WeGo Public Transit

Transit Plan Summary Report

WeGo Star
Future Direction Strategy

Prepared for the Regional Transportation Authority of Middle Tennessee

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1. Executive Summary

This Transit Plan Summary Report is the final recommendation for the WeGo Star Future Direction Strategy. It is meant to present the final recommendation and summarize project work building the basis and the business case supporting the recommendation. There is a Transit Plan Extended Report including appendices with each task area report for the most comprehensive document. All of the work included in the contract statement of work inform the Transit Plan. The application of technical analysis, public engagement, business case, and triple bottom line analysis methodologies resulted in this final recommendation. The Transit Plan is presented as one comprehensive package for implementation together in a single start up or in phases as funding becomes available. The mid-day regional bus service and the on-demand microtransit are considered optional and may be tested or piloted to assess utilization and value. The details follow in the body of the report.

The Transit Plan recommends the “Preferred Option” to include the following elements.

- WeGo Star weekday peak period and evening service
- WeGo Star day and evening Saturday service
- WeGo Star special events and Titans service on Sundays
- Optional two mid-day regional bus roundtrips between Lebanon and Riverfront on weekdays (Wilson County WeGo stations and Riverfront Station, fixed route bus currently serves Davidson County stations)
- Optional On-Demand Microtransit service for Wilson County stations (van-type contracted service for catchment zones operating 1 hour before until 1 hour after WeGo Star scheduled service; or WeGo Link Uber service for Wilson County)

The “Preferred Option” was selected over the all-day service plan or what could be considered the most expansive build out because the all-day service plan is not a viable or sustainable alternative requiring extensive investment for very low return in a limited demand transportation corridor. Details are listed below.

- Capital cost investment of approximately $65-75 million, largely due to Federally mandated Positive Train Control technology implementation
- Increased operation and maintenance cost of $4.5 million/year
- Lack of sustainable funding within the RTA structure
- Low population and employment density, low transportation demand
- Currently does not meet the criteria for a high performing transit corridor
- Federal grant potential for the investment is very low

In October 2024, the Regional Transportation Authority (RTA) Executive Committee formally approved the WeGo Star Transit Plan. The next step in implementation of the Transit Plan is obtaining formal funding commitments from local jurisdictions for annually recurring and

sustainable funding for the identified increase in operations and maintenance (O&M) costs. Following local jurisdiction commitment for the increased annual O&M costs, funding for capital investments will be identified and secured.

The rationale providing the business case and identifying the benefits for the Preferred Option recommendation is summarized in Table 1.1.

Table 1.1 Final Recommendation Benefits

Responsive to public engagement for evening, weekend, and special event service
Minimal change to existing peak commuter schedule
Aligns with shifts in travel demand and changing demographics
Supportive of the Davidson and Wilson County Mayors' desire for enhanced service
Provides greater capacity and flexibility for freight operations
Supports economic develoment and transit oriented development
Implementable within the current regulatory framework
Estimated ridership increase +30%
Cost per rider decrease of 1%
Potentially reachable annual O&M increase and capital infrastructure costs

Several factors are required for the viability of the Transit Plan, including:

1. **Infrastructure Investment** – A new siding is required near the Martha Station to support the passenger schedule and provide flexibility/capacity for freight operations. The estimate for this siding is $2 - 3 million. Funding needs to be identified for this capital investment. Additionally, the freight operator suggests that additional capital maintenance be performed prior to the implementation of the enhanced passenger service because of the loss of evening and weekend maintenance windows. These investments need to be identified, priced, and funded.
2. **Tri-Party Agreement Amendment** – The agreement between the RTA, the Nashville and Eastern Railroad Authority (NERA), and RJ Corman needs amending to address the expanded passenger service schedule. Presentations have been made to the NERA Board describing the draft Transit Plan.
3. **Funding** – The Transit Plan requires funding the items summarized in Table 1.2.

Table 1.2 - Transit Plan Funding Requirements

Operations & Maintenance Costs (Recurring Annually)	
Increased Annual O&M Cost for Enhanced WeGo Star Passenger Service	$4.3 million
Mid-day regional bus service (optional)	$0.3 million
On-Demand microtransit (optional, priced as on-demand van service)	$2.2 million
Total Increase to Annual O&M	*$6.8 million*
Capital Costs (One-Time)	
Martha Siding (0.51-mile track and 2 interlockings)	$2-$3 million
New Yard Track	$1 million
Additional Trainset	$1.2 million
Required Maintenance of Way Capital Project Advancement	$5 to $10 million
Total Estimated Capital Costs	*$9.2-$15.2 million*

4. **Regulatory Compliance** – The WeGo Star currently operates on a mainline track exception (MTE) under the limited operations exception, as defined in 49 CFR 236.101(c)(2)(ii), along the entire WeGo Star route from milepost 0.35 to milepost 31.6. Any revisions to the WeGo Star operation must be within the requirements of this main line track exception. In practical terms, this means the WeGo Star can operate 12 regularly scheduled passenger trains per calendar day and cannot exceed that amount. Recent discussion with the FRA confirmed this and that the WeGo Star may operate a deadhead (a non-passenger or non-revenue service train) and that the deadhead trip does not count as a passenger trip. Should WeGo Star prefer to operate more than 12 passenger trains per day, implementation of positive train control would be required. This option is not recommended primarily due to the extensive capital costs, increased annual operations and maintenance costs, and estimated limited ridership increase.

2. Introduction

2.1 Background

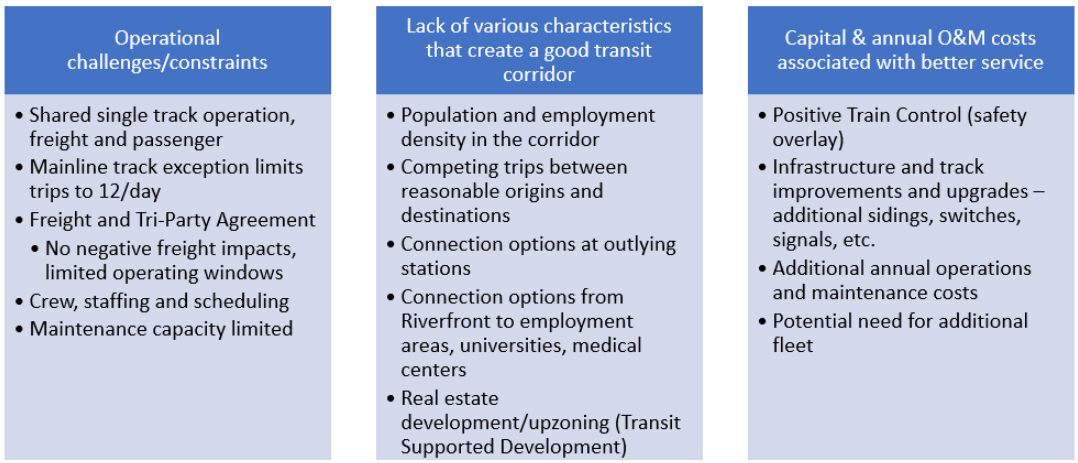
2.1.1 WeGo Star Future Direction Strategy

The Transit Plan is the major outcome of the WeGo Star Future Direction Strategy work. The work is focused on developing a long-term strategy to optimize prior and future investments along the WeGo Star line to maintain a state-of-good repair, meet changing customer service needs, address freight flexibility and capacity, provide a sustainable financial structure, and

offer the operational flexibility to sustain and manage service as ridership fluctuates due to external factors. Development of the long-term strategy has included a multidisciplinary approach to engage and inform stakeholders about the history of the WeGo Star operation and its relationship to the line's freight service; how it fits within the region's need to mitigate traffic congestion; how it may be better utilized to offer new options for accessing downtown Nashville and Wilson County to enhance regional livability, affordability, and quality of life; and how the pandemic and its long-term changes in employment and commuting patterns may require permanent changes in the utilization, operation, and financial support structure for commuter-focused transportation services.

The current WeGo Star operation, essentially providing morning and afternoon peak service, is optimized based on the current constraints and challenges on the system as described in Figure 2.1.

Figure 2.1 - Challenges in Making the WeGo Star More Effective



Analysis and assessment of ten main task areas informed the Transit Plan. The task areas are summarized in Table 2.1.

Table 2.1 - Task Areas Analysis and Assessment

Project Management	Public/Stakeholder Engagement
Baseline Assessment & Benchmark Review	Scenario Planning
Related Initiatives Analysis	Financial Analysis
Passenger Market Assessment	Business Case
Freight Market Assessment	Corridor & Station Area Visioning

2.1.1.1 Service Scenarios Analyzed

The scenario planning task of the WeGo Star Future Direction Strategy work originally looked at four short-term scenarios and four long-term scenarios. A series of workshops with WeGo staff and RJ Corman (the freight short line operator) considered scenarios to be analyzed

resulting in the selection of these initial scenarios and elimination of certain scenarios as non-viable options that were not modelled. Previous analysis completed as part of the WeGo Star Future Direction Strategy work informed the service scenarios, including public/stakeholder engagement, potential service schedules, ridership forecasts, estimated operating costs, considerations of other freight operations along the corridor, and political considerations. As the scenario analysis process evolved, additional short-term scenarios and combinations of scenarios emerged, and were included to provide a more comprehensive set of results. The short and long-term evaluated scenarios are detailed in Table 2.2 and Table 2.3.

Table 2.2 - Short-Term Scenarios

S0	Cancel Star Services	Annul Star services entirely; loss of annual federal funding and requirement to payback FTA debt; keep PTC Waiver but terminate other contracts/agreements
S1	Existing/Baseline Scenario	Maintains service as-is; 8 end-to-end trips with 4 trips Riverfront to Mt Juliet at weekday peak hours only
S2	Spread Afternoon Peak	10 end-to-end trips with 2 trips Riverfront to Mt Juliet; two additional end-to-end trips; less dense schedule for PM peak
S3	Shift Services from AM to PM	14 trips total; 12 end-to-end trips (2 are deadheads) and 2 trips from Riverfront to Mt Juliet
S4	Weekends Only	Weekend service; one train running 10 full trips; slots to run museum excursions and rock train
S5	Reduced-Cost Option	Weekday service; one train running 12 trips; 6 end-to-end and 6 Riverfront to Mt Juliet
S1+S4	Weekday + Weekend	Weekdays: one train with 12 trips; 6 end-to-end and 6 Riverfront to Mt Juliet (S1); Weekends: on train with 10 end-to-end trips, 2 museum trips, 1 rock train (S4)
S4+S5	Reduced-Cost Weekday + Weekend	Weekdays: 8 end-to-end trips with 4 trips Riverfront to Mt Juliet at weekday peak hours only (S1); Weekend: 10 end-to-end trips, 2 museum trips, 1 rock train (S4); Lowest cost per rider compared to all other scenarios

Table 2.3 - Long-Term Scenarios

L1	Nashville Fairground (Vine Hill)	New proposed station and infrastructure improvements; special event service would be limited to weekday evenings or weekends
L2	Infill Station at Driftwood/Nestor	New proposed infill station similar in construction to Hamilton Springs station
L3	All Day Service	Requires PTC implementation; extended Martha siding; conversion and extension of one track of Stones River Yard and re-signaling; spur track added at Vulcan Quarry
L4	All Day Service to Riverfront/Vine Hill	L1 and L3 are prerequisites; additional capacity for freight is required; an additional trainset would be necessary

2.1.1.2 Preferred Option

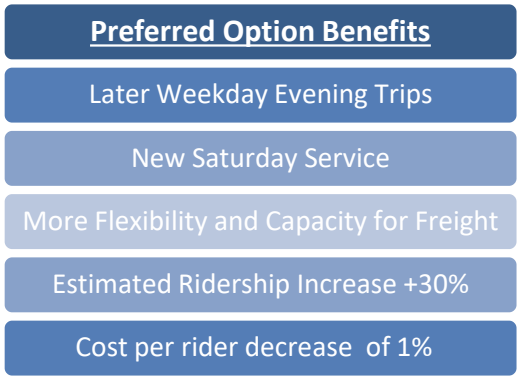
As the scenario analysis process progressed concurrently alongside public engagement efforts and political/government relations input, similar feedback was received on several improvements both riders and non-riders would like to see, including:

Also, the team heard from riders about the inconvenience of the combination of low service frequency and all trips not serving Lebanon. In particular, how this severely limits rider ability to have flexibility in when they arrive and depart from work each day.

Through close coordination with WeGo staff, the project team developed a new hybrid scenario, H1, with the goal of designing a scenario that is both financially and operationally feasible and is also customer-focused, improves the overall service experience for both riders and non-riders, increases freight flexibility and capacity, and supports economic development. H1 combines modified S3 (Saturday Service), S4 without the trips between Mt. Juliet and Riverfront (12 end-to-end trips to Lebanon), and the Martha siding addition from L3. This is the “Preferred Option”. In this scenario, service on Sundays will be limited to special events, such as Titan’s games and other major events. With the addition of evening and Saturday service, the limited service on Sundays provides opportunity for maintenance activities to offset the loss of evening and Saturday maintenance windows. Ridership analysis was completed to evaluate the value/impact of an additional morning peak trip, resulting in the creation of a third trip between Riverfront and Lebanon with the last morning reverse-peak and first evening reverse-peak being run as non-revenue deadhead trains. A third trainset

could be implemented with the addition of another passenger vehicle to the existing fleet, which is currently in procurement and expected to be in service later in 2025. This would also require an additional (third) train crew.

In comparison to all evaluated scenarios, the Preferred Option provides the greatest flexibility and capacity for the lowest possible capital investment. This scenario maintains modified weekday service to create additional evening trips and introduces Saturday service. It also provides greater flexibility and capacity for freight service and is expected to increase ridership by more than 30% while reducing the cost per rider by about 1%.



The Preferred Option does require investments in infrastructure and additional ongoing annual O&M costs. Modifications to the Tri-Party Agreement and the current O&M contract will also be required. In February 2024, the RTA Board directed staff to advance this scenario into a draft transit plan. This scenario was presented to the Nashville Mayor's office in February 2024 and the NERA Board in April 2024. In October 2024, the Regional Transportation Authority (RTA) Executive Committee formally approved the WeGo Star Transit Plan.

2.2 Purpose of Transit Plan

The purpose of the Transit Plan is to layout the strategy for implementing the Preferred Option service scenario.

3. WeGo Star Service Plan

3.1 Approach

The approach for development of the Service Plan includes consideration of required coordination with partners and compliance with federal regulatory programs.

3.1.1 Schedule Coordination

Development of the schedule included coordination with the Star's O&M contractor, RJ Corman. This coordination is key to ensuring the implementation of the Transit Plan does not negatively impact existing freight service levels and offers the identified benefits of increased flexibility and capacity identified in the scenario analysis process.

The project team met with RJ Corman several times to understand the impacts of the proposed modifications to weekday and weekend service. Sunday service was identified as a maintenance of way (MOW) concern. Shifting MOW activities from daytime on Sundays to overnight would require a significant increase in maintenance costs. RJ Corman did note that more limited maintenance windows associated with increased service levels would require

the acceleration of some planned capital maintenance prior to implementation of service changes to avoid future long term service interruptions.

3.1.2 Pilot Service Change

It is recommended that the implementation of the Transit Plan service changes be first tested as a pilot for a period of one year. This will provide WeGo staff with the opportunity to evaluate rider and non-rider adoption of the changes, service performance, and any operational, maintenance, or freight impacts encountered by RJ Corman.

3.1.3 Title VI Review

After the one-year pilot, should the agency decide to keep the pilot service change as a permanent service change, a Title VI review to assess the service change for any adverse effects, disparate impacts, or disproportionate burdens to minority or low-income populations will be required, in accordance with RTA's Title VI Program.

3.2 Service Modifications

3.2.1 Star Schedule Modifications, Preferred Option

3.2.1.1 Demand-Based Adjustments

Adjustments to the Star schedule have been informed by demand-based data, which was gathered and analyzed in detail in Task 4 of this project, and reported in the Transit Plan Extended Report. The schedule shifted in the Weekday morning peak to accommodate the annulment of Train 155 in the existing schedule. Advanced evaluation and modeling for minor schedule shifts may be worthwhile to maximize alignment of the schedule with current demand using updated ridership data.

3.2.1.2 Weekday Service

The Preferred Option for Weekday service extends the existing morning peak service to serve Lebanon on all trips. Implementation would include two deadhead moves, Train 155 (from Nashville at 8:25 am) and Train 156 (to Nashville at 3:20 pm). Trip 151 (from Nashville at 6:53 am) and Trip 154 (to Nashville at 7:45 am from Mt. Juliet) would be extended to provide service to Lebanon. The afternoon trips are spread out into the evening to reflect changes in demand identified by the modeling in Task 4. The Preferred Option for Weekday service would require a third trainset in service and the addition of a third train crew, but only in the morning. The main benefits of this service design are the preservation of the most used morning peak service levels, the extension of all service trips to Lebanon, and the opportunity to serve both commuter and leisure travelers in the evening. The primary drawback is the increased costs in O&M related to the additional trainset and train crew. Daily Weekday ridership is estimated to result in a 14% increase over baseline.

3.2.1.3 Saturday Service

Saturday service has been developed based on constraints related to Tennessee Central Railway Museum Excursion trains and RJ Corman rock train operations as well as feedback from public engagement efforts. The proposed Saturday service will provide 8 full trips, preserving two heritage train trips and one rock train trip. Stakeholder discussions during the project confirmed some flexibility in the schedules of these services which are reflected in the plans as composed to the existing timing of these trips.

3.2.2 Proposed Star Service Schedule

The proposed Weekday schedule is outlined in Table 3.1. Figure 3.1 shows the Weekday schedule as a stringline chart. The proposed Saturday schedule is outlined in Table 3.2, with the stringline chart provided in Figure 3.2. The Saturday schedule string chart provides a visual of where the excursion trains and rock train operated by RJ Corman are shown in relation to the Star passenger service trains.

Table 3.1 - Proposed Weekday Schedule

Lebanon	Hamilton Springs	Martha	Mt. Juliet	Hermitage	Donelson	Riverfront
5:40 AM	5:47 AM	5:52 AM	6:01 AM	6:09 AM	6:16 AM	6:35 AM
6:30 AM	6:37 AM	6:42 AM	6:51 AM	6:59 AM	7:06 AM	7:25 AM
7:20 AM	7:27 AM	7:32 AM	7:41 AM	7:49 AM	7:56 AM	8:15 AM
3:55 PM	**4:02 PM**	**4:07 PM**	**4:16 PM**	**4:23 PM**	**4:35 PM**	**4:50 PM**
5:37 PM	**5:44 PM**	**5:49 PM**	**5:58 PM**	**6:06 PM**	**6:13 PM**	**6:32 PM**
7:10 PM	**7:17 PM**	**7:22 PM**	**7:31 PM**	**7:38 PM**	**7:50 PM**	**8:05 PM**
Riverfront	Donelson	Hermitage	Mt. Juliet	Martha	Hamilton Springs	Lebanon
6:53 AM	7:04 AM	7:17 AM	7:25 AM	7:34 AM	7:39 AM	7:48 AM
7:45 AM	7:56 AM	8:09 AM	8:17 AM	8:26 AM	8:31 AM	8:40 AM
4:18 PM	**4:30 PM**	**4:37 PM**	**4:45 PM**	**4:54 PM**	**4:59 PM**	**5:13 PM**
5:15 PM	**5:27 PM**	**5:34 PM**	**5:42 PM**	**5:51 PM**	**5:56 PM**	**6:10 PM**
6:50 PM	**7:02 PM**	**7:09 PM**	**7:17 PM**	**7:26 PM**	**7:31 PM**	**7:45 PM**
8:25 PM	**8:37 PM**	**8:44 PM**	**8:52 PM**	**9:01 PM**	**9:06 PM**	**9:20 PM**

Figure 3.1 - Weekday Schedule Stringline Chart

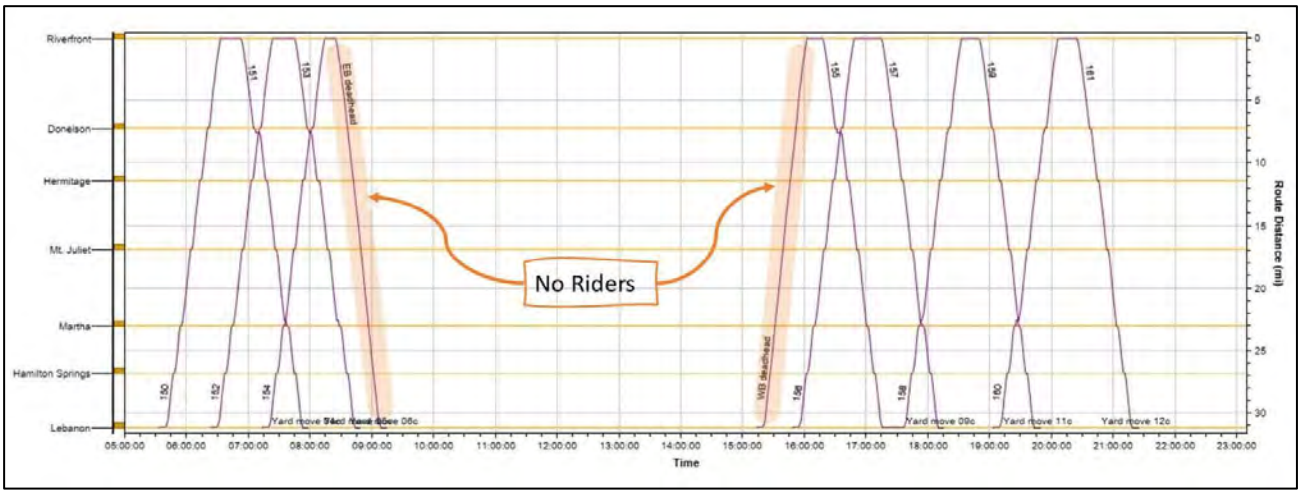
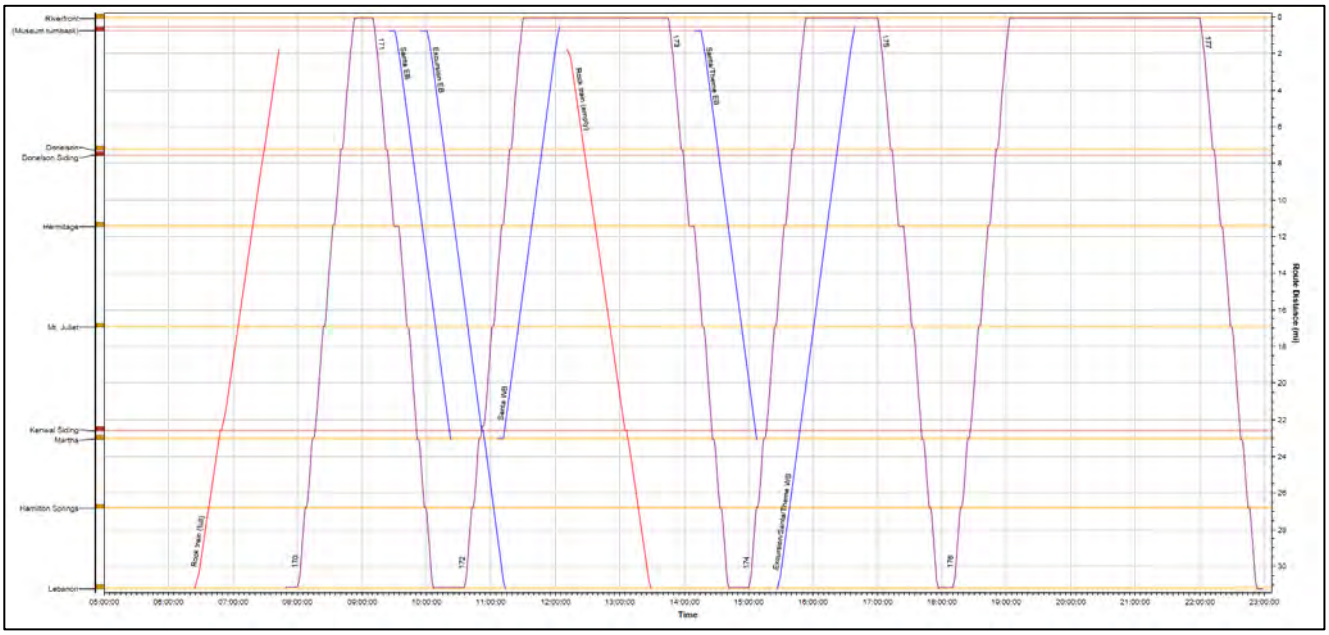


Table 3.2 - Proposed Saturday Schedule

Lebanon	Hamilton Springs	Martha	Mt. Juliet	Hermitage	Donelson	Riverfront
8:00 AM	8:07 AM	8:12 AM	8:21 AM	8:28 AM	8:40 AM	8:55 AM
10:35 AM	10:42 AM	10:47 AM	10:56 AM	11:04 AM	11:11 AM	11:30 AM
3:00 PM	**3:07 PM**	**3:12 PM**	**3:21 PM**	**3:29 PM**	**3:36 PM**	**3:55 PM**
Riverfront	Donelson	Hermitage	Mt. Juliet	Martha	Hamilton Springs	Lebanon
9:10 AM	9:21 AM	9:34 AM	9:42 AM	9:51 AM	9:56 AM	10:05 AM
1:45 PM	**1:56 PM**	**2:09 PM**	**2:17 PM**	**2:26 PM**	**2:31 PM**	**2:40 PM**
5:00 PM	**5:11 PM**	**5:24 PM**	**5:32 PM**	**5:41 PM**	**5:46 PM**	**5:55 PM**
10:00 PM	**10:12 PM**	**10:19 PM**	**10:27 PM**	**10:36 PM**	**10:41 PM**	**10:55 PM**

Figure 3.2 - Saturday Schedule Stringline Chart



3.2.3 Other Considerations

Subject to funding availability and feasibility of implementation, WeGo may also consider adding other types of services to the Preferred Option implementation to supplement existing Star service and provide additional solutions for mid-day travel and first/last mile challenges.

3.2.3.1 Mid-Day Regional Bus Service

WeGo may consider additional express bus service during the mid-day period to provide additional travel options for those traveling within the WeGo Star corridor. Mid-day regional bus service to Star commuter rail stations would provide the stakeholder requested increased service levels as well as address the perceived loss of service from the annulment of morning peak Star trips to increase evening service. Implementing mid-day regional bus service would require additional O&M funding as well as available vehicle fleet. Estimated operating costs to provide two mid-day regional round trips serving the WeGo Star's Wilson County stations and Riverfront Station is estimated at about $300,000 per year. This estimate is based an average cost of RTA's service data for commuter bus.

3.2.3.2 Alternative/Complementary Mobility Options

Another potential solution for WeGo to address requests for additional service and first/last mile connections to Star stations is alternative or complementary mobility options such as an expansion of the WeGo Link program or implementing a new microtransit service. Both the expanded WeGo Link and standalone options for additional service should, if implemented, be introduced as pilot programs so the agency has an opportunity to evaluate the program prior to making any permanent service changes.

3.2.3.3 *WeGo Link (Uber) Program*

The current WeGo Link program provides connecting WeGo Star service to only two stations: Donelson and Hermitage. The feasibility of expanding this program to cover all WeGo Star stations besides Riverfront (already well served by fixed route bus service) is being assessed for capacity and availability. The primary goal of expanding the WeGo Link program would be to provide first/last mile accessibility for all WeGo Star stations at a reasonable cost. Preliminary assessment of the feasibility of extending the WeGo Link program to additional Star stations indicates an adequate supply of service would be available, with average wait times around 10 to 15 minutes and fares averaging between $15 and $20 per trip.

3.2.3.4 *Microtransit*

Microtransit, or on demand service, is another possible consideration for providing additional service or a solution for first/last mile connectivity for WeGo Star riders. However, depending on how this type of service is implemented, it may not be the most cost-effective solution for WeGo. A cost benefit analysis and industry review of similar services should be completed prior to the undertaking of a pilot microtransit program.

4. Implementation

Implementation of the Transit Plan must take several schedule constraints and dependencies into consideration, including required time to:

- Obtain/authorize budget for local match (percentage subject to individual grant program requirements)
- Apply for and receive grant funding for the capital elements of the plan
- Complete infrastructure improvements (procurement, engineering, construction, etc.)
- Obtain/authorize budget for additional O&M expenses
- Negotiate, modify, and execute changes to the Tri-Party Agreement and O&M contract
- Recruit and retain required additional staff
- Public engagement/education of service changes

In October 2024, the RTA Executive Committee formally approved the WeGo Star Transit Plan. The next step in implementation of the Transit Plan is obtaining formal funding commitments from local jurisdictions for annually recuring and sustainable funding for the identified increased operations and maintenance costs.

4.1 Priorities

The Weekday and Saturday service changes for the Star are dependent on the use of the Martha siding, an approximately 3700 feet of track to be installed adjacent to the mainline track which will allow for passing movements and storage capacity. Because of this dependency and the long lead time for required activities, the first priority of the Transit Plan is completion of the Martha siding project.

It is possible that the addition of Saturday Service could be accomplished prior to the Martha siding being in place, but it may experience service impacts related to excursion trains operated by RJ Corman for the Tennessee Central Railway Museum, totaling 12 to 14 trains per year. However, the benefits of introducing Saturday Star Service to the public may outweigh the potential service disruption associated with this limited number of excursion trains.

4.2 Recommended Phased Approach

The recommended phased approach for implementing the Transit Plan focuses on advancing long lead time (critical path) activities such as securing funding for the Martha siding project and the increase to annual O&M costs. The 6-Month Action Plan outlines those activities which have the longest lead time and therefore should be advanced first.

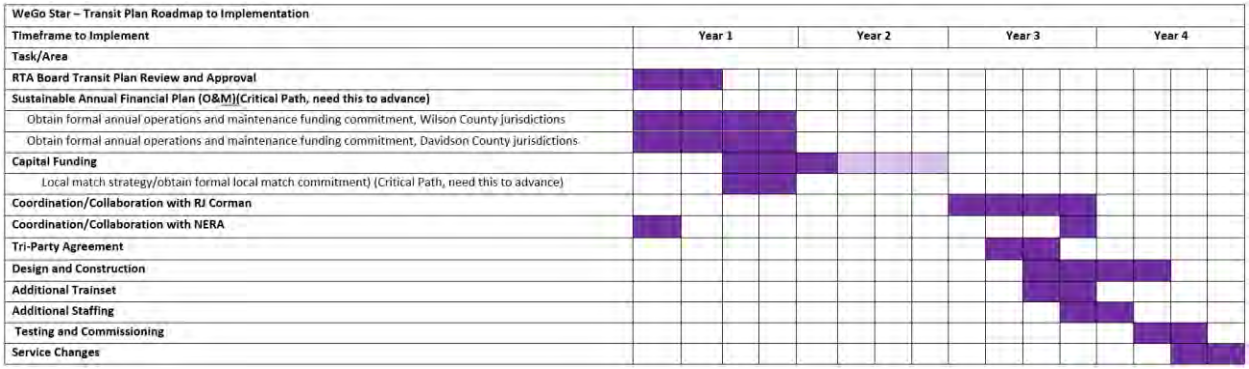
Should WeGo elect to implement Saturday Service prior to Weekday Service, project activities could be completed concurrently for both services, which would allow for quicker realization of some of the benefits of the Transit Plan through the introduction of Saturday Service to the public while allowing time for WeGo to identify, apply, and secure grant funding to advance the environmental, engineering, and construction elements of the Weekday Service implementation.

Significant time could be cut from the overall project schedule if local, regional, or private funding could be secured to begin the environmental and engineering elements of the Martha siding project sooner. It may take multiple grant cycles for WeGo to fund both the planning and construction stages, significantly increasing the time to complete the Martha siding project.

4.2.1 Roadmap to Implementation

A proposed high-level Roadmap to Implementation is provided in Figure 4.1, reflecting approximately 4 years to full implementation. A detailed Roadmap to Implementation with additional activities outlined can be found in Appendix A.

Figure 4.1 - Roadmap to Implementation (High Level)



4.2.2 6-Month Action Plan

Immediate actions for WeGo to take in advancing the Transit Plan in the next six months include:

1. Obtain/authorize budget for local match for O&M funding
2. Obtain/authorize budget for local match for capital funding
3. Negotiate, modify, and execute changes to the Tri-Party Agreement and O&M contract
4. Apply for grant funding for the Martha Siding project
5. If possible, advance planning and environmental activities for the Martha Siding project

5. Cost/Funding

Implementation of the Transit Plan requires both one-time capital investments and ongoing additional O&M costs. Estimates for both capital and O&M costs are summarized in Table 5.1 and

Table 5.2 respectively. These are high level estimates that will be further refined as the project progresses.

Table 5.1 - Estimated Capital Costs

Martha Siding (0.51 miles track and 2 interlockings)	$2,000,000 to 3,000,000
New Yard Track	$1,000,000
Additional Trainset	$1,200,000
Required MOW Capital Project Advancement	$5,000,000 to 10,000,000
Total Estimated Capital Costs	*$9.2 to $15.2 million*

Table 5.2 - Estimated O&M Costs

Additional Star O&M Expenses	$4,300,000
Midday Commuter Bus Service (optional)	$300,000
On-Demand Microtransit or WeGo Link Service (optional, priced as on-demand van service)	$2,200,000
Total Estimated Additional Annual Costs	*$6.8 million*

The funding required for a large and complex rail project like WeGo Star Transit Plan is significant. One of the largest opportunities for securing outside funding is through the various federal grant programs. In recent years, an increased amount of federal funding has been

devoted to the maintenance and expansion of the nation's transportation infrastructure through the Inflation Reduction Act (IRA), the Infrastructure Investment and Jobs Act (IIJA), and others. There is a wide range of opportunities available through various agencies including the Department of Transportation (DOT), Environmental Protection Agency (EPA), Federal Railroad Administration (FRA), the Federal Emergency Management Agency (FEMA), and others.

5.1 Grant Funding Programs

This section details federal grants programs that WeGo can utilize for future infrastructure capital projects for the WeGo Star. Federal grants for activities such as planning are not included here. An overview of each grant program, annual funding amounts, eligibility requirements, and match requirements are detailed for each grant program. This is not an exhaustive list but presents the grants that would be best suited to fund the recommendations in the WeGo Star Future Direction Strategy.

5.2 Department of Transportation Grant Programs

5.2.1 DOT's Mega Grant Program

The National Infrastructure Project Assistant or Mega Grant Program is part of the larger Multimodal Project Discretionary Grant (MPDG) initiative by the Federal Department of Transportation and is a significant funding source for what the department calls "transformative transportation infrastructure projects." These projects yield substantial improvements to transportation systems that are otherwise too complex or large in scale for other means of funding and stand to generate economic development, safety, and mobility benefits.[1] Past recipients of this award include Metra in the Chicago area, which received $117 million in FY2022 for its commuter railroad system that it was able to use in improving safety measures like rail and ridge refurbishment, and pedestrian infrastructure and lighting.[2]

- **Funding agency:** U.S. Department of Transportation (DOT)
- **Types of infrastructure funded:** Large, complex transportation projects such as highways, bridges, rail, and port infrastructure
- **Funding available FY2023-24:** $1.7 billion[3]
- **Maximum available per grant/project:** No explicit match but average grant amount was $155 million in the 2023-24 cycle[4] [5]
- **Number of projects funded in FY2023-24:** 11
- **Match required:** 20 percent by applicant award not to exceed 60 percent of project's overall costs [6]

5.2.2 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) discretionary grant program arose from the 2009 Recovery Act under its original name Better Utilizing Investments to Leverage Development (BUILD). It has also been known as the Transportation Investment Generating Economic Recovery (TIGER) program. This program is aimed at capital projects that generate a significant regional impact. Eligible projects are typically those that are multimodal or multi-jurisdictional and are therefore more difficult to

[1] Mega - Additional Guidance | US Department of Transportation
[2] MEGA FY2022 Combined Fact Sheet | US Department of Transportation
[3] MPDG Program | US Department of Transportation
[4] MEGA Fact Sheets FY2023-24 | US Department of Transportation
[5] MPDG Program | US Department of Transportation
[6] DOT Selects $1.2 Billion in Megaproject Awards for FY22 Cycle | The Eno Center for Transportation

fund through other DOT programs.[7] Its funds are available for both planning and capital expenses and can be used for activities related to passenger rail projects. Past recipients include the California High Speed Rail Authority who received $202 million in 2023 and the Charlotte Multimodal Transit Hub which was awarded $15 million in 2021.[8] [9] RAISE capital grants are subject to a benefit cost analysis of the project and are evaluated on their potential impacts on Areas of Persistent Poverty and Historically Disadvantaged Communities. Eligible recipients for this program are limited to public agencies, so funds would only be eligible for use on the publicly managed station and vehicle infrastructure rather than any expenses associated with the rail component, which is privately held.

- **Funding agency:** U.S. Department of Transportation (DOT)
- **Types of infrastructure funded:** Rail, roadway, and port projects that serve national development goals including "surface transportation components of transit-oriented development projects" [10]
- **Funding available FY2023-24:** $2.3 billion total ($1.5 billion for capital projects, the remainder was reserved for planning-related expenses)
- **Maximum available per grant/project:** Awards range from $5-25 million; limit of 15 percent of total fund ($345 million in last round) can go to a single state
- **Number of projects funded in FY2023-24:** 166 total, 121 capital projects
- **Match required:** 20 percent by applicant

5.3 Federal Rail Administration Grant Programs

5.3.1 Federal-State Partnership for Intercity Passenger Rail Grant Program

The intent of this program is to fund capital projects that improve the performance of, expand or establish new intercity passenger rail projects. Under the Federal-State Partnership for Intercity Passenger Rail Grant Program, eligible government agency applicants including states and state agencies can partner with privately-operated rail organizations to obtain funding. [11] Past awardees have included the Brightline West High-Speed Intercity Passenger Rail System Project from Las Vegas, NV to Ranch Cucamonga, CA where it connects to Los Angeles's Metrolink commuter rail service which was awarded up to $3 billion to begin in FY2022-23 with funding to continue through FY2024-26 with continued compliance.[12] This grant program is specifically intended to improve the efficiency and expand the frequency of passenger rail to entice ridership.

- **Funding agency:** Federal Rail Administration
- **Types of infrastructure funded:** Intercity passenger rail capital expenses including rail facility construction, signal improvements, overhauling rolling stock and others[13]
- **Funding available FY2022-23:** $8.9 billion, $4.5 billion reserved for Northeast Corridor
- **Maximum available per grant/project:** No explicit match but average deal amount was $809 million last cycle
- **Number of projects funded in FY2022-23:** 11
- **Match required:** 20 percent by applicant

[7] About RAISE Grants | US Department of Transportation
[8] The Federal Railroad Administration Awards $5.4 Billion for Rail Projects | High Speed Rail Alliance
[9] Rail News - USDOT awards $1 billion in RAISE grants for FY2021. For Railroad Career Professionals | ProgressiveRailroading.com)
[10] FY2024 RAISE NOFO | US Department of Transportation
[11] Federal-State Partnership for Intercity Passenger Rail Grant Program | Federal Rail Administration
[12] FY2022-23 Federal-State Partnership for Intercity Passenger Rail Program (National) Selections | Federal Railroad Administration
[13] Notice of Funding Opportunity for Projects Located on the Northeast Corridor for the Fiscal Year 2024 Federal-State Partnership for Intercity Passenger Rail Program | Federal Railroad Administration

5.3.2 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program

The Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program is an FRA-backed grant program that seeks to fund projects that improve and enhance efficiency, safety, and reliability of intercity passenger rail systems. This program has broad applications that are not strictly limited to capital expenditures. Eligible capital expenditures must directly address the challenges associated with rail congestion and facilitate ridership.[14] Funds are allocated as part of the Infrastructure Investment and Jobs Act (IIJA).[15] Based on previous NOFOs, the FRA favors projects that help to address the environmental justice issues particularly where disadvantaged communities are directly at risk of bearing the consequences of climate change and those that address racial inequity and transportation-related barriers to economic opportunity.[16]

- **Funding agency:** Federal Rail Administration
- **Types of infrastructure funded:** Intercity rail projects that enhance reliability, efficiency, and safety and can be used for improvements to locomotives, facilities, safety equipment, and environmental analyses among others
- **Funding available FY2023-24:** $2.5 billion total
- **Maximum available per grant/project:** Awards averaged $20 million in last cycle[17]
- **Number of projects funded in FY2022-23:** 70
- **Match required:** 20 percent by applicant

5.4 Environmental Protection Agency Grant Programs

5.4.1 State Grants: Diesel Emissions Reduction Act (DERA)

A key policy mechanism for the Environmental Protection Agency's (EPA) efforts to promote more sustainable transportation is the Diesel Emissions Reduction Act (DERA). Dating back to 2005, the various iterations of this program have built a broad national and state level grant and loan program specifically targeting and reducing environmental harm from diesel emissions. This state-specific grant program can be used towards the capital expenses associated with replacing, retrofitting, and upgrading conventional diesel engines with cleaner alternatives.[18] This has potential applications for both the locomotive engines used on the passenger rail system as well as any highway support vehicles, park-and-ride shuttles, and equipment like generators. For the state-level DERA two-thirds serves as base funding for participating states and territories. The other third is set aside to serve as an incentive for those states and territories that voluntarily match the amount equivalent to the base.[19]

- **Funding agency:** Environmental Protection Agency
- **Types of infrastructure funded:** State-level efforts to reduce environmental impacts of diesel emissions through the replacement or retrofitting of diesel engine equipment
- **Funding available FY2024:** $30 million[20]
- **Maximum available per grant/project:** Awards range from $5 - $25 million; limit of 15 percent of total fund ($345 million in last round) can go to a single state
- **Number of projects funded in FY2023-24:** Not available

[14] Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program | Federal Railroad Administration
[15] Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program | Federal Railroad Administration
[16] Notice of Funding Opportunity for the Consolidated Rail Infrastructure and Safety Improvements Program | Federal Railroad Administration
[17] FY 2022 Consolidated Rail Infrastructure and Safety Improvement Program Selections: Project Summaries | Federal Railroad Administration
[18] State Grants: Diesel Emissions Reduction Act (DERA) | US Environmental Protection Agency
[19] State Grants: Diesel Emissions Reduction Act (DERA) | US Environmental Protection Agency
[20] 2023-2024 Diesel Emissions Reduction Act (DERA) State Grants Program Guide State Grants | US Environmental Protection Agency

- **Match required:** 25 percent for non-road engines (ex. Locomotive), 50 percent for on-road engines

5.5 Federal Emergency Management Agency (FEMA)

5.5.1 Flood Mitigation Assistance Program

The landscape around the WeGo Star projects has a vulnerability to flooding and mitigating that risk is important to maintaining efficient and reliable services. FEMA's Flood Mitigation Assistance (FMA) grant program allocates funds to public agencies to retrofit buildings and structures to reduce the impacts of repeated flood damage, which can be applicable to select sites along the WeGo Star corridor. Funding is awarded at the state and territory level with the local community agencies signing on as sub applicants, so this program would require an extra level of coordination with the State of Tennessee.

- **Funding agency:** Federal Emergency Management Agency
- **Types of infrastructure funded:** improvements such as flood control channels and stormwater management structures
- **Funding available FY2023:** $800 million, $520 million of that is set aside for localized flood risk reduction projects
- **Maximum available per grant/project:** Localized flood risk reduction projects are capped at $50 million
- **Number of projects funded in FY2023-24:** 40 awards and 725 sub-awards[21]
- **Match required:** Varies based on the specific characteristics of the project

[21] Fiscal Year 2023 Notices of Funding Opportunities for Hazard Mitigation Assistance Grants | Federal Emergency Management Agency

6. Appendix A – WeGo Star Transit Plan Implementation Roadmap

Timeframe to Implement	Year 1				Year 2				Year 3				Year 4			
Task/Area																
RTA Board Transit Plan Review and Approval																
Review for information																
Review for approval																
Sustainable Annual Financial Plan (O&M) (Critical Path, need this to advance)																
Obtain formal annual operations and maintenance funding commitment, Wilson County jurisdictions																
Obtain formal annual operations and maintenance funding commitment, Davidson County jurisdictions																
Capital Funding																
Local match strategy/obtain local match commitment) (Critical Path, need this to advance)																
Prepare TDOT Improvement Act grant application																
Prepare FRA CRISI grant application																
Coordination/Collaboration with RJ Corman																
Align and refine schedule, operating plan, cost estimate, and implementation plan																
Contract amendments																
Coordination/Collaboration with NERA																
Obtain NERA Board support																
Tri-Party Agreement																
Amend to expand passenger operating windows to match new schedule																
Design and Construction																
Design/engineering																
Construction																
Additional Trainset																
Acquisition																
Refurbish																
Additional Staffing																
Recruit, train, certify																
Testing and Commissioning																
Static, Dynamic, and Integrated																
Service Changes																
Integrate regional midday bus (contract plus service planning)																
Integrate on-demand micro transit																
Implement new schedule																