2022-2027
City of Fitchburg Transit Plan
May 12, 2022

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Department of Public Works
City of Fitchburg
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Introduction

The City of Fitchburg has a strong interest in providing a choice to all residents and visitors of Fitchburg as to how they travel to, within, throughout, and beyond the City of Fitchburg. This includes biking, walking, driving, or using public transportation. Investing in public transportation provides an opportunity to reduce fuel consumption (with a reduction in single-occupancy vehicles), thereby reducing the carbon-footprint of the City and reaffirming the City's commitment to address global climate change through clean energy (R-26-19).

The City's 2030 Comprehensive Plan lists the development of a 5-year transit improvement plan in its policy 3.4.3. There are several advantages of adopting and maintaining a transit plan for the City of Fitchburg. The first advantage is to frame a working vision for the level of transit service that should be provided in Fitchburg. The second advantage is to enable the City to be better prepared for implementing improvements to the system. Changes to the contracted bus transit service can be a lengthy process including time for staff planning, public input, and route implementation. The third advantage is that a plan allows the City to be better prepared during the development of its Capital Improvement Plan (CIP), annual budget, and requests (e.g., grants) for external resources by staff. By having the CIP, budget, Comprehensive Plan, and Transit Plan share a common vision for recommended transit improvements, the mutual focus of the city officials and staff is guided to the appropriate mixture of capital and operating funding to accommodate those transit service improvements.

This transit plan is prepared in three sections. Section 1 identifies the transit-related goals, objectives, and policies that are included in the City of Fitchburg Comprehensive Plan. These policies provide the backbone for many of the recommended actions. Section 2 outlines the general transit goals of this plan, the actions that should be taken by the city, measures of success, and performance measures. These recommendations are based on filling in the gaps where transit service is not readily available and planning for the future transit improvements that will be necessary to accommodate the planned growth areas as they develop. Section 3 defines recommended changes to the network. Several appendices are included at the end of the plan to provide additional details and definitions.

Section 1 – City of Fitchburg Comprehensive Plan

To guide the successful development and implementation of a five-year transit plan, it is important to consider and comply with the transit-related goals, objectives, and policies that are included in the City of Fitchburg Comprehensive Plan 2030. Outlined below are the transit-related goals, objectives, and policies that are included in the Transportation Element of the City of Fitchburg Comprehensive Plan.

Goals, Objectives, and Policies of the Transportation Element

Goal 1: Develop and maintain a coordinated land use and transportation system

Objective 1.1: Plan transportation infrastructure in both redevelopment projects and new developments to encourage compact, urban development patterns.

- Policy 1.1.1: Encourage Traditional Neighborhood Developments (TND) that include mixed-uses, buildings located adjacent to sidewalks, less private and more public open space, smaller blocks, narrow streets with wide sidewalks, street trees, pedestrian-scale and street lighting, plantings and public art, lower parking ratios, shared parking, structured parking, and parking behind buildings.
- Policy 1.1.2: Encourage Transit Oriented Developments (TOD) that include a train station and intermodal transfer points as the prominent neighborhood features with high-density, high-quality development within a 10 minute walk radius of the station, and with all qualities of a Traditional Neighborhood Design as described in Policy 1.1.1.

Goal 2: Provide a safe and efficient transportation system that allows for the convenient movement of people and goods

Objective 2.3: Maximize the use of the existing transportation investments.

- Policy 2.3.3: Encourage employers to develop Transportation Demand Management Programs to reduce the number of single-occupancy vehicle trips.
- Policy 2.3.4: Encourage developers to develop in ways to reduce single occupancy vehicle trips (transit, bike parking, showers, etc.).
- Policy 2.3.5: Encourage freight and passenger use of the Fitchburg-Oregon rail corridor to maximize corridor investments and upgrades and investments.

Goal 3: Develop and maintain a multi-modal transportation system that reduces automobile dependency and increases transportation choice

Objective 3.4: Promote an efficient and reliable transit system that offers convenient alternatives to private vehicle travel.

- Policy 3.4.1: Continue to work with Madison Metro Transit (Metro), or its successor, to develop more efficient bus service and increase ridership.
- Policy 3.4.2: Improve existing bus stop conditions, where demand exists, with the addition of amenities such as bus shelters, trash receptacles, sidewalks, and accessible concrete bus pads.
- Policy 3.4.3: Develop annually a 5-year transit improvement plan that designates and maps potential future bus routes and transfer points.
- Policy 3.4.4: Preserve, where feasible, rail corridors in the City, in coordination with neighboring communities, for future transportation needs including rail.
- Policy 3.4.5: Coordinate potential rail corridor use with existing and future transit routes.
- Policy 3.4.6: Support the development of a regional transit authority to plan and implement opportunities for regional transit service.
- Policy 3.4.7: Identify and promote paratransit services to meet the needs of the seniors and persons with disabilities.

- Policy 3.4.8: Provide transportation options which will be available to the City's senior residents in the most cost effective manner.
- Policy 3.4.9: Examine dedicated bus ways, including regional Bus Rapid Transit, if rail-based options are not fully feasible.

Objective 3.5: Manage the parking supply to provide efficient parking choices and opportunities to minimize parking needs.

- Policy 3.5.3: Explore the development of park-and-ride lots or ramps to minimize pass-through traffic, reduce single-occupancy vehicle travel, and increase the use of efficient public transit service. Encourage park & ride options at large format retailers for the convenience of drivers who would like to shop before driving home.

Objective 6: Initiate passenger rail-based service along the Fitchburg-Oregon rail corridor.

- Policy 3.6.1: Promote and support Transport 2020 and the extension of the start-up system to provide commuter rail service to the City along the Fitchburg-Oregon rail corridor.
- Policy 3.6.2: Adopt and implement transit-oriented developments to support rail-based passenger transit along the Fitchburg-Oregon rail corridor.
- Policy 3.6.3: Encourage tourism use of the rail line that runs past the Alliant Energy Center, Monona Terrace, and potentially to Dane County Regional Airport.
- Policy 3.6.4: Coordinate transit stops within a reasonable distance to maximize the convenience of the service.

Section 2 – Transit Goals, Actions, Measures of Success, and Performance Measures

This section provides (1) an overview of the general goals of this transit plan, (2) a list of specific recommendations with measures of success for the next five years, and (3) specification of performance measures used to track progress.

General Transit Goals for 2022-2026

The recommendations in this transit plan are primarily based on the following general goals:

1. Reduce single-occupancy vehicle miles traveled (VMT) within and through Fitchburg.
2. Provide mobility to those who don't drive.
3. Improve intracity transit service.

Goal 1. Reduce single-occupancy vehicle (SOV) miles traveled (VMT) within and through Fitchburg.

To reduce single-occupancy VMT in Fitchburg, transit and other modes of travel need to become more compelling across a range of factors including:

- Convenience – how easy is it to know what bus to take, get to a stop, know when the next bus is coming, get from a stop, and make transfers, if needed
- Cost – how much does parking cost, fare cost, and net travel time compare with SOVs
- Comfortable – how comfortable is it to wait for and ride transit under many different situations (e.g. traveling in groups such as with family members of all ages and varying mobility, or transporting bulky items such as groceries)

To the extent possible, the City should make transit service available in new neighborhoods at the time of first occupation. Lifestyle decisions are made when selecting the location and features of a home or when looking for work. Decisions about where to live or work are based in part on the availability of transit to meet some, or all, of a resident's transportation needs.

The complexity with that goal, however, is that the cost of transit service in new neighborhoods combined with low initial utilization makes early service cost-prohibitive. There is no guarantee that people will use the provided transit service, or how quickly the new neighborhood will become occupied to take advantage of that transit service. However, Fitchburg should market plans for future transit service and should provide transit service as early as possible to these new neighborhoods to facilitate a lifestyle that will utilize transit as an integral transportation option.

In order to reduce the number of SOV miles travel, the City must ensure that the transit service is convenient, cost effective, and comfortable. Below are some actions the City may take to realize this goal:

Convenient

- Install ADA ramps and sidewalks, where possible, adjacent to transit stops
- Install electronic "next bus" signs at major bus stops
- Improve information on the City website and other notification services about how to access bus routes
- Develop a Transportation Demand Management (TDM) Program to encourage employers and developers to make transit and other modes more convenient
    - This program would define mitigation points for new developments depending on land use, parking, or other measures
    - Mitigation point requirements generally correlate with the number of vehicle trips generated or parking stalls installed for a given site
    - The development would achieve points by including measures to reduce vehicle miles traveled including:
        - Develop off-site pedestrian infrastructure
        - Offer vanpool or shuttle service to employees/residents
        - Offer discounted transit passes to employees/residents
        - Provide car share parking or memberships to employees/residents
        - Establish a shared parking agreement with nearby land uses
- Analyze on-time performance by route to identify reliability issues and determine possible infrastructure improvements

Cost Effective

- Provide more direct routes between origins and destinations people want to go
- Conduct Park and Ride feasibility study to determine locations and type of Park and Ride lots in Fitchburg
- Construct Park and Ride lots or create agreements with existing lots near major route termini. This will provide an incentive to ride transit when the cost to park at another destination is greater than the cost of fare and increased travel time.

Comfortable

- Add or improve bus stop amenities including benches, trash cans, shelters, lighting, and heaters

Goal 2. Provide mobility to non-drivers

Non-driving populations in Fitchburg can include aging adults, students, low-income individuals, those with physical, mental or intellectual/developmental disabilities, and those who prefer not to drive. These populations need access to other modes to reach their destinations.

To make the transit service more convenient, the City must recognize people get to transit in a variety of ways. Depending on their situation, some transit users will walk to transit, ride bikes to transit, ride micromobility options (bike share, scooters, etc.) to transit, be dropped off at transit, or use demand-responsive transit like paratransit. Below are some actions organized by transit access that the City can take to realize this goal:

Walk to Transit

- Install ADA ramps and sidewalks, where possible, adjacent to transit stops
- Implement the recommendations of the City's Bicycle and Pedestrian Plan (2017) and complete a continuous pedestrian transportation network
- Create agreements with local business owners and apartment managers to maintain bus stops during the winter

Bike to Transit

- Add bike parking on public land/ROW within ¼ mile of bus stops
- On-street or off-street bike facilities should be included along roadways adjacent to bus stops in accordance with the City's Bicycle and Pedestrian Plan (2017)
- Establish in-ROW bike parking application for existing businesses and multifamily units without bike parking to create bike parking areas along their frontage

Micromobility to Transit

- Create multimodal transit hubs adjacent to major bus stops
    - These could be similar to the hub shown in the Appendix B and would alleviate many first/last mile issues, particularly in commercial/retail areas
- Seek grant funding for BCycle stations near major bus stops
- Partner with BCycle to construct and maintain stations near major bus stops
- As other micro mobility options are introduced in Fitchburg, policies should be enacted to encourage use to transit without adversely affecting other modes

Shared Ride to Transit

- Promote RoundTrip (a free carpool service), or its successor, to travelers in Fitchburg for traditional carpool, and also for partial carpool to transit options

Demand-Responsive Transit

- Promote paratransit to eligible travelers in Fitchburg within ¾ mile of fixed routes
- Provide demand-responsive service to the Senior Center for seniors and potentially to other destinations for other users

Goal 3. Improve intra-City-of-Fitchburg transit service

Madison Metro provides high-quality regional fixed-route transit for Fitchburg, but does not currently provide a dedicated intra-City route. This is primarily due to the general low to medium land use density in the City, which is not conducive to fixed-route intra-City transit. The 2015 Intra-City Transit Feasibility Study sought to determine the areas that could support intra-city service and the optimal service type and characteristics of that service. The study cited four households per acre as the minimum residential density needed to support basic transit service. Additionally, three methods of city-wide transit demand were used to estimate the service level the City can support compared to its current ridership. The study introduced several options including shared-ride taxi, flexible bus, and fixed-route; the study ultimately concluded the former two options operated by a contractor to be preferred mainly because of cost. Based on the results of the study, the City contracted shared-ride-taxi services through Richwood Transport from 2017-2018. The service terminated early because of low usage and complaints about service quality.

Below are some actions the City can take to realize this goal:

- Reevaluate optimal shared-ride service characteristics including:
    - level of advertising
    - drop off and pick-up locations
    - type of vehicles
    - hours of operation
    - fares and fare integration with Madison Metro
- Determine feasibility of demand responsive service to the civic campus (City Hall, Library, Community Center, Senior Center) and other destinations.
- Determine feasibility of extending or adding fixed-route service to the civic campus (City Hall, Library, Community Center, Senior Center) and other priority areas
- Secure grant funding to cover some of the capital cost to purchase vehicles
- Secure operating assistance to cover some of the operating expenses

Relating Goals to Actions to Measures of Success

The preceding sections defined goals and actions. In order to define whether actions and goals are being accomplished or at least moving in the right direction, measures of success are needed. The table on the next page relates actions to goals and defines measures of success to gauge their progress. It also specifies general levels of capital and operating cost associated with each action and the timeframe to complete the action. In this table, short term refers to 1-3 years and medium term refers to 3-6 years.

Item #	Action Item	Goals			Cost and Timing			Status	Measure of Success	Related Comprehensive Plan Goal
		Reduce SOV miles traveled	Provide mobility to non-drivers	Improve intra-city transit service	Capital Cost	Operating Cost	Timeframe			
1	Install ADA ramps and sidewalks adjacent to transit stops	✓	✓		$$	$	Ongoing		% sidewalks within ¼ mile of bus stops	Policy 3.4.2
2	Install electronic next bus signs at major bus stops	✓			$$	$	Medium		% of stops with shelters	
3	Improve information on the City website about how to access bus routes	✓	✓			$	Ongoing		Updated twice per year	
4	Create a Transportation Demand Management Program	✓			$		Short		Calculated VMT reduction	Policy 2.3.3
5	Analyze and fix on-time performance by route	✓	✓		$	$	Ongoing		On-Time Performance	Policy 3.4.1
6	Provide more direct routes between origins and destinations	✓	✓			$$$	Ongoing		Cost comparison to auto by route	Policy 3.4.1
7	Conduct Park and Ride feasibility study	✓	✓			$	Short		Study complete	Policy 3.5.3
8	Construct Park and Ride lots or create agreements with existing lots	✓			$$$	$	Medium		Study action items complete	Policy 3.5.3
9	Add or improve bus stop amenities	✓	✓		$$	$	Short		% of stops with shelters	Policy 3.4.2
10	Implement the recommendations of the 2017 Bicycle and Pedestrian Plan	✓	✓		$$	$$	Ongoing		Plan items complete	
11	Partner with businesses and apartments to maintain bus stops during the winter	✓	✓			$	Ongoing		Ordinance complete	
12	Add bike parking on public land/ROW within ¼ mile of bus stops	✓	✓		$	$	Ongoing		% stops with bike parking within ¼ mile	
13	Install on-street or off-street bike facilities adjacent to bus stops	✓	✓		$$	$	Ongoing		% of stops with adjacent bike facilities	
14	Establish in-ROW bike parking application for private businesses and apartments	✓	✓		$	$	Ongoing		Program funded and on city website	Policy 2.3.4
15	Create multimodal transit hubs adjacent to major bus stops	✓	✓		$$	$	Ongoing		% of stops with adjacent multimodal hub	Policy 1.1.2
16	Seek grant funding for BCycle stations near major bus stops	✓	✓		$	$	Short		Submit application(s) for TAP Grant	
17	Partner with BCycle to construct and maintain stations near major bus stops	✓	✓			$	Ongoing		% of stops with adjacent BCycle station	
18	Enact policies to encourage responsible micromobility use to transit	✓	✓			$	Medium		Policy complete	
19	Promote RoundTrip (a free carpool service) traditional and partial carpool	✓	✓			$	Ongoing		Four outreach efforts per year	Policy 2.3.3
20	Promote paratransit to eligible travelers in Fitchburg within ¾ mile of fixed routes		✓			$	Ongoing		Four outreach efforts per year	
21	Provide demand-responsive service to the Senior Center for seniors and potentially to other destinations for other users		✓	✓		$	Short		Complete feasibility analysis and outreach	Policy 3.4.8
22	Determine feasibility of service to civic campus and other priority areas			✓		$	Short		Study complete	
23	Reevaluate optimal shared-ride service characteristics			✓		$	Short		Discuss options with Council	
24	Apply for grant funding to cover some of the capital cost to purchase vehicles			✓	$		Ongoing		Apply for 5310 grant funding	
25	Apply for operating assistance to cover some of operating expenses			✓		$$	Ongoing		Apply for 85.20 grant funding	

Performance Measures

To measure the success of the plan, actions items and measures of success have been outlined in previous sections. Additional performance measures are needed to track the overall condition of transit in Fitchburg. This section defines fifteen performance measures the City can use to track performance over time. It is recommended that the City calculate these measures after the network redesign service changes are in place and set short, medium, and long-term targets based on overall City goals.

ID	Performance Measure
1	% Pop within ¼ mile daily service
2	% ND Pop within ¼ mile daily service
3	% sidewalks within ¼ mile of bus stops
4	% stops with bike parking within ¼ mile
5	% of stops with adjacent bike facilities
6	% of stops with shelters
7	% of stops with adjacent multimodal hub
8	% of stops with adjacent BCycle station
9	On-Time Performance
10	Passengers per vehicle hour
11	Total operating cost per passenger
12	Farebox recovery
13	Travel time comparison to auto by route
14	Parking cost comparison to auto by route
15	Cost comparison to auto by route

Section 3. Recommended Transit Changes

Madison Metro is currently undertaking a network redesign that would fundamentally change the way bus service is provided in the Madison region. The most significant changes include:

- Shift toward more direct, frequent service to downtown and other higher ridership areas
- Streamline routes and remove some existing routes to maintain the current level of service budget
- Increase the average walk distance to the nearest bus stop

These changes not only affect how transit riders travel through Fitchburg, but the region generally and likely represents the biggest change in 20 years. To undertake this largescale shift Madison Metro is engaging residents and City of Fitchburg staff to weigh in on system characteristics over a yearlong process that first started by defining choices, then providing ridership and coverage alternatives, and then a proposed plan while soliciting feedback at each stage. The proposed plan represents the first draft of network redesign and the portion within

Fitchburg (shown in Figure 1) is the City's currently recommended base transit network to take effect in August 2023.

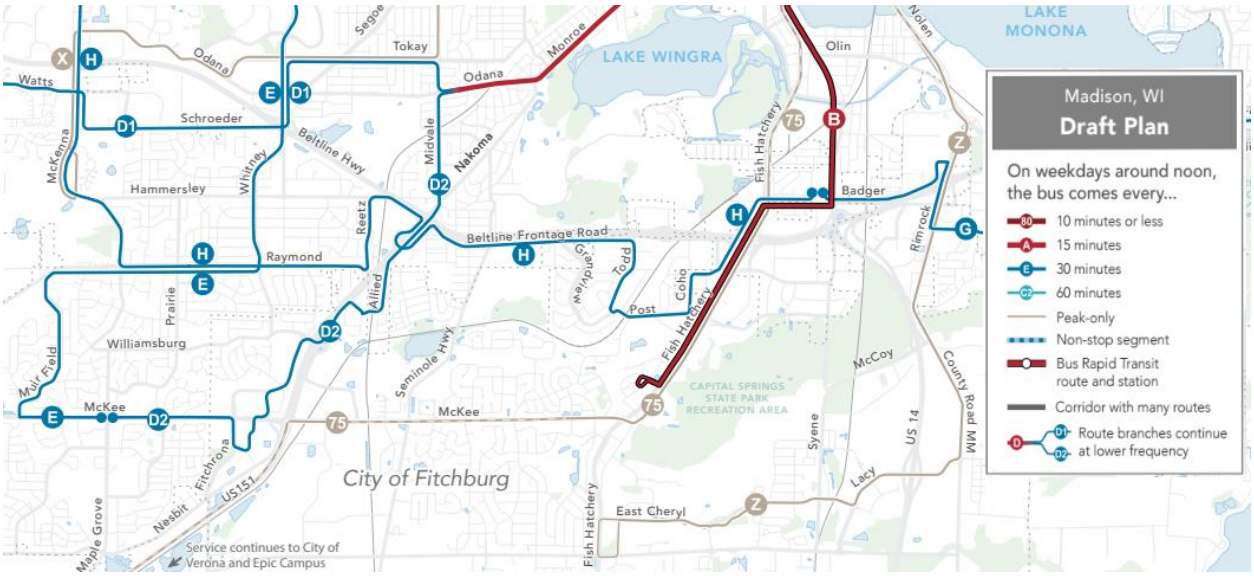
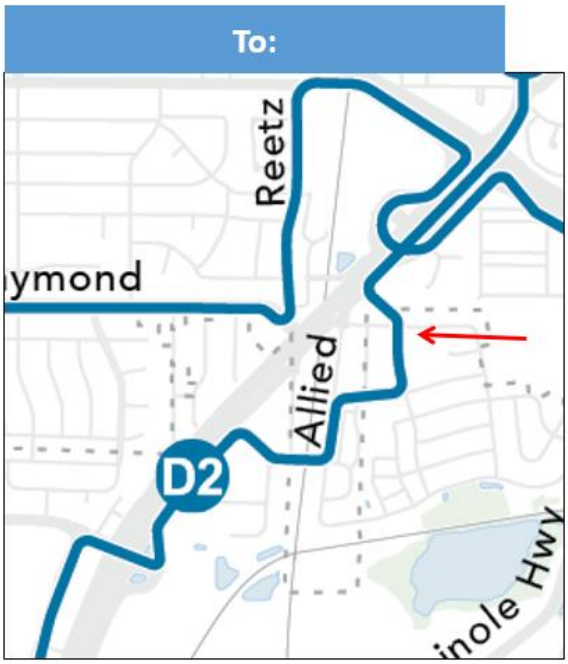


Figure 1: Base Recommended Transit Network

Through several public engagement activities and conversations several possible amendments were identified that could modify the base recommended network. Overall these amendments would generally provide better neighborhood coverage in parts of the City and reduce the walking distance to bus stops. These amendments are listed below along with their estimated partner hour, gross cost, and net cost to the City of Fitchburg.

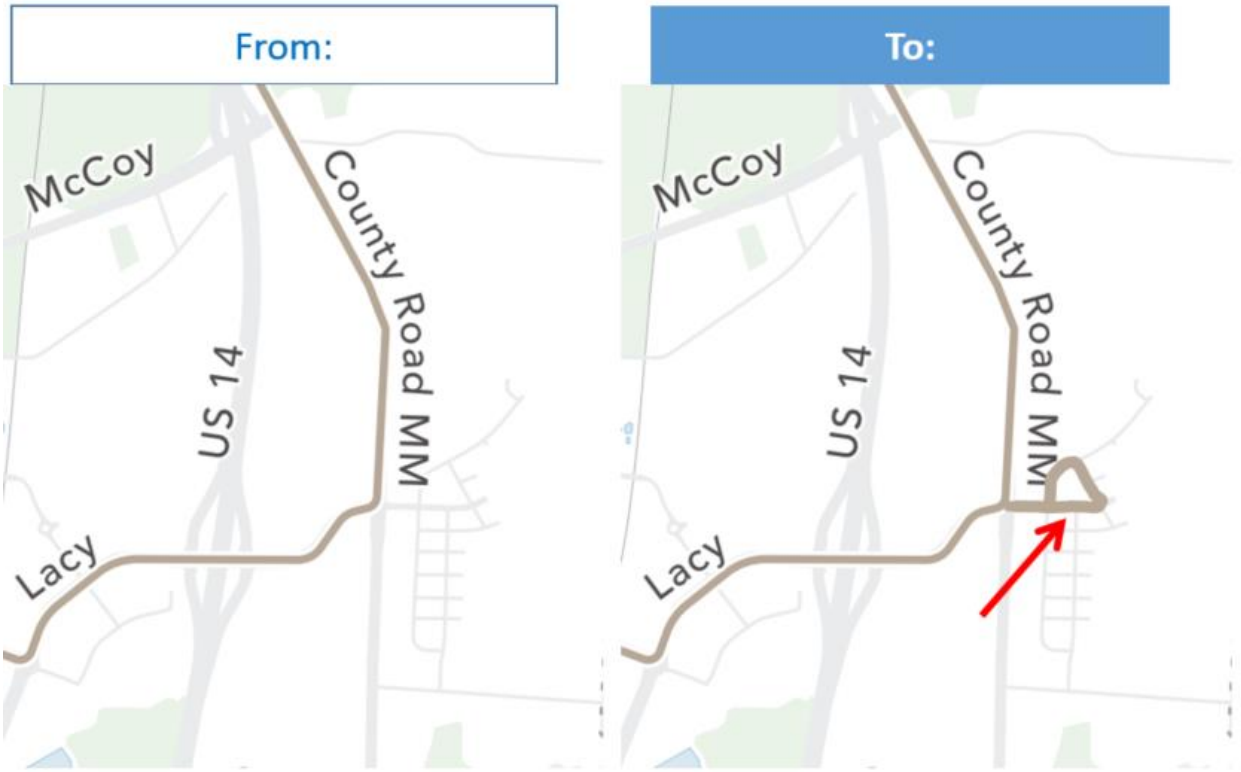
Route D2 - Approved

- This amendment would shift Route D2 from Allied Drive to Red Arrow, Jenewein, and Allied. This new alignment would provide service at Red Arrow and Jenewein, reducing the walk for residents along Red Arrow and Crescent.
- Shifts about 700 annual service hours from Madison to Fitchburg.
- $102,000 gross annual cost to the City of Fitchburg transit budget
- $34,000 net annual cost to the City of Fitchburg transit budget after grant funding



Route Z-1 - Approved

- This amendment would shift Route Z to provide transit service to the Terravessa neighborhood in Fitchburg via Lacy Road, Radicchio Drive, and Brassica Road.
- Shifts about 300 annual service hours from Madison to Fitchburg.
- This amendment is recommended until bus stops can be installed on Lacy and CTH MM.
- $44,000 gross annual cost to the City of Fitchburg transit budget
- $15,000 net annual cost to the City of Fitchburg transit budget after grant funding

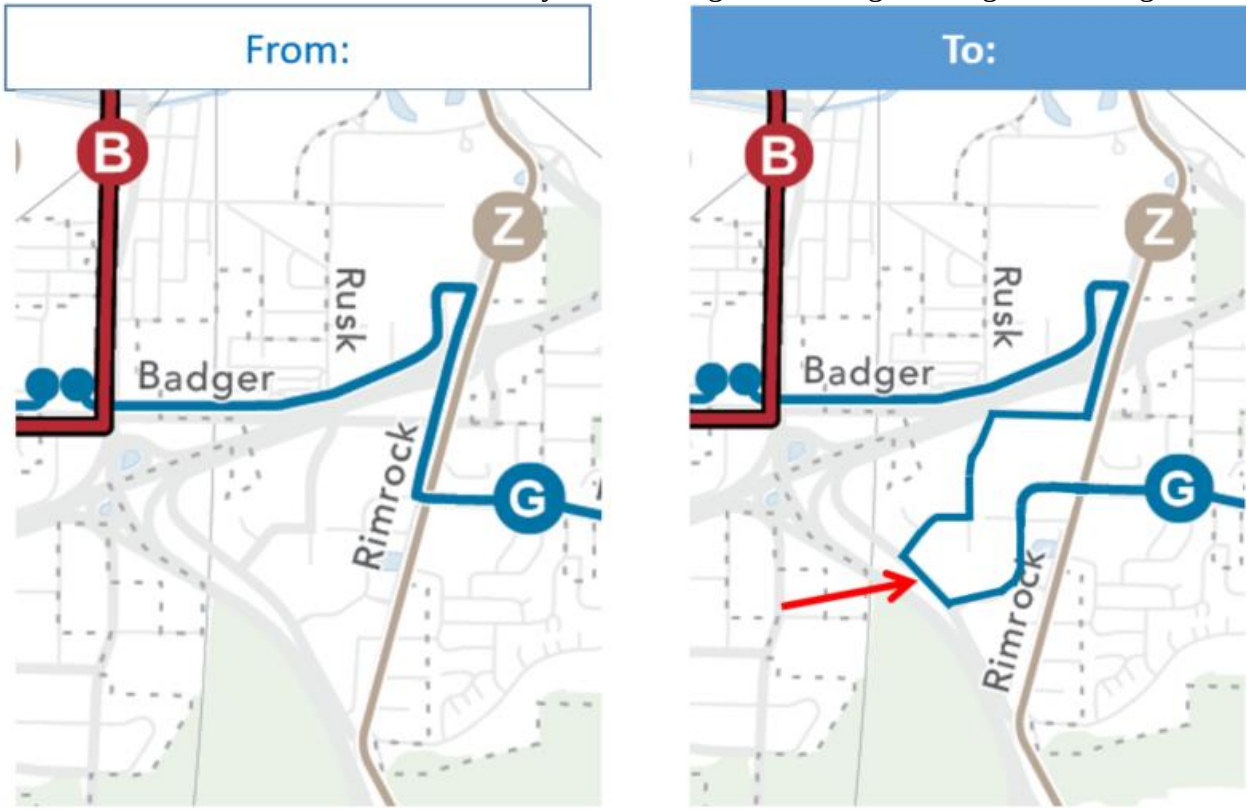


Route Z-2 - Approved

- This amendment would shift Route Z to provide transit service to the UW campus in Madison via John Nolen Dr and Broom St.
- No shifts in annual service hours from Madison to Fitchburg.
- $0 gross annual cost to the City of Fitchburg transit budget
- $0 net annual cost to the City of Fitchburg transit budget after grant funding

Route G-3 – Approved

- This amendment would largely replace the existing Route 16 service in the Southdale neighborhood by deviating the Route G using Badger Rd, Pheasant Ridge Trail, Deer Valley Rd., Ski Ln. and Novation Pkwy.
- Adds about 2600 annual service hours from Madison to Fitchburg.
- $378,000 gross annual cost to the City of Fitchburg transit budget
- $125,000 net annual cost to the City of Fitchburg transit budget after grant funding



Conclusion

The Fitchburg Transit Plan is a key component towards achieving the transportation goals laid out in the City's Comprehensive Plan, along with the Bicycle and Pedestrian Plan and plans for the street and road network. The implementation of this plan, and associated annual updates, will improve transit within and through Fitchburg and ensure that residents and visitors will have safe, efficient, and cost-effective transportation options that meet their changing needs.. Improved transit will promote sustainable and regenerative growth and provide an opportunity to reduce fuel consumption, thereby reducing the carbon-footprint of the City. The plan will ensure the City is better prepared to prioritize and implement transit service improvements.

Appendix A – Definitions

This appendix offers several definitions of commonly used terms.

BRT: Bus Rapid Transit, a mode of fixed route bus transit that characterized by some or all of the following: higher-capacity vehicles, dedicated lanes, signal priority, off-board fare payment, or all-door boarding

Deadhead: "Deadheading" refers to an out-of-service bus that is driving from the bus garage to the route terminal, driving back to the bus garage, or driving between route terminals.

DR: Demand-responsive transportation is comprised of automobiles, vans, or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations. Rides are typically shared with other passengers.

Headway: The time between scheduled transit vehicle departures.

Paratransit: Types of passenger transportation which are more flexible than conventional fixed-route transit but more structured than the use of private automobiles. Paratransit includes demand response (DR) transportation services, shared-ride taxis, car-pooling and vanpooling (VP), and jitney (JT) services. Most often refers to the wheelchair-accessible, demand response (DR) service Metro Transit provides to individuals with disabilities who cannot use fixed-route bus service.

Public Transportation: As defined in the Federal Transit Act, "transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation or intercity passenger rail transportation provided by the entity described in chapter 243 (or a successor to such entity)."

RTA: Regional Transit Authority

SOV: Single Occupancy Vehicle, defined as a vehicle with a single occupant (i.e. only driver).

TDM: Travel (or traffic) demand management, a term used to describe any combination of efforts or strategies aimed at reducing congestion-inducing travel demand of single occupancy vehicle. A municipal TDM program typically requires these strategies be applied to site when they are redeveloped.

TOD: Transit-Oriented Development, any form of real estate development that is located within walking distance of a high-capacity transit station node.

Transit: see public transportation

TSP: Transit Signal Priority, priority that is given to transit vehicles at a signaled intersection with mixed traffic.

VMT: Vehicle Miles Traveled, a number that measures the number of miles motorists collectively have traveled over a given geographic and time scope.

Appendix B – Mobility Hub

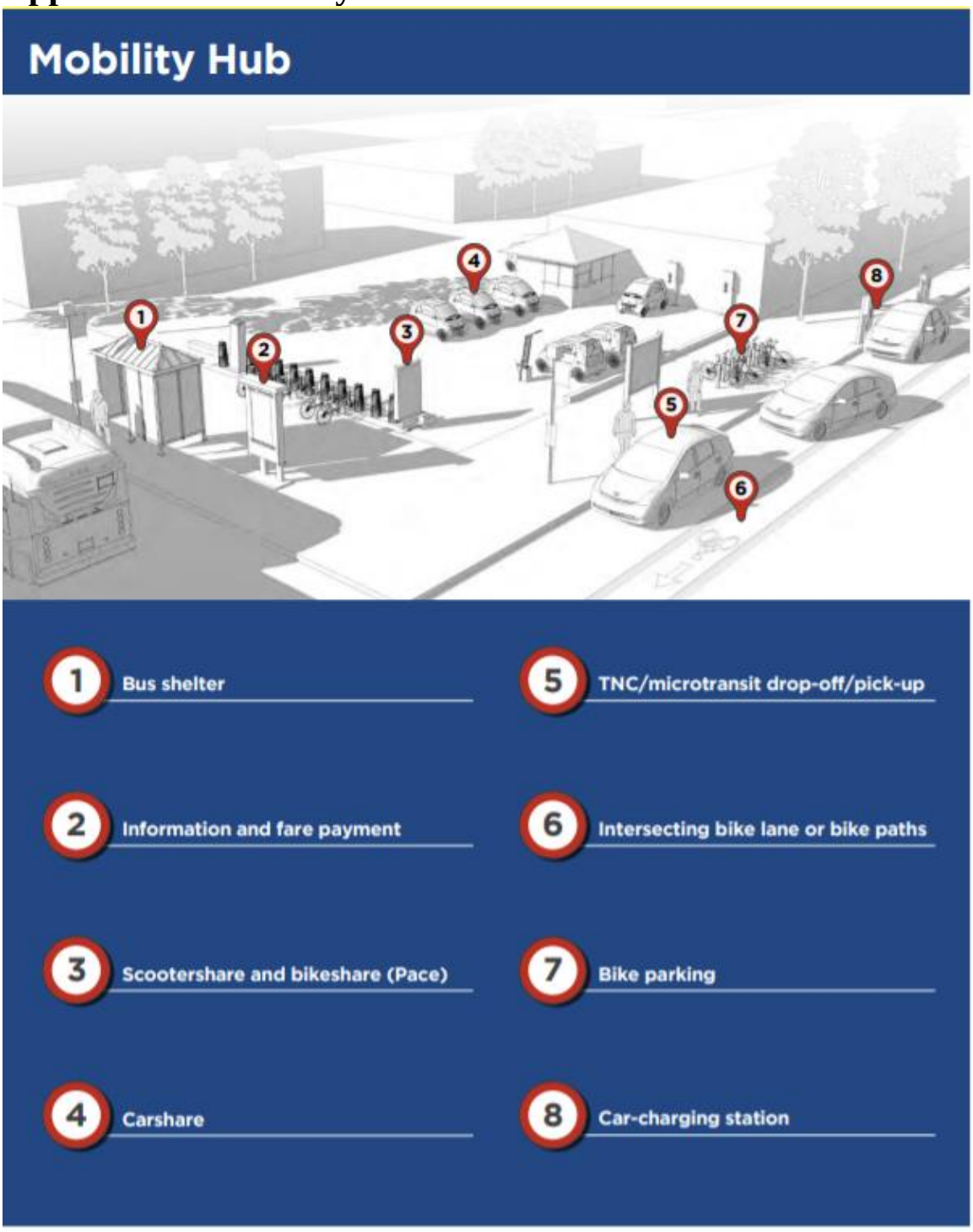


Figure 2: Mobility Hub (Source - Fort Collins Transit Master Plan found here