28	62	65	24	9	1	2	193
7:00	13	5	2	5	2	7	69	120	94	22	2	2	0	343
8:00	5	0	3	5	8	18	70	102	87	26	3	0	0	327
9:00	7	2	2	1	2	2	53	123	98	28	3	0	0	321
10:00	7	1	2	2	2	11	60	114	91	40	7	0	0	337
11:00	4	0	1	4	3	10	58	137	99	23	2	0	1	342
12:00 PM	1	0	1	1	1	7	40	161	111	30	6	1	1	361
1:00	2	5	0	6	3	19	72	146	118	45	5	0	0	421
2:00	8	0	0	3	5	17	77	208	153	32	5	0	0	508
3:00	8	0	0	4	8	28	109	238	163	47	6	0	0	611
4:00	3	4	0	2	1	22	159	325	189	32	2	0	0	739
5:00	8	3	0	0	2	11	102	278	204	43	7	0	1	659
6:00	0	1	0	1	3	13	68	198	137	35	2	0	0	458
7:00	4	1	1	0	0	6	54	175	129	31	2	0	0	403
8:00	2	1	0	0	0	5	57	176	93	32	3	0	0	369
9:00	1	1	0	0	6	14	60	98	52	14	3	0	1	250
10:00	0	0	0	0	0	6	11	34	22	9	0	0	1	83
11:00	0	0	0	0	0	3	19	18	20	3	0	0	0	63
Total	76	24	12	34	46	204	1202	2789	1992	535	74	5	9	7002
Grand Total	177	50	26	64	133	410	2207	5428	4011	1089	172	14	21	13802

Stats				
	Percentile	15th	50th	85th	95th
	Speed	43	48	53	56
	Mean Speed (Average)	48.5			
	10 MPH Pace Speed	46-55			
	Number in Pace	9401			
	Percent in Pace	68.0%			
	Number > 40 MPH	12942			
	Percent > 40 MPH	93.8%			

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: SB

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	1	2	7	6	16	3	1	0	0	36
1:00	0	0	0	0	0	5	6	7	11	2	2	0	1	34
2:00	0	0	0	0	0	0	2	3	2	2	1	1	0	11
3:00	0	0	0	0	0	2	3	4	2	2	1	2	0	16
4:00	0	0	0	0	0	3	9	10	10	6	0	0	0	38
5:00	0	0	0	0	0	0	10	42	44	27	5	4	0	132
6:00	2	2	0	0	2	13	30	104	109	31	13	4	0	310
7:00	6	0	0	0	2	31	99	214	181	62	12	5	2	614
8:00	2	0	2	2	2	2	67	207	242	75	14	1	0	616
9:00	1	2	0	3	4	17	73	178	181	43	8	1	0	511
10:00	2	2	2	5	0	5	48	143	140	56	9	0	0	412
11:00	2	1	3	6	1	23	72	96	103	35	9	0	0	351
12:00 PM	4	0	4	0	2	3	50	148	135	43	10	3	0	402
1:00	3	1	4	4	0	7	47	110	120	44	9	1	0	350
2:00	7	2	4	2	3	8	42	123	144	51	8	1	0	395
3:00	2	0	1	6	2	7	29	108	134	66	12	5	1	373
4:00	5	4	7	0	1	9	34	126	160	72	13	1	0	432
5:00	16	3	3	5	5	9	56	152	160	41	6	0	0	456
6:00	3	1	2	6	1	7	39	141	126	65	18	4	1	414
7:00	2	2	0	0	1	5	25	74	96	41	8	0	0	254
8:00	0	0	3	0	1	6	37	60	69	21	8	1	0	206
9:00	2	2	2	2	1	3	21	51	47	23	8	1	0	163
10:00	0	1	1	0	0	4	23	38	34	13	4	0	0	118
11:00	0	0	0	0	1	4	11	26	25	10	4	1	0	82
Total	59	23	38	41	30	175	840	2171	2291	834	183	36	5	6726

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: SB

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	2	0	1	4	8	8	10	8	2	0	1	44
1:00	0	1	0	0	1	0	0	3	5	2	0	1	0	13
2:00	0	0	0	0	0	1	3	2	3	5	1	0	0	15
3:00	0	0	0	0	0	1	3	5	5	3	2	0	0	19
4:00	0	0	0	0	0	0	13	5	7	3	1	0	0	29
5:00	0	0	0	0	1	5	11	37	39	23	9	1	1	127
6:00	2	0	0	0	0	2	32	81	99	65	13	1	3	298
7:00	1	1	0	0	3	9	103	225	195	64	9	3	0	613
8:00	2	2	2	2	3	13	102	232	190	68	12	2	0	630
9:00	4	1	2	4	0	11	56	184	178	53	10	0	0	503
10:00	2	2	5	4	6	14	45	147	136	47	11	2	0	421
11:00	4	1	1	5	1	7	71	132	105	34	7	1	1	370
12:00 PM	2	1	2	3	0	10	38	122	147	44	11	2	0	382
1:00	2	0	2	2	0	10	53	111	114	43	10	2	0	349
2:00	5	2	3	3	4	12	41	132	113	41	7	1	0	364
3:00	6	1	3	1	3	7	43	124	124	62	15	2	0	391
4:00	12	2	5	3	2	11	37	142	147	62	13	1	1	438
5:00	11	4	4	0	4	6	53	172	155	53	14	1	1	478
6:00	1	1	1	0	1	4	33	122	146	57	11	0	0	377
7:00	4	0	2	0	1	4	42	96	93	31	6	1	0	280
8:00	3	4	0	1	0	7	51	87	54	13	6	1	0	227
9:00	2	0	1	0	1	4	29	65	30	25	2	2	0	161
10:00	0	0	0	1	0	0	14	53	52	18	3	0	1	142
11:00	0	0	0	0	1	1	12	30	20	18	2	0	1	85
Total	63	23	35	29	33	143	893	2317	2167	842	177	24	10	6756
Grand Total	122	46	73	70	63	318	1733	4488	4458	1676	360	60	15	13482

Stats	Percentile	15th	50th	85th	95th
	Speed	43	49	54	58
	Mean Speed (Average)	49.8			
	10 MPH Pace Speed	46-55			
	Number in Pace	8896			
	Percent in Pace	66.0%			
	Number > 40 MPH	12790			
	Percent > 40 MPH	94.9%			

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: Combined

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	1	3	16	19	24	12	2	0	0	77
1:00	0	0	0	0	0	6	9	10	16	4	2	0	1	48
2:00	0	0	0	0	1	1	4	13	6	5	1	1	0	32
3:00	0	0	0	0	0	4	5	7	5	2	1	3	0	27
4:00	3	0	0	0	0	4	13	17	22	14	2	0	0	75
5:00	0	0	0	0	0	0	20	68	70	44	13	4	2	221
6:00	8	3	0	0	2	19	49	172	186	54	17	4	1	515
7:00	23	3	3	0	7	43	149	319	278	93	16	5	4	943
8:00	9	3	2	5	11	10	103	316	357	97	18	1	3	935
9:00	4	3	3	6	18	29	132	312	265	63	10	1	0	846
10:00	2	4	4	8	8	13	106	268	225	69	14	0	0	721
11:00	7	1	3	6	2	28	128	227	221	64	12	2	2	703
12:00 PM	8	1	5	0	8	14	91	292	232	72	17	4	0	744
1:00	4	2	5	9	4	25	130	268	247	68	18	2	1	783
2:00	17	5	4	4	8	18	101	334	299	91	20	2	1	904
3:00	10	3	3	13	11	30	110	355	310	113	19	5	1	983
4:00	13	7	9	2	7	28	146	411	335	141	21	1	0	1121
5:00	40	6	3	8	14	26	131	404	387	94	12	0	0	1125
6:00	5	1	2	8	8	18	109	320	242	101	25	4	1	844
7:00	4	4	0	0	1	11	73	212	219	76	11	1	0	612
8:00	0	0	3	0	2	22	97	211	135	37	11	2	0	520
9:00	3	2	2	2	2	15	64	122	110	41	8	1	0	372
10:00	0	1	1	0	1	10	40	74	74	20	6	0	0	227
11:00	0	0	0	0	1	4	19	59	45	13	5	2	0	148
Total	160	49	52	71	117	381	1845	4810	4310	1388	281	45	17	13526

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

Direction: Combined

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	2	0	1	7	16	22	19	8	3	0	2	80
1:00	0	1	0	0	1	0	5	13	10	3	0	1	0	34
2:00	0	0	0	0	0	2	10	9	6	6	3	0	0	36
3:00	0	0	0	0	0	1	6	10	14	5	3	0	0	39
4:00	1	0	0	0	0	1	18	20	18	10	1	0	1	70
5:00	0	0	0	0	1	5	19	62	69	31	12	2	1	202
6:00	4	0	0	0	0	2	60	143	164	89	22	2	5	491
7:00	14	6	2	5	5	16	172	345	289	86	11	5	0	956
8:00	7	2	5	7	11	31	172	334	277	94	15	2	0	957
9:00	11	3	4	5	2	13	109	307	276	81	13	0	0	824
10:00	9	3	7	6	8	25	105	261	227	87	18	2	0	758
11:00	8	1	2	9	4	17	129	269	204	57	9	1	2	712
12:00 PM	3	1	3	4	1	17	78	283	258	74	17	3	1	743
1:00	4	5	2	8	3	29	125	257	232	88	15	2	0	770
2:00	13	2	3	6	9	29	118	340	266	73	12	1	0	872
3:00	14	1	3	5	11	35	152	362	287	109	21	2	0	1002
4:00	15	6	5	5	3	33	196	467	336	94	15	1	1	1177
5:00	19	7	4	0	6	17	155	450	359	96	21	1	2	1137
6:00	1	2	1	1	4	17	101	320	283	92	13	0	0	835
7:00	8	1	3	0	1	10	96	271	222	62	8	1	0	683
8:00	5	5	0	1	0	12	108	263	147	45	9	1	0	596
9:00	3	1	1	0	7	18	89	163	82	39	5	2	1	411
10:00	0	0	0	1	0	6	25	87	74	27	3	0	2	225
11:00	0	0	0	0	1	4	31	48	40	21	2	0	1	148
Total	139	47	47	63	79	347	2095	5106	4159	1377	251	29	19	13758
Grand Total	299	96	99	134	196	728	3940	9916	8469	2765	532	74	36	27284

Stats	Percentile	15th	50th	85th	95th
	Speed	43	48	53	57
	Mean Speed (Average)	49.1			
	10 MPH Pace Speed	46-55			
	Number in Pace	18297			
	Percent in Pace	67.0%			
	Number > 40 MPH	25732			
	Percent > 40 MPH	94.3%			

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q5016
Station ID:
Location 1: N Walnut St
Location 2: From E Blue Ridge Dr to N Old State Road 37
Latitude: 39.197093
Longitude: -86.534481

9/16/2024	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	41	36	36	44	*	*	*	*	38	40	*	*	*	*
1:00	*	*	14	34	21	13	*	*	*	*	18	24	*	*	*	*
2:00	*	*	21	11	21	15	*	*	*	*	21	13	*	*	*	*
3:00	*	*	11	16	20	19	*	*	*	*	16	18	*	*	*	*
4:00	*	*	37	38	41	29	*	*	*	*	39	34	*	*	*	*
5:00	*	*	89	132	75	127	*	*	*	*	82	130	*	*	*	*
6:00	*	*	205	310	193	298	*	*	*	*	199	304	*	*	*	*
7:00	*	*	329	614	343	613	*	*	*	*	336	614	*	*	*	*
8:00	*	*	319	616	327	630	*	*	*	*	323	623	*	*	*	*
9:00	*	*	335	511	321	503	*	*	*	*	328	507	*	*	*	*
10:00	*	*	309	412	337	421	*	*	*	*	323	416	*	*	*	*
11:00	*	*	352	351	342	370	*	*	*	*	347	360	*	*	*	*
12:00 PM	*	*	342	402	361	382	*	*	*	*	352	392	*	*	*	*
1:00	*	*	433	350	421	349	*	*	*	*	427	350	*	*	*	*
2:00	*	*	509	395	508	364	*	*	*	*	508	380	*	*	*	*
3:00	*	*	610	373	611	391	*	*	*	*	610	382	*	*	*	*
4:00	*	*	689	432	739	438	*	*	*	*	714	435	*	*	*	*
5:00	*	*	669	456	659	478	*	*	*	*	664	467	*	*	*	*
6:00	*	*	430	414	458	377	*	*	*	*	444	396	*	*	*	*
7:00	*	*	358	254	403	280	*	*	*	*	380	267	*	*	*	*
8:00	*	*	314	206	369	227	*	*	*	*	342	216	*	*	*	*
9:00	*	*	209	163	250	161	*	*	*	*	230	162	*	*	*	*
10:00	*	*	109	118	83	142	*	*	*	*	96	130	*	*	*	*
11:00	*	*	66	82	63	85	*	*	*	*	64	84	*	*	*	*
Total	0	0	6800	6726	7002	6756	0	0	0	0	6901	6744	0	0	0	0
Day	0		13526		13758		0		0		13645		0		0	
AM Peak			11:00	8:00	7:00	8:00					11:00	8:00				
Volume			352	616	343	630					347	623				
PM Peak			4:00	5:00	4:00	5:00					4:00	5:00				
Volume			689	456	739	478					714	467				
Comb Total	0		13526		13758		0		0		13645		0		0	
ADT	ADT: 13,642		AADT: 13,642													

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: EB

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
7:00	4	6	4	2	0	0	0	0	0	0	0	0	0	16
8:00	4	7	6	1	0	0	0	0	0	0	0	0	0	18
9:00	4	7	14	0	0	0	0	0	0	0	0	0	0	25
10:00	4	5	9	3	0	0	0	0	0	0	0	0	0	21
11:00	1	10	9	5	0	0	0	0	0	0	0	0	0	25
12:00 PM	3	11	18	2	0	0	0	0	0	0	0	0	0	34
1:00	3	9	16	6	1	0	0	0	0	0	0	0	0	35
2:00	3	3	15	2	0	0	0	0	0	0	0	0	0	23
3:00	4	9	16	3	0	0	0	0	0	0	0	0	0	32
4:00	6	8	19	7	0	0	0	0	0	0	0	0	0	40
5:00	5	10	23	4	0	0	0	0	0	0	0	0	0	42
6:00	4	12	15	4	0	0	0	0	0	0	0	0	0	35
7:00	4	7	11	2	0	0	0	0	0	0	0	0	0	24
8:00	3	13	12	2	0	0	0	0	0	0	0	0	0	30
9:00	5	4	7	3	0	0	0	0	0	0	0	0	0	19
10:00	1	0	2	1	0	0	0	0	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	59	122	196	48	1	0	0	0	0	0	0	0	0	426

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: EB

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
7:00	3	4	5	0	0	0	0	0	0	0	0	0	0	12
8:00	3	5	4	1	0	0	0	0	0	0	0	0	0	13
9:00	5	6	8	1	0	0	0	0	0	0	0	0	0	20
10:00	2	5	10	1	0	0	0	0	0	0	0	0	0	18
11:00	3	6	23	2	0	0	0	0	0	0	0	0	0	34
12:00 PM	2	11	14	2	0	0	0	0	0	0	0	0	0	29
1:00	1	1	13	3	0	0	0	0	0	0	0	0	0	18
2:00	5	9	11	4	0	0	0	0	0	0	0	0	0	29
3:00	3	11	14	2	0	0	0	0	0	0	0	0	0	30
4:00	6	10	17	1	0	0	0	0	0	0	0	0	0	34
5:00	5	10	19	4	0	0	0	0	0	0	0	0	0	38
6:00	2	5	17	3	0	0	0	0	0	0	0	0	0	27
7:00	5	10	11	3	0	0	0	0	0	0	0	0	0	29
8:00	8	4	13	2	0	0	0	0	0	0	0	0	0	27
9:00	2	2	7	4	0	0	0	0	0	0	0	0	0	15
10:00	0	2	4	1	0	0	0	0	0	0	0	0	0	7
11:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	55	102	193	35	0	0	0	0	0	0	0	0	0	385
Grand Total	114	224	389	83	1	0	0	0	0	0	0	0	0	811

Stats	Percentile	15th	50th	85th	95th
	Speed	15	20	23	25

Mean Speed (Average)	20.6
10 MPH Pace Speed	16-25
Number in Pace	613
Percent in Pace	76.0%
Number > 25 MPH	84
Percent > 25 MPH	10.4%

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

City of Bloomington
Engineering Department

401 N. Morton St., Suite 130
Bloomington, IN 47404

Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: WB

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:00	1	0	3	0	0	0	0	0	0	0	0	0	0	4
6:00	5	2	8	1	0	0	0	0	0	0	0	0	0	16
7:00	7	16	15	1	0	0	0	0	0	0	0	0	0	39
8:00	3	10	15	3	0	0	0	0	0	0	0	0	0	31
9:00	6	11	18	2	0	0	0	0	0	0	0	0	0	37
10:00	1	8	13	1	0	0	0	0	0	0	0	0	0	23
11:00	2	3	10	1	0	0	0	0	0	0	0	0	0	16
12:00 PM	1	6	12	3	0	0	0	0	0	0	0	0	0	22
1:00	2	7	13	0	1	0	0	0	0	0	0	0	0	23
2:00	2	6	19	2	0	0	0	0	0	0	0	0	0	29
3:00	4	10	3	2	0	0	0	0	0	0	0	0	0	19
4:00	4	8	9	2	0	0	0	0	0	0	0	0	0	23
5:00	7	17	18	1	0	0	0	0	0	0	0	0	0	43
6:00	2	9	13	1	0	0	0	0	0	0	0	0	0	25
7:00	0	9	5	1	0	0	0	0	0	0	0	0	0	15
8:00	2	3	4	0	0	0	0	0	0	0	0	0	0	9
9:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:00	2	2	1	0	0	0	0	0	0	0	0	0	0	5
11:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	52	129	184	21	1	0	0	0	0	0	0	0	0	387

CITY OF BLOOMINGTON
ENGINEERING DEPARTMENT

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Engineering Department

401 N. Morton St., Suite 130
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Start Date: 9/17/2024
End Date: 9/18/2024
Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: WB

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
5:00	1	2	1	0	0	0	0	0	0	0	0	0	0	4
6:00	0	1	7	3	0	0	0	0	0	0	0	0	0	11
7:00	6	8	17	5	0	0	0	0	0	0	0	0	0	36
8:00	4	8	12	3	0	0	0	0	0	0	0	0	0	27
9:00	5	9	17	6	0	0	0	0	0	0	0	0	0	37
10:00	1	9	10	4	0	0	0	0	0	0	0	0	0	24
11:00	3	7	11	1	0	0	0	0	0	0	0	0	0	22
12:00 PM	0	5	11	0	0	0	0	0	0	0	0	0	0	16
1:00	3	8	11	2	0	0	0	0	0	0	0	0	0	24
2:00	2	6	8	2	0	0	0	0	0	0	0	0	0	18
3:00	4	7	11	4	0	0	0	0	0	0	0	0	0	26
4:00	7	14	5	0	0	0	0	0	0	0	0	0	0	26
5:00	6	8	13	5	0	0	0	0	0	0	0	0	0	32
6:00	0	7	10	2	0	0	0	0	0	0	0	0	0	19
7:00	2	6	6	2	0	0	0	0	0	0	0	0	0	16
8:00	4	2	4	0	0	0	0	0	0	0	0	0	0	10
9:00	1	3	3	0	0	0	0	0	0	0	0	0	0	7
10:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Total	50	113	162	39	0	0	0	0	0	0	0	0	0	364
Grand Total	102	242	346	60	1	0	0	0	0	0	0	0	0	751

Stats	Percentile	15th	50th	85th	95th
	Speed	14	19	23	25
	Mean Speed (Average)	20.3			
	10 MPH Pace Speed	16-25			
	Number in Pace	586			
	Percent in Pace	78.0%			
	Number > 25 MPH	61			
	Percent > 25 MPH	8.1%			

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Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: Combined

9/17/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:00	1	0	3	0	0	0	0	0	0	0	0	0	0	4
6:00	5	3	8	2	0	0	0	0	0	0	0	0	0	18
7:00	11	22	19	3	0	0	0	0	0	0	0	0	0	55
8:00	7	17	21	4	0	0	0	0	0	0	0	0	0	49
9:00	10	18	32	2	0	0	0	0	0	0	0	0	0	62
10:00	5	13	22	4	0	0	0	0	0	0	0	0	0	44
11:00	3	13	19	6	0	0	0	0	0	0	0	0	0	41
12:00 PM	4	17	30	5	0	0	0	0	0	0	0	0	0	56
1:00	5	16	29	6	2	0	0	0	0	0	0	0	0	58
2:00	5	9	34	4	0	0	0	0	0	0	0	0	0	52
3:00	8	19	19	5	0	0	0	0	0	0	0	0	0	51
4:00	10	16	28	9	0	0	0	0	0	0	0	0	0	63
5:00	12	27	41	5	0	0	0	0	0	0	0	0	0	85
6:00	6	21	28	5	0	0	0	0	0	0	0	0	0	60
7:00	4	16	16	3	0	0	0	0	0	0	0	0	0	39
8:00	5	16	16	2	0	0	0	0	0	0	0	0	0	39
9:00	5	6	8	3	0	0	0	0	0	0	0	0	0	22
10:00	3	2	3	1	0	0	0	0	0	0	0	0	0	9
11:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	111	251	380	69	2	0	0	0	0	0	0	0	0	813

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Start Date: 9/17/2024
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Comment 1:

Site Code: q514
Station ID:
Location 1: E Blue Ridge Dr
Location 2: From N Walnut St to N Blue Slopes Dr
Latitude: 39.197012
Longitude: -86.533996

Direction: Combined

9/18/2024 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	3	0	0	0	0	0	0	0	0	0	0	3
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
5:00	1	2	1	0	0	0	0	0	0	0	0	0	0	4
6:00	0	2	8	3	0	0	0	0	0	0	0	0	0	13
7:00	9	12	22	5	0	0	0	0	0	0	0	0	0	48
8:00	7	13	16	4	0	0	0	0	0	0	0	0	0	40
9:00	10	15	25	7	0	0	0	0	0	0	0	0	0	57
10:00	3	14	20	5	0	0	0	0	0	0	0	0	0	42
11:00	6	13	34	3	0	0	0	0	0	0	0	0	0	56
12:00 PM	2	16	25	2	0	0	0	0	0	0	0	0	0	45
1:00	4	9	24	5	0	0	0	0	0	0	0	0	0	42
2:00	7	15	19	6	0	0	0	0	0	0	0	0	0	47
3:00	7	18	25	6	0	0	0	0	0	0	0	0	0	56
4:00	13	24	22	1	0	0	0	0	0	0	0	0	0	60
5:00	11	18	32	9	0	0	0	0	0	0	0	0	0	70
6:00	2	12	27	5	0	0	0	0	0	0	0	0	0	46
7:00	7	16	17	5	0	0	0	0	0	0	0	0	0	45
8:00	12	6	17	2	0	0	0	0	0	0	0	0	0	37
9:00	3	5	10	4	0	0	0	0	0	0	0	0	0	22
10:00	0	2	5	1	0	0	0	0	0	0	0	0	0	8
11:00	1	2	0	1	0	0	0	0	0	0	0	0	0	4
Total	105	215	355	74	0	0	0	0	0	0	0	0	0	749
Grand Total	216	466	735	143	2	0	0	0	0	0	0	0	0	1562

Stats	Percentile	15th	50th	85th	95th
	Speed	14	20	23	25

Mean Speed (Average)	20.5
10 MPH Pace Speed	16-25
Number in Pace	1199
Percent in Pace	77.0%
Number > 25 MPH	145
Percent > 25 MPH	9.3%

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Comment 1:

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Station ID:
Location 1: E Blue Ridge Dr
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Latitude: 39.197012
Longitude: -86.533996

9/16/2024	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	0	1	0	0	*	*	*	*	0	0	*	*	*	*
1:00	*	*	0	0	2	1	*	*	*	*	1	0	*	*	*	*
2:00	*	*	1	0	0	0	*	*	*	*	0	0	*	*	*	*
3:00	*	*	0	0	0	0	*	*	*	*	0	0	*	*	*	*
4:00	*	*	0	3	0	4	*	*	*	*	0	4	*	*	*	*
5:00	*	*	0	4	0	4	*	*	*	*	0	4	*	*	*	*
6:00	*	*	2	16	2	11	*	*	*	*	2	14	*	*	*	*
7:00	*	*	16	39	12	36	*	*	*	*	14	38	*	*	*	*
8:00	*	*	18	31	13	27	*	*	*	*	16	29	*	*	*	*
9:00	*	*	25	37	20	37	*	*	*	*	22	37	*	*	*	*
10:00	*	*	21	23	18	24	*	*	*	*	20	24	*	*	*	*
11:00	*	*	25	16	34	22	*	*	*	*	30	19	*	*	*	*
12:00 PM	*	*	34	22	29	16	*	*	*	*	32	19	*	*	*	*
1:00	*	*	35	23	18	24	*	*	*	*	26	24	*	*	*	*
2:00	*	*	23	29	29	18	*	*	*	*	26	24	*	*	*	*
3:00	*	*	32	19	30	26	*	*	*	*	31	22	*	*	*	*
4:00	*	*	40	23	34	26	*	*	*	*	37	24	*	*	*	*
5:00	*	*	42	43	38	32	*	*	*	*	40	38	*	*	*	*
6:00	*	*	35	25	27	19	*	*	*	*	31	22	*	*	*	*
7:00	*	*	24	15	29	16	*	*	*	*	26	16	*	*	*	*
8:00	*	*	30	9	27	10	*	*	*	*	28	10	*	*	*	*
9:00	*	*	19	3	15	7	*	*	*	*	17	5	*	*	*	*
10:00	*	*	4	5	7	1	*	*	*	*	6	3	*	*	*	*
11:00	*	*	0	1	1	3	*	*	*	*	0	2	*	*	*	*
Total	0	0	426	387	385	364	0	0	0	0	405	378	0	0	0	0
Day	0		813		749		0		0		783		0		0	
AM Peak			9:00	7:00	11:00	9:00					11:00	7:00				
Volume			25	39	34	37					30	38				
PM Peak			5:00	5:00	5:00	5:00					5:00	5:00				
Volume			42	43	38	32					40	38				
Comb Total	0		813		749		0		0		783		0		0	
ADT	ADT: 781		AADT: 781													