



LEGACY
Leesburg

TRANSPORTATION IMPROVEMENT PLAN (03.22.2022)

TRANSPORTATION IMPROVEMENT PLAN

The Moving Around Town (Transportation) Guiding Principle for Legacy Leesburg States: *Provide a safe, reliable, and efficient transportation system that promotes and enhances mobility and connectivity between neighborhoods and destinations through a multi-modal network of complete and walkable streets, sidewalks, and trails for transit riders, pedestrians, and cyclists.* This statement holds true for many transportation projects, plans, and policies across the United States, but as Leesburg grows, the implementation of this guiding principle also changes.

This Transportation Improvement Plan (TIP) is a strategic plan intended to refine the overall vision of Legacy Leesburg. It provides more specific policies, projects, and actions related to transportation in the Town. The Capital Improvements Program is an implementation tool that brings the conceptual projects found in the TIP to reality. Projects would generally move from the TIP to the CIP once it is scoped and a funding source is identified.

This document includes a wide range of potential projects that can implement these goals and strategies as well as the Roadway Network Policy Map at the end of this document. The list of projects below is intended to be dynamic and regularly reevaluated. Some projects that may currently be prohibitively expensive can be made possible with grant funding or other funding sources. Similarly, needs for different projects may evolve with time resulting some projects no longer being necessary or viable.

The table and map below describe the current roadway classifications (federal categorization system) within Leesburg’s town limits.

Table 1. Federal Functional Classification Mileages

Functional Classification	Length (mi.)
Major Collector	16.79
Minor Arterial	11.9
Minor Collector	1.32
Other Freeway or Expressway Ramp	0.16
Other Freeway or Expressway]	6.19
Other Principal Arterial	7.92
Battlefield Pkwy	3.1
Total (w/Battlefield Pkwy)	44.3

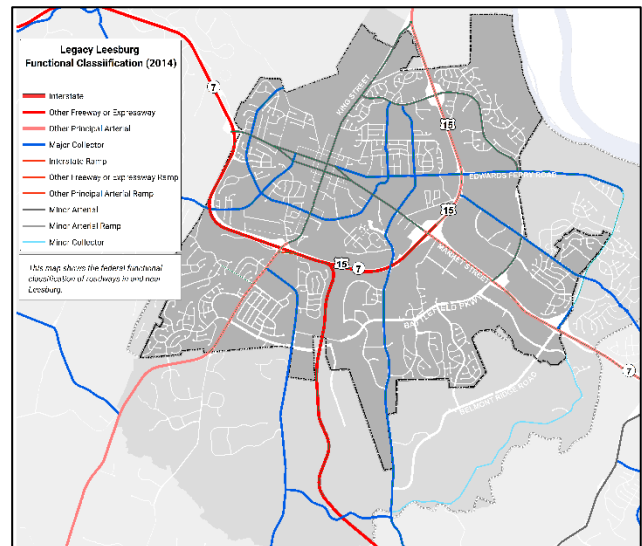


Figure 1. Leesburg Functional Classification Location (2014)

CONDITIONS TODAY

Congestion

The current state of traffic congestion is represented by the two images (morning peak, top, and evening peak period, bottom) on the next page in [Figure 2](#). Notable segments of roadway experiencing regular, recurring traffic congestion are:

- Route 7, particularly northbound evening from the intersection of the Leesburg Bypass;
- East Market Street, particularly east of Catoctin Circle; and
- Dulles Greenway and The Leesburg Bypass interchange area.

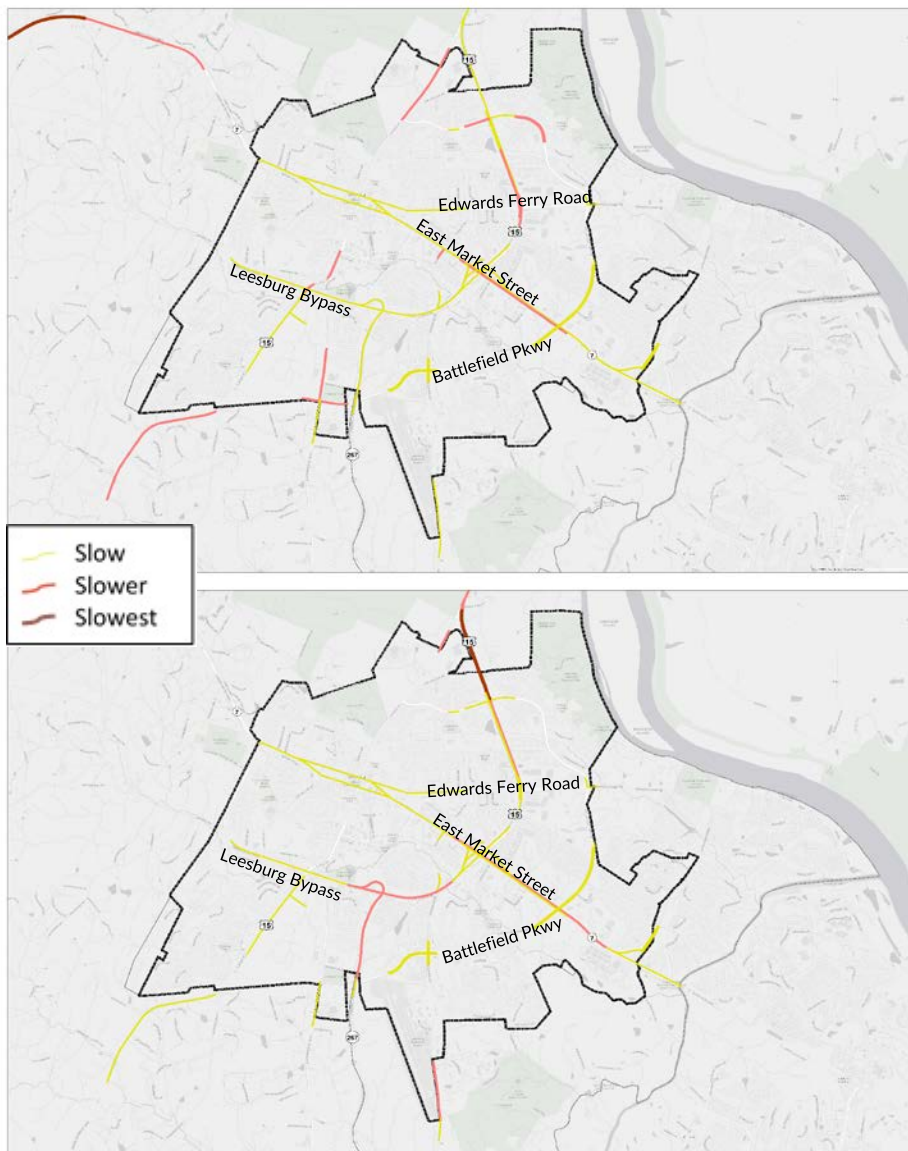


Figure 2. Congestion in Morning (top) and Evening Peak Periods (source: Google Maps)

Note: Google Maps uses speed differentials to calculate congestion, comparing "live" speeds to typical speeds for segments of roads based on inputs from traffic sensors and GPS devices (e.g., smartphones). /Data shown here captures congestion information from historic data for a given time period and day of the week.

Programmed Projects

The Virginia Department of Transportation (VDOT) publishes a statewide transportation improvement program (STIP) every three years. The STIP presents a program of projects in Leesburg that are or will use state and federal funds over the next four years; locally administered projects are also indicated. [Table 2](#) describes the current and recent projects programmed by VDOT in the STIP.

Street	Project Administrator	Route Number	Project Purpose	Target Time Frame*
VA 7/15 Leesburg Bypass	VDOT	7 / 15	Widen Route 7/ US 15 Leesburg Bypass from West Market Street to East Market Street (Route 7 Business)	2035
Evergreen Mill Road	Leesburg	621	Widen US 15 South Kin Street to South Town limits of Leesburg	2028
Route 15 Bypass	VDOT	US 15	Widen Us 15 Bypass from Battlefield Parkway to VA 661 Montresor Road	2026
Route 15 Bypass	Leesburg	US 15	Complete interchange at Battlefield Parkway and Route 15 Bypass	2035
Route 7/15 Bypass	VDOT	7/15	Complete interchange at South King Street and Route 7/US 15 Bypass	2027
Route 15 Bypass	Leesburg	US 15	Complete interchange at Edwards Ferry Road and Route 15 Bypass	2030

Table 2. Recent and Current VDOT Programmed Projects (source: Virginia State Transportation Improvement Program)

* Target Time Frame is subject periodic updates per the CIP process

SUMMARY OF POTENTIAL PROJECTS AND IMPACTS

The great majority of comments received during the public engagement process for the Town Plan Update referenced better walking conditions. Additional improvements to some areas of traffic congestion, cycling improvements, and transit connectivity / improvements were also cited. The project recommendations reflect the same emphasis on personal mobility, but also include a number of concepts for improving all modes of travel.

It is worth noting that Leesburg and northern Virginia generally have traffic congestion because people want to be here. This is a sign of economic and cultural vitality and indicative of Leesburg being a good place to live. However, this vitality can be bad for an individual that simply wants to move quickly across Town. Some things that are generally good can be bad for individuals. For example, while Leesburg has great retail options, that retail attracts people from throughout the region that contribute to the local economy. But those visitors can make our individual commutes take longer.

The project team heard repeatedly that traffic congestion in Leesburg is relatively light compared to where some people originated. People also talked about building on the great atmosphere and extending the walk- and bike-ability of the Town outside of downtown, and connecting places to downtown, commercial centers, and neighborhoods through improved walking connections.

Potential Future Projects

The project team and community engagement process, as well as a review of past, adopted plans, helped discover a number of projects that can improve the objectives of safety, connectivity, mobility, and a healthy slate of alternatives. These projects originate from a high-level assessment of the issues presented at public forums. All recommendations should be considered conceptual,

requiring further investigation in both their planning and design to incorporate environmental impact minimization, permitting, community interests, and other requirements. Additional studies, including modeling, microsimulation, environmental screening, and community input will be required to bring many of these recommendations to reality, as well as an objective quantification of start-up costs, ongoing operations/maintenance costs, and rights-of-way requirements to produce an accurate cost estimate.

The Town of Leesburg is required by state statute and the policies of the Virginia Department of Transportation to consider multiple effects of any transportation project that may have a negative impact on traffic congestion for state-maintained roadways. Additionally, the Town (or any community inside VDOT's Northern District 9) must assess the impacts of access to or along emergency evacuation routes (which include the Leesburg Bypass (Route 7/15), King Street (Route 15), the Dulles Greenway (Route 267), and Market Street (Route 7)). This section summarizes transportation project recommendations contained in the Town Plan along five dimensions (safety/security, connectivity/reliability, traffic congestion relief, slowing too-fast traffic, and improving aesthetics).

Table 3 on the following page and Figure 3 below summarize the project recommendations, with reference codes for the table as shown below.

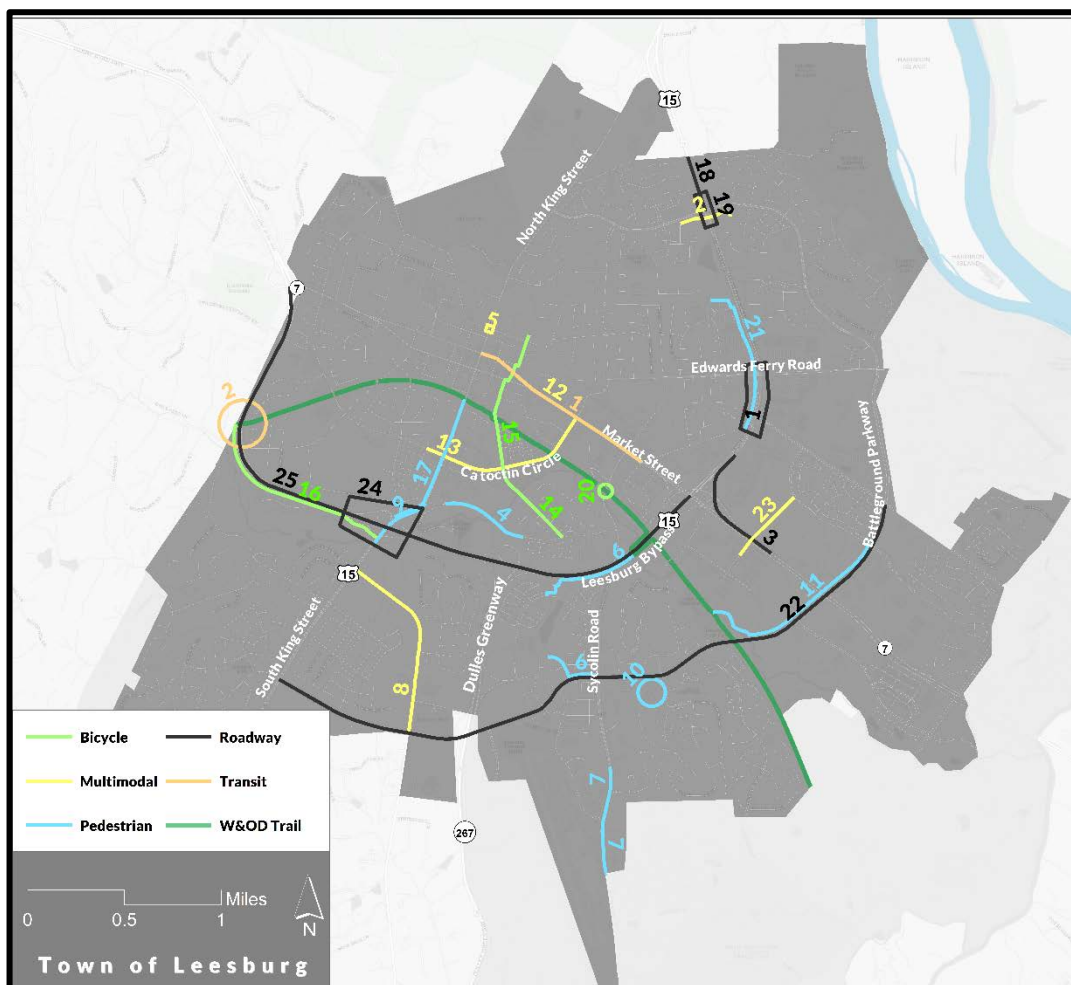


Figure 3. Project Recommendations Map

map	PROJECT RECOMMENDATION	SS	C R	T C	ST	IA	SM	EE	COST (\$000S)	TARGET TIME FRAME*
1	Edwards Ferry Road/Leesburg Bypass Interchange	●	●	●			▲	▲	\$70,000	2030
2	Battlefield to Bypass Roadway & Pedestrian Imps.	●	●	●		●			\$1,030	2020
3	Route 7 (East Market) To Bypass		●			●	▲	▲	\$5,348	2035
4	Davis Avenue / Isaac Walton Park Area Improvements				●	●			\$1,623	2024
5	King Street / North Street Intersection Safety Improvements	●	●			●			\$493	2028
6	Oaklawn/Hope Pedestrian Improvements		●			●			\$1,110	2030
7	Sycolin Road SE Pedestrian Improvements (phase I and II)	●	●			●			\$594	2030
8	Evergreen Mills Road Widening	●	●	●					\$22,000	2028
9	South King Street Pedestrian Improvements (Leesburg Bypass)	●	●			●			\$854	2030
10	Cool Spring Safe Routes to School Pedestrian Infrastructure Project	●	●		●	●			\$2,101	2030
11	Battlefield Parkway SE Pedestrian Improvements		●			●			\$2,856	2030
12	Market Street Redesign (Loudoun Street to Plaza Street)	●			●	●			\$5,906	2030
13	Catoctin Circle Redesign (E. Market Street to Crestwood)		●		●	●			\$14,157	2040
14	Harrison Street SE Cycling Improvements (W&OD to Gateway Dr)	●	●			●			\$440	2030
15	Harrison Street NE Cycling Imps. (North Street NE to W&OD)		●			●			\$623	2035
16	Leesburg Bypass SW shared-use Path (S. King Street to W&OD Trail)		●			●			\$3,689	2040
17	South King Street Pedestrian Imps. (Leesburg Bypass to W&OD)	●	●		●	●			\$693	2035
18	Widen Route 15 Bypass from Battlefield Parkway, north to corporate limits		●	●			▲	▲	5,000	2040
19	Interchange at Leesburg Bypass and Battlefield Parkway		●	●					\$91,124	2030
20	Shared-use Path Connection between Sycolin Rd and W&OD Trail	●	●			●			\$963	2035
21	Leesburg Bypass NE Pedestrian Improvements	●	●			●			\$3,230	2030
22	Widen Battelfield Parkway from South King Street (Route 15) to Fort Evans Road		●	●			▲	▲	\$22,000	2040
23	Construct Flyover over Route 7 at Cardinal Park Drive		●	●			▲	▲	\$61,000	2030
24	Interchange at South King Street and Leesburg Bypass (Route 7/15)		●	●			▲	▲	\$50,000	2027
25	Widen Leesburg Bypass (Route 7/15) from West Market Street to East Market Street		●	●			▲	▲	\$70,000	2038
1	Transit: Deploy Micro-Mobility in Leesburg (not mapped)		●				▲	▲	Variable	2040
2	Transit: Improve Connections (various locations, some not mapped)		●				▲	▲	Variable	2040
3	Express Route to Ashburn Station (not mapped)		●	●			▲	▲	\$350	2040

Table 3. Project Recommendation Summary Table

SS: Safety / Security

CR: Connectivity / Reliability

TC: Traffic Congestion Relief

ST: Slow Too-Fast Traffic

IA: Improve Aesthetics

SM: Impact to State-Maintained Road

EE: Impact to Evacuation Route

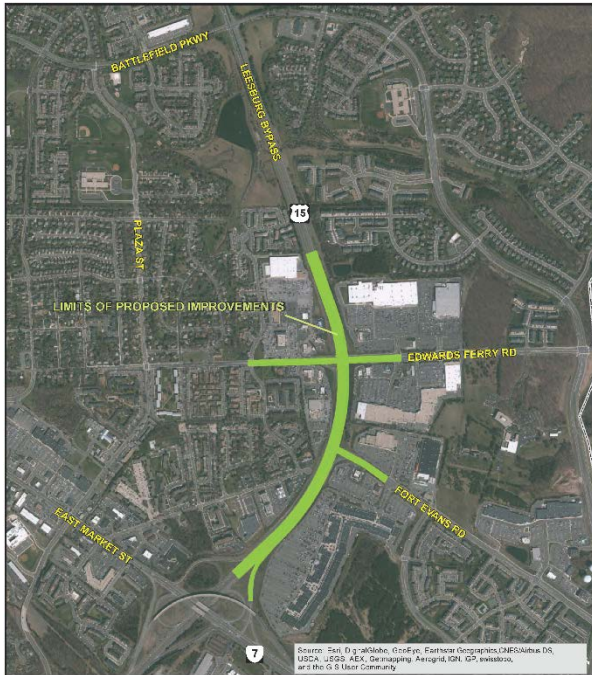
(▲ Positive, || Neutral, ▼ Negative)

*Target Time Frame is subject periodic updates per the CIP process

The project recommendations detailed in the paragraphs that follow are not shown in any particular order or priority. The numbering corresponds to that shown in the project recommendations summary.

1. Edwards Ferry Road/Leesburg Bypass Interchange

Justification: The Leesburg Bypass (Route 15) serves as a major commuter route, and there are numerous large retail developments in the area of Edwards Ferry Road and Fort Evans Road that generate significant traffic volumes. These two existing signalized at-grade intersections are heavily congested and have high accident rates. In addition, large volumes of pedestrian traffic cross the bypass between the residential areas inside the bypass and the commercial development outside the bypass resulting in significant safety concerns. The project area has also experienced significant commercial growth in the past 15 to 20 years. As a result, traffic volumes are beyond the capacity of the existing at-grade signalized intersections. This project can improve traffic flows and safety conditions while creating a pedestrian connection across the Bypass that serves both Edwards Ferry Road Fort Evans Road.



Description: This project consists of the development of a new grade-separated interchange on Edwards Ferry Road at the Route 15 Leesburg Bypass and will include the intersection at Fort Evans Road. Public hearings for this project were held in May of 2018 and the project is currently awaiting funding.

2. Battlefield to Bypass Pedestrian Improvements

Justification: Traffic conditions in this location are worsened by a four-lane roadway transitioning to two lanes on Route 15 going towards Maryland – a scenic byway with an important bridge over the Potomac River that is unlikely to be widened soon. As noted, getting people in cars and on foot through the barrier of the Bypass is important, as is improving safety at this moderately high-crash location. This project complements the north-side improvements programmed for construction in 2020 with a south-side trail and crossing, likely concurrent with the development of an interchange to replace the intersection (refer to recommendation #19).

Description: The intersection at this location is currently at-grade and serves 38,000 cars per day. The interchange recommendation (refer to recommendation #19) should also accommodate this south-side pedestrian improvement. VDOT, as of this writing is preparing to construct a pedestrian route on the north side of the existing intersection as well as make drainage improvements under the west approach (VDOT Project #U000-253-337).

3. Route 7 (East Market) to Leesburg Bypass North

Justification: Backups occur in the westbound direction daily on Route 7 heading into Leesburg’s heart, generally caused by insufficient capacity on the right-turning movements at the Bypass. Better signage has also been identified for wayfinding purposes.

Description: A second northbound ramp could be constructed to pull traffic off of Market Street faster; better approach signage starting earlier would be an immediate enhancement. Additional conceptual design and microsimulation of traffic flows would support this option, but there appears to be sufficient right-of-way currently to accommodate this capacity improvement although redesigning the wing wall on the structure for the flyover on the Bypass is likely required and could present significant project challenges. This project should be reconsidered after completion of the nearby Battlefield Parkway Interchange.

4. Davis Avenue / Isaac Walton Park Area Improvements

Justification: Improve connectivity in a more-recent-era street layout that traditionally did not prioritize connections. Parks and neighborhoods are nearby, with the potential to pull local traffic off of major arterials (Catocin Circle and Leesburg Bypass) to provide a lower-traffic alternative.

Description: Private development is expected to connect Davis Avenue to Gateway Drive; it will also include a minimum 8’ (preferably 10’) shared-use path (SUP). Given the importance of this project from a pedestrian and vehicular connectivity standpoint, the Town should keep this project in the Transportation Improvement Plan and consider making these improvements in the event the event the proposed development does not occur as anticipated.

5. Historic District Intersection Safety Improvements

Justification: The historic district and its tightly knit street system work together extremely well to produce the iconic heart of Leesburg. While the King / North street intersection was used as an example, other intersections have issues with small turning radii (and curb run-ups), narrow rights-of-way, and poor visibility.

Description: First and foremost, the intersections in the historic district contribute to the feel of the downtown. There are a variety of options to make improvements and any such improvements will require more detailed studies to confirm their viability. For example, additional traffic signals could likely reduce angle collisions from turning movements that have poor sight lines now, but they are generally not recommended. A context-sensitive solution, and one that would improve walking, slow cars, and reinforce the desired local emphasis for downtown streets, would be the introduction of “bump outs” or pedestrian extensions. Extending the stop bar on the east leg also improves sight distances.



6. Oaklawn/Hope Pedestrian Improvements

Justification: Improving the connectivity through the newer parts of town close to Battlefield Parkway and the Leesburg Bypass includes not only improvements within Catocin Circle or downtown, but also closer to the periphery of these major arterials.

Description: Widening the greenway from the intersection of Sycolin/Battlefield to and up Oaklawn Drive to a minimum of 8' wide can occur as the pavement begins to need replacement. The existing trails around the pond stop at Hope Parkway; connecting across Hope Parkway to a new location greenway (600') bounding the south side of the Leesburg Bypass will reach the west side shared-use path on Sycolin Road and its crossing of the Leesburg Bypass (approximately 1,200'). A switchback path can help move pedestrians and cyclists from the Leesburg Bypass grade up to the grade of Sycolin Road (approximately 25' in height) to make the Leesburg Bypass crossing on Sycolin Road.

7. Sycolin Road SE Pedestrian Improvements

Justification: Connecting this future area of development with the rest of the pedestrian network in town can help bring new and old parts of the community together, reinforcing the walk- and bike-oriented tapestry well removed from the historic downtown.

Description: Finishing the short (1,100') segment of the east-side shared-use path to Tavistock Drive SE is facilitated by ample setbacks to existing parking areas and undeveloped lands. Improving pedestrian crossing conditions at Tavistock Drive/Sycolin is also recommended (pedestrian phase, crosswalks), as is the possible purchase of the northeast corner parcel from Virginia Power & Light (future park or neighborhood commercial, excluding the existing parking area). A second phase would continue the east side shared-use path from Tavistock Drive SE to north of Loudoun Center Place (2,100') and can be supported by private development actions. Bolen Park and its ballfields, the Leesburg Executive Airport, and Leesburg's nearest park-and-ride stop would be connected with this second phase of the Sycolin Road SE shared-use path.

8. Widen Evergreen Mills Road (Route 621 from South King Street, south to Town Limits)

Justification: This project will help to maintaining the adopted roadway level of service standards and calls for providing a safe, convenient, continuous, comfortable, and aesthetically pleasing transportation environment that promotes bicycling and walking.

Description: This project consists of widening of approximately 1.3 miles of Evergreen Mill Road from the Heritage High School entrance (south of Battlefield Parkway) to South King Street (Route 15). The existing two lane road will be widened to a four-lane street with median, sidewalk on one side and a shared use path on the other side. The project will include utility relocation, curb, gutter, and storm drainage.

9. South King Street Pedestrian Improvements (Leesburg Bypass)

Justification: An important crossing of the Leesburg Bypass on its west end, the underpass shared with South King Street satisfies the need to connect newer neighborhoods to the south (Linden Hill, Greenway Farm) inside Catoctin Circle and then to downtown less than a mile away – an easy bike ride when there are facilities to allow the trip to occur.

Description: The underpass of the Leesburg Bypass at South King Street is nicely equipped with a barrier-protected shared-use path on the west side. However, the east side can be readily improved as well, including a vertical barrier (fencing) to match that on the west side (Figure 6). Additionally, more lighting under the bridge would be a welcome security and safety



Figure 1. South King Street Underpass w/Leesburg Bypass Now (left) and Recommended (right)

improvement.

10. Safe Routes to School Pedestrian Infrastructure Project

Justification: Schools in Leesburg are often fairly “walkable.” People told us not to focus strictly on downtown or inside Catocin Circle, but also to bring walkability to other areas that didn’t benefit from historical grid patterns of narrow streets, so schools like Cool Springs Elementary make good pilot projects.

Description: Although this recommendation would potentially for any school in Leesburg, Cool Springs could make a good pilot project. Tavistock Drive is mostly a two-lane roadway and posted at 25mph throughout. The current design of 12-foot travel lanes and turning lanes even at minor intersections is indicative of a much higher design speed, in spite of the purely low- to moderate-density neighborhoods, schools, and civic uses nearby. This recommendation pairs with a safe routes to school policy/program recommendation (Policy & Program Recommendation #4) that would capitalize on existing walking trails and neighborhood-level proximity of the school to its neighbors, creating a more clearly defined walk-first context. Redesigning the intersections of Tavistock Drive with Battlefield Parkway, Somerset Park Drive, and MacAlister Drive to include (tree-) planted medians; painting/signing bicycle lanes throughout Tavistock Drive; constructing buffered pedestrian crossings; and installing a new, pedestrian-activated signal at MacAlister Drive are some recommendations that could be refined during a design exercise. The [Safe Routes to School \(SRTS\) Infrastructure Grant Program with VDOT](#) could be applied for in 2021 after a preliminary design and neighborhood involvement exercise has been completed to help fund the improvements.

11. Battlefield Parkway SE Pedestrian Improvements

Justification: Battlefield Parkway takes advantage of its wide right-of-way by dedicating a portion of it to pedestrians, cyclists, and other active mode users. Filling in the remaining gap segments is beneficial to travel in the less-well-connected and newer areas of town that are near areas likely to grow faster.

Description: Connect the north-side shared-use path that exists now from W&OD Trail to the existing shared-use path on the west side of Potomac Station Drive (4,700’). This route also connects with the Russell Branch Parkway shared-use path; hence, improvements to the pedestrian crossing treatments at the Battlefield Parkway / Russell Branch Drive intersection should be constructed at the same time.

12. Market Street Redesign (Loudoun Street to Plaza Street)

Justification: Depending on when land uses along a street first developed, the product can look very much like East Market Street: driveways leading to parking areas and existing retail businesses. While reliable retail produces income for people and government functions alike, it doesn't have to present the face of strip retail that doesn't articulate the gateway that Market Street should be serving or creating experiential, interesting retail development necessary to survive in an increasingly challenging marketplace for shopping. Reducing crashes in this corridor from left-turn movements – and the delays created by those crashes – is another important objective.

Description: The right-of-way in Market Street allows for a planted center median like the one shown in [Figure 7](#). Openings allow for circulation to adjacent parcels, otherwise making connections off of Market Street and between parking areas create full access opportunities. This recommendation complements Project Recommendation #13, the redesign of Catoctin Circle, and should include a beautification and traffic safety improvement to the Catoctin / Market intersection. All of this would also support an eventual redevelopment of the Leesburg Plaza retail center at the northeast corner of this intersection. However, with this project, some businesses may lose left in/left out options so further study and consideration of details is necessary. The Town will need to work with businesses to achieve mutual objectives. Additionally, re-directing these movements may unintentionally create safety and operational issues elsewhere.

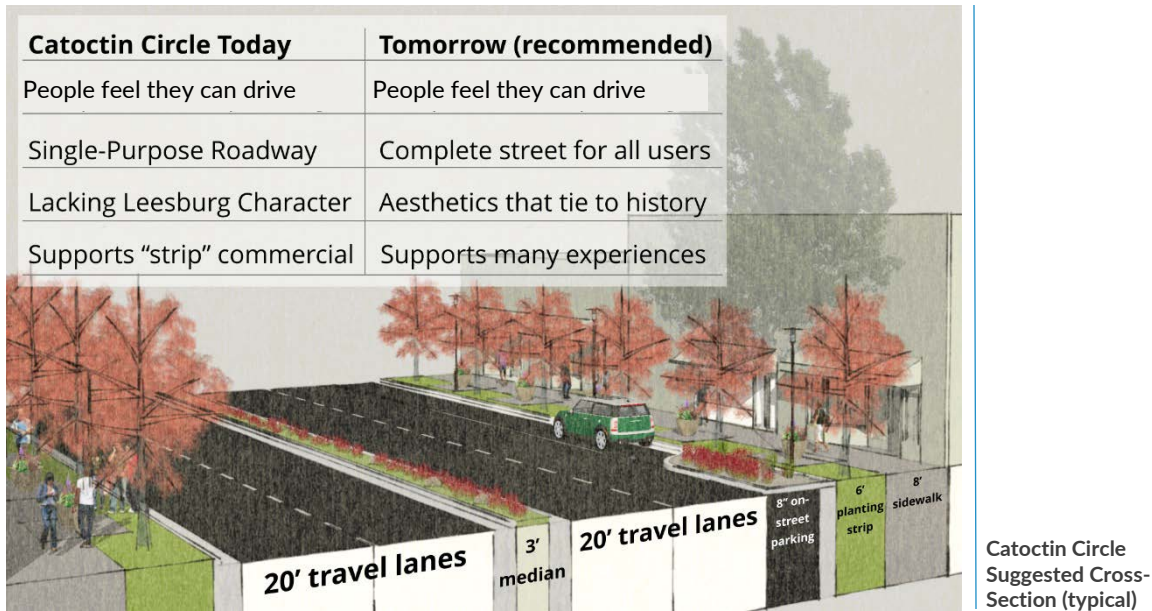


Figure 2. Market Street Redesign (to Catoctin Circle Dr.)

13. Catoctin Circle Redesign (E. Market Street to Crestwood Street SW)

Justification: Catoctin has presented one of the primary “mental dividing lines” between the old and new Leesburg. By redesigning the street to better fit the street’s access-over-mobility purpose, facilitation of commercial redevelopment, walking, biking, and transit access; and reconnecting communities on both sides can be facilitated.

Description: Catoctin Circle is currently posted at a 25mph speed limit but some people perceive this a higher speed road due to its width and other factors. Any redesign should support the physical signals for a lower speed limit given the safety benefits from reducing speeds. The redesign should be consistent with the Crescent District Master Plan and should include features like pedestrian “bump outs,” pedestrian-scale lighting, streetscaping, and wider pedestrian and biking accommodations as well as some additional on-street parking. Improved crossing treatments at intersections with East Market Street (*see Project Recommendation #12*), minor street intersections, and the W&OD Trail crossing are also recommended to be undertaken during the improvement project.



14. Harrison Street SE Cycling Improvements (W&OD Trail to Gateway Drive)

Justification: The southern reach of Harrison Street connects (mostly) residential properties to Catoctin Circle and to existing and proposed walking and biking trails to the core of downtown (refer to Project Recommendation #15).

Description: The existing cross-section of Harrison Street SE can typically support bicycle lanes, being 35 feet wide for two lanes and parking (the two-foot gutterpan is also used for parking now, which adds another four feet to the total cross-section width). One option that can be considered with more detailed engineering studies is the removing parking on one side of the road. This could allow bicycle lanes to be marked and signed on both sides including additional width for the bike lane that is adjacent to parked cars to avoid “dooring” situations. The total length is approximately 3,900’. Part of the improvement should be redesigning the Catoctin Circle intersection to conform with the earlier recommendation (see Project Recommendation #13).

15. Harrison Street NE Cycling Improvements (North Street NE to W&OD Trail)

Justification: An identified priority by local bicycling advocates, this trail was brought to the attention of the project team during and prior to the planning charrette. The trail would connect downtown, including the new parking garage, to county and local government offices and then to the W&OD Trail.

Description: A combination of on-street bicycle lanes and intersection crossing improvements can make this project work, even in the short term. The section between North Street NE and Edwards Ferry Road NE would consist of pavement markings (shared lane, or sharrow, markings); immediately to the south the crossing of Edwards Ferry Road NE to Loudoun Street SE would likely traverse parking areas, possibly including the plaza in the Loudoun County government complex. The next three blocks to the south (from Loudoun Street SE to Depot Street and the W&OD Trail) would ideally see the lightly used parking removed on one side of the street to accommodate bicycle lanes. The total length of the project is approximately 3,000’; see also Project Recommendation #14 for the continuation of the on-street bicycle project.

16. Leesburg Bypass SW Shared-Use Path (South King Street to W&OD Trail)

Justification: A second project brought to the attention of the planning project team during focus group meetings is this proposed, off-road connection hugging the south side of the Leesburg Bypass (Harry Byrd Highway). The project fills a significant gap in the walking / biking network and connects neighborhoods to the southeast with the W&OD Trail to the northwest.

Description: The 1.04-mile length of the project would consist of 10-foot-wide asphalt and two-foot clear zone on either side (the width can be narrowed to 8' in short sections where the right-of-way is constrained. A short "stub" connection with the Tuscarora Creek apartments connects this development as well. Some challenges with sharing road right-of-way with VDOT as well as overhead utilities are expected.

17. South King Street Pedestrian Improvements (Leesburg Bypass to W&OD Trail)

Justification: This project addresses sidewalk gaps and design shortcomings between the Leesburg Bypass and the W&OD Trail (4,300'), resolving connectivity, safety, and (potentially) aesthetic needs in this busy corridor.

Description: Sidewalk exists along most of the length of this corridor (although not all of it), but completing two gaps in the sidewalk as well as improving intersection and driveway crossings are important upgrades in a busy, auto-centric corridor that is a gateway to the heart of town. The following set of improvements, which could be augmented by a more detailed study later, include:

- Complete two gaps in the sidewalk network (attaching to Project Recommendation #9) at the south end (700' total);
- Improve crossing safety and visibility at the westbound/northbound Bypass ramp, Food Lion driveways (eliminate high-speed entrance on northmost driveway), East First Street SE, Catoctin Circle, install flashing signal in advance of the W&OD Trail crossing; and
- A more extensive project would be the redesign of the 700' block from the residential section of South King Street to Catoctin Circle to narrow the road from six lanes to four, extend brick surface sidewalk and pedestrian-scale lighting present to the north, and widen the median to allow for tree-planted landscaping. Note: these elements are not included in the opinion of probable cost.

18. Widen Route 15 Bypass from Battlefield Parkway, north to corporate limits

Justification: The Route 15 Bypass is a major commuter that is currently facing significant traffic congestion and peak hour delays.

Description: This project will be designed and constructed from Battlefield Parkway to Montresor Road. This project is funded by NVTA and only a small portion is in the Town. Proposed improvements consists of widening and reconstruction of the existing roadway from two to four-lanes within a tight corridor, with complex right-of way (ROW) and utility impacts. The project will require extensive public relations efforts coordinated with VDOT, Loudoun County and affected stakeholders; as well as multi-stage temporary traffic control with high traffic volumes and maintenance of property access.

19. Interchange at Leesburg Bypass and Battlefield Parkway

Justification: The other important option (refer to *Project Recommendation #18*) to moving people through the north end of Route 15 is to replace the intersection of Route (Leesburg Bypass) and Battlefield Parkway NE with a full interchange. This area was the first- or second-most-cited congestion problem in Leesburg, the other being East Market Street.

Description: The current intersection operates with every turning movement “at grade;” that is, whenever a car is turning other cars have to wait for it (after the car that is turning had to wait to turn). All of this turning creates a lot of delays. The location currently has unbuilt land that can accommodate several different interchange types without taking a single home, including a compressed diamond (Figure 9). With additional expense, heavy turning movements can be accommodated with more structures. It is important

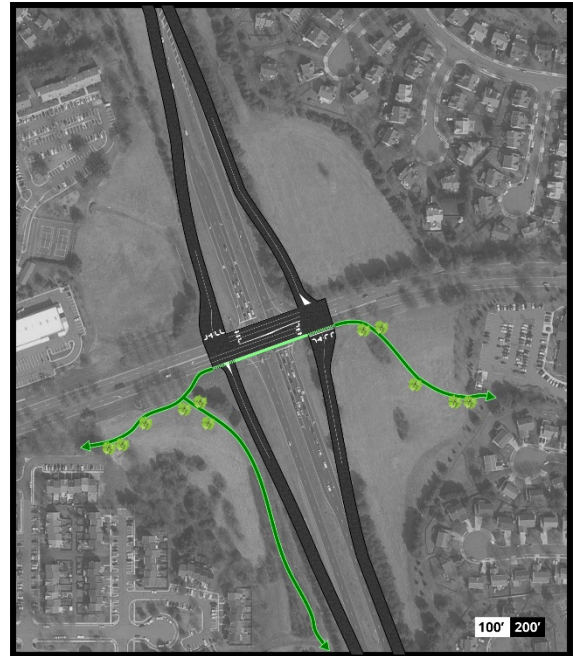


Figure 3. Rendering of Compressed Diamond Interchange

to accommodate pedestrian and bicycle movements at this location as well as tie into existing trail networks on both sides of the Leesburg Bypass. The Town has received funding to support a conceptual design (Interchange Access Report – IAR) and this concept design will start in Summer 2021, but no funds for final design, land acquisition, or construction have been identified.

20. Shared-Use Path Connection from/to Sycolin Road with W&OD Trail

Justification: Identified by the public and cycling advocacy participants, this connection allows for easy and legal access between Sycolin / Plaza Road and the W&OD Trail. This connection to Sycolin Road’s adjacent sidewalks and trails also means connections to the north and south, some of which are adjacent retail and other commercial destinations.

Description: There are a number of options available to make this connection on either side of Sycolin Road. One interesting alternative (Figure 10) is to upgrade the pavement on and make streetscaping improvements to Sycolin Road SE in front of Southern Electrical Services Company, then extending the pavement to a new pedestrian footbridge crossing of Tuscarora Creek before continuing up to meet the grade of Sycolin Road (new MUP distance is 280’).



Figure 4. Existing W&OD Trail / Sycolin Road Overpass (left) and Rendering of shared-use Path

21. Leesburg Bypass NE Pedestrian Improvements

Justification: The northeast section of the Leesburg Bypass forms one side of a “Bermuda Triangle” with poor accessibility across the Bypass, Edwards Ferry Road, and North King Street. Several commenters expressed a desire to move more safely and easily to work, shopping, and other destinations. It is worth noting that this triangular area represents a lower-than-average income population for Leesburg; is one of the few areas of this size that does not have a grocery store; and increasing pedestrian, bicycle, and transit mobility are important transportation concerns.

Description: The limits of this proposed shared-use path extend along the Leesburg Bypass approximately 1,250’ from north of Edwards Ferry Road to Fort Evans Road (refer also to Project Recommendation #1) but may extend further north (additional 1,800’) to reach an existing trail on the northwest side of the Shenandoah Square shopping center. A rare opportunity, the currently planned interchange at Edwards Ferry Road and the Leesburg Bypass needs to incorporate pedestrian and bicycle crossing provisions in both directions (across Edwards Ferry Road as well as across the Leesburg Bypass).

22. Widen Battelfield Parkway from South King Street (Route 15) to Fort Evans Road

Justification: The purpose of this project is to improve the traffic operations, safety and congestion issues along Battelfield Parkway upon the completion of all adjacent development. This area of Battelfield Parkway is experiencing tremendous growth in traffic volumes. This project will assist in reducing traffic congestion on Route 7 Bypass, which will help the movement of goods to and from the commercial and residential areas of Leesburg. This project will not require additional right-of-way because of the widening will be built towards to existing median.

Description: The project involves widening Battlefield Parkway to 6 lanes to address traffic congestion issues.

23. Construct Flyover over Route 7 at Cardinal Park Drive

Justification: Route 7 creates a barrier between development on south side of the highway and planned mixed-use development on the north side. This flyover will enhance connectivity in the Town, provide pedestrian connections, and provide additional roadways to distribute traffic flows and manage congestion in the area.

Description: The proposed project consists of the construction of flyover Cardinal Park Dive over Route 7(E. Market Street) The bridge will link Cardinal Park south of the Route 7 to Trailview Blvd and north of Route 7 to Potomac Station Drive. A sidewalk along the bridge will be provided.

24. Interchange at South King Street and Leesburg Bypass (Route 7/15)

Justification: The existing grade-separated interchange at this location is heavily congested and was built years ago and cannot handle current traffic volumes. South King Street and 7 Bypass serve as major commuter routes. Proposed development in this area will generate significant traffic volumes which will increase as new projects are constructed. This project is a high priority interchange for Loudoun County and the Town and is included in the *TransAction 2040 Plan*.

Description: This project consists of completion/improvements to the existing grade-separated interchange on South King Street and Route 7 Bypass.

25. Widen Leesburg Bypass (Route 7/15) from West Market Street to East Market Street

Justification: The primary objective of this project is to improve safety and operations along the Route 7/15 Bypass by building two additional lanes. It will relieve traffic congestion, facilitate traffic operations and improve public safety. RT 7 is a primary east-west highway serving the residents, commuters and visitors of the Washington Metropolitan Region. This route is part of the National Highway System. The Leesburg Bypass is the busiest highway in Leesburg. Widening the bypass is a long overdue transportation project of the regional importance that will greatly improve traffic congestion and safety. The Town Council has identified this project as our highest "Primary" road system transportation priority.

Description: Virginia Department of Transportation is the lead agency for the proposed project. The project involves widening this existing highway to 6 lanes.

Transit Related Projects

1. Transit: Deploy Micro-Mobility in Leesburg

Justification: The success of the Cartwheels golf cart-based personal transportation service has been informative and encouraging of other, similar efforts. Micromobility, while having not universal definition, often refers to a range of small, lightweight vehicles operating at speeds typically below 15 mph and driven by users personally. Micromobility devices include bicycles, e-

bikes, electric scooters, electric skateboards, shared bicycles, and electric pedal assisted bicycles. Micro-Mobility works with the public sector to expand that type of mobility option, which can reach Leesburg's suburban residential and commercial centers.

Description: There are a lot of formulas for proceeding forward with additional or expanded micro-mobility initiatives. Typically, these options include bringing people to an existing “trunk” fixed-route transit service (e.g., Leesburg-to-Dulles Express Route); creating deviated fixed-route transit service (the bus deviates from its normal route up to one mile to do pick-ups); and direct services (the trip both begins and ends in a micro-mobility vehicle). Loudoun County Transit has expressed an interest in further developing Mobility as a Service (MaaS) options (*source: email from Scott Gross, Loudoun County Transit, dated 2.25.2020*). MaaS generally involves allowing users to purchase on demand rides that often feed into larger “trunk lines”. These rides often use smaller vehicles like shuttles, taxis, or even bikes. The advantage of a MaaS approach is that it can serve lower-density areas inside Leesburg with door to door service better than some of the poorer-performing, fixed-route transit services in place now. Note that while some communities have enjoyed private scooter services as a complement to address first-mile/last-mile issues getting to/from regular transit routes, park-and-ride lots, or short trips, having a sound regulatory framework in place has proved to be important. Finally, Fairfax County has implemented a ride cost-reduction program for disabled residents in partnership with the Lyft company. Although originally explored for Loudoun County as well, funding and funding consistency necessary for long-term programming of services that people come to depend on were fatal obstacles to implementation (*source: conversation with Lynn Reed, Loudoun Area Agency on Aging*). This program could be reexamined, and perhaps even piloted within the denser and therefore more cost-effective Leesburg planning area.

2. Transit: Improve Connections

Justification: Several commenters expressed a desire to improve connections to Dulles Airport and directly into Washington, DC. As negotiating traffic congestion becomes more problematic, implementing solutions for longer commute trips will become increasingly important.

Description: Working with Loudoun County transit again, this recommendation may involve several shorter- and longer-term improvements. The Guaranteed Ride Home program is a great service for bus patrons and deserves recognition, as does the interactive local bus service map on the Loudoun Transit website.

- Work with Loudoun Transit and VDOT to improve existing route 400 by adding a new park-and-ride on the west side of Leesburg would be an important addition. Similarly, work with VDOT and Loudoun Transit to consider other new park-and-ride opportunities in conjunction with the development of mixed-use developments.
- Loudoun Transit, like many larger transit companies, has implemented a real-time arrival information application. Extending this app to serve the local bus routes in Leesburg would be a great addition to the local service. (Also: the links from the stop points on the interactive map could link more directly to route information.)
- To make the current or future express routes more productive, they have to be time-competitive or even faster compared to a similar automobile trip. Implementing bus prioritization (which can be coupled with emergency vehicle signal prioritization),

dedicated lanes, and smart routing technologies can help with making transit a more attractive option.

- Continuing to improve local bus service, including upgrades to stop amenities, is important to the riders that depend on these services. The Market Street route is performing better than some others; starting with improvements to this route is suggested.

3. Transit: Express Route to Ashburn Station (Metrorail)

Justification: In the realm of transit, no comment was cited more often than connecting Leesburg to Metrorail service. Although there are no firm plans to extend Metrorail service into Leesburg proper, park-and-ride locations and express services that minimize transfer ('dwell') times are highly desirable to commuters.

Description: Loudoun County Transit has stated that they intend (at the time of this plan's preparation) to create a new express service bus route between the County Government Center in downtown Leesburg to the new Ashburn Metrorail station (Silver Line Extension, Phase II) after it is operational (*source: email from Scott Gross, Loudoun County Transit, dated 2.25.2020*). The Town needs to work with Loudoun County Transit to discuss service specifics, including the duration (times of day) of service hours in peak and off-peak on weekdays, and if there will be weekend service. The likely route might include 1-2 stops at existing park-and-ride locations, including Leesburg's park-and-ride facility, and total about 20-25 minutes in travel time.

