Nashville MTA Board Meeting

WeGo Central
400 Dr. Martin L. King Jr. Blvd. | Nashville, TN 37219

November 21, 2019 | 2:30 p.m.

Board Members:
Gail Carr Williams, Chair
Janet Miller, Vice Chair
Glenn Farner
Hannah Paramore Breen
Walter Searcy

1. Call to Order
2. Approval of October 24, 2019 Minutes
3. Public Comments*
4. Operations & Finance Committee – Walter Searcy, Chair
   – Annual Audit Report
   – Proposed EasyRide Pilot Program
   – Resolution to Amend Gillig Purchase Contract
   – Gresham Smith Contract Extension
   – Trapeze Sole Source Agreement

5. New Initiatives & Community Engagement Committee – Janet Miller, Chair

6. Nashville MTA Committee & Board Meeting Schedule 2020 – Rita Roberts-Turner, CAO

7. Chair’s Report
8. Chief Executive Officer’s Report
9. Other Business
10. Adjourn

* Please keep all public comments to the Board within three minutes. Thank you *
I. **Call to Order:** The regular meeting of the Nashville Metropolitan Transit Authority (Nashville MTA) Board of Directors was held at WeGo Central, located at 400 Dr. Martin L. King Jr. Blvd., Nashville, TN 37219 on Thursday, October 24, 2019.

**Present:** Gail Carr Williams, Chair; Janet Miller, Vice Chair; Member; Walter Searcy, Member, Glenn Farner, Member; Margaret Behm, Secretary; and Stephen G. Bland, Chief Executive Officer.

**Absent:** Hannah Paramore Breen, Member

A quorum was established, and Chair Williams called the meeting to order at 2:43 p.m.

II. **Approval of Minutes:** Minutes of the September 26, 2019 board meeting were approved.

III. **Public Comments:** Chair Williams opened the floor for public comments. The public was reminded that comments were limited to three minutes.

**James Thomas**

Mr. Thomas reported the following:
- Bus 1803 charging ports are not working.
- Bus 732 was supposed to leave at 11:15 a.m., but didn’t arrive until 11:19 a.m.; driver arrived late and didn’t leave until 11:22 a.m.
- Bus 1816 charging ports are not working.

**Richard Forberg**

Mr. Forberg reported the following:
- He made the Board aware that the Greater Nashville Regional Council (GNRC) would host its’ Metropolitan Planning Organization 25-year Regional Planning effort (a federally required function every five years by the U.S. Department of Transportation). It goes through the necessary process of allocating highway dollars but can also be set aside for transit needs. Mr. Forberg stated that he hoped Nashville MTA and RTA would take advantage of this process in multiple ways to grow our public transportation system.
- He didn’t know if this could be used as dedicated funding, but it could be potential repeat sources of funding for these types of things.
- He stated our region can accomplish some of these long-term goals best by building more transit centers at the metro, regional, and neighborhood levels across our 10-county region, combined with managed high-occupancy vehicle (HOV) lanes and bus express routes.

**Peter O’Connor**

Mr. O’Connor reported the following:
- He would like for there to be extended bus and customer service hours.
- He would like consideration on his proposal for route 72.
- He said low-income people that have cars don’t always have money for parking.
• He got stuck Downtown at 4th and Church due to buses being rerouted at the last minute.
• He said drivers that are new to routes need to understand that regular passengers know the routes better than they do.
• The header signs and the side window signs aren’t working.
• On Route 52A - the end of the line stop needs to be moved to the rear side of Walgreens.

Darius Knight
Mr. Knight reported the following:
• He said that he was present to report the same bus maintenance issues that he reports on a monthly basis.
• He’s noticed that drivers aren’t writing buses up for repairs.
• On occasion, he’s had to report bus maintenance issues that happen in the back of the bus, because evidently drivers can’t feel what’s happening in the back of the bus.
• He reports the Donelson customers are complaining about drivers not arriving and departing per the on time
• More advertisement discussions need to be had amongst the Better Bus Committee.
• The new wraps look a lot better than the old wraps.

John Bull
Mr. Bull reported the following:
• He appreciates the new seven high quality cameras on the buses.
• He likes the new crosstown connectors; but modifications to need to be made to the 52 (at the Fairgrounds).
• He’s glad that the Nolensville bus stop is being addressed.
• He stated that we need dedicated funding to support extended hours.

James Terry Livingston
Mr. Livingston reported the following:
• He stated that he was present on behalf of the residents at Trevecca Towers Retirement Center on Murfreesboro Road. He said that due to the service changes that many of the residents are having issues with rude drivers who ignore passengers in wheelchair and on canes.
• He stated that the disabled passengers are having to stand for long periods of time because no one is willing to give up their seat on the bus for the disabled.
• He said that there are always a couple of bad apples, but overall, we have a great group of drivers.
• He stated that he felt like the Access Ride program was for the elderly and disabled passengers, however in reality, is only for the people that can afford it and not for the low-income people.

Glen Alan Graham
Mr. Graham reported the following:
• He mentioned the meeting regarding the proposed cutback and service changes a couple of months ago reminded him of what took place in 2008.
• He understands that we have to have a balanced budget, but at the same time we need to provide the city with a viable and valuable mass transit alternative to the increasing traffic crisis in this city.
• He didn’t like that we lost so many bus stops along the former BRT corridors.
• There is still a bus stop at 7th & Charlotte, but the drivers aren’t aware of this.
• He stated that we need forward-facing seats versus inward-facing seats.

Sealy Shannon (Written comment sent to Chair Williams)
Ms. Shannon reported the following:
• Eliminate bus stops with less than two blocks apart.
• Use more WeGo vans instead of full buses during non-peak periods, saving full buses for peak morning/afternoon transportation to town and for low-volume activity routes.
• Create fare cards (much like gift cards) that can be sold at retail stores (Target, Walmart, grocery stores, etc.)
• Have dedicated buses
  o Commuter buses that picks up from parking areas (Shopping malls, church parking lots, etc.) during morning commutes and make no other stops along the way.
  o “Fun Bus” that picks up from designated suburban parking areas for to transport people to the downtown area (Titans Stadium, Bridgestone Arena) for special activities, at a special rare of $20-$30 roundtrip per person
• Advertisement
  o Promote commuter bus with the downtown companies and/or government agencies
  o Coordinate with coffee shops to have kiosks at designated pickup points, as well as newspaper stands

There were no other public comments to come before the Board.

IV. Operations & Finance Committee Report: Committee Chair Searcy stated that there were no actions items to approve at this time. He, along with Board Chair Williams, asked that the Statement of Operations Compared to budget and the Upcoming Projects and Operation Statistics reports be included in the minutes.

V. New Initiatives and Community Engagement Committee Report: Vice Chair Miller stated that we reviewed Marketing Strategy and Advertising plans. There were no action items to approve at this time, but she said that the NICE Committee will carefully review and assess the new wraps.

Ms. Miller concluded her remarks by acknowledging and congratulating Board Chair Williams for being honored at the Academy of Women’s Achievement tonight at the Music City Convention, located at 501 Fifth Avenue South, Nashville, TN 37203.

VI. Chair’s Report: Chair Williams thanked CEO Bland and the WeGo staff for the hard work they do on a daily basis. She thanked the drivers in particularly for having to learn new routes and being flexible with route changes that are given in a short period of time. She also thanked the passengers for being patient with the drivers that have had to recalibrate at a moment’s notice.

She thanked CEO Bland for writing a lovely letter of recommendation on her behalf for the Academy of Women’s Achievement Award.

She concluded by saying that she liked the passport on the services changes.
VII. **CEO’s Report:** CEO Bland reported the following to the Board:

- He called everyone’s attention to page 10 in the Operations & Finance Committee packet, which listed significant upcoming procurements. Updating the information the Board members had, the Nolensville Stop Improvement Project was out to bid now, as were the last two items – Banking Services and Line of Credit. Bids for the Mt. Juliet Station Lot Expansion would be issued tomorrow.

- He stated that it’s been almost a month since we implemented the most significant service change in system history. Our stop and shelter crew have made tremendous progress in updating stops and shelters to coincide with the system revisions. Overall, changes went rather smoothly, and we were monitoring operations for adjustments that need to be made. We needed to address some overcrowding issues on the 8 and 55 routes, and we were monitoring schedule adherence on certain routes that will likely need schedule adjustments with our spring service changes. Among other changes we were examining was a routing change to the 73 Bell Road Connector to improve its connections with the Nolensville Pike service.

- It was far too early to draw any conclusions about the longer-term impacts of the service changes – particularly when combined with the impacts of our August 1 fare increase. However, preliminary figures showed revenue tracking well in September. After the fare increase, ridership adjusted for service hours declined just under 2% compared to the prior September, and revenue per passenger was up about 22%. With respect to the October service changes, results were even more preliminary, but comparing school days between October 2018 and 2019, total ridership was down 7.7%. Adjusting for the impact of the elimination of the Circuit, total ridership was down by about 2%.

- Last weekend, Nashville MTA held its’ Annual Family Fun Day event. Overall, 250 employees and retirees attended. As part of this event, we honored our retirees with special recognition for those who have retired in the past year. This past year, we had a total of 24 people retire.

- Next week, winners of our Roadeo event will compete against the best in the state at the Tennessee Public Transportation Association Roadeo Competition in Chattanooga. He stated that he didn’t want to jinx anything, but next month he expected to announce that we collected a whole lot of hardware at this event.

- We conducted our quarterly meeting with Federal Transit Administration (FTA) regional staff in Atlanta this past month. FTA continues to be satisfied with our progress on significant Nashville MTA and RTA projects. Also relative to the FTA, we received our triennial review report from them and are preparing our responses. We would report on their findings and our corrective actions at the Operations & Finance Committee meeting next month.

- Several Board members and staff were pleased to represent WeGo at the Public Education Hall of Fame Luncheon this past month where Gail and David Williams were honored for their many contributions to public education in the community.

- He attended the inauguration of Nashville Mayor John Cooper in September. Staffing of the Mayor’s Office was still in progress, and he would be meeting with several Mayor’s Office staff to discuss WeGo and general mobility issues next week. Notably, Mayor Cooper announced the appointment of Faye DiMassimo to head up transportation and infrastructure for his office. Ms. DiMassimo has extensive experience in mobility, holding several senior positions in the Atlanta region.
• At the invitation of Vice Mayor Jim Shulman, he gave a short presentation on transit and mobility issues that will face the Council in the coming four years, during a day-long orientation session held at Vanderbilt two weeks ago. As part of the session, he attended the full day where Council received briefings from a variety of departments and on a variety of issues. What was striking was how we all pointed out the interrelationships among our issues. As examples, both Education and Affordable Housing advocates pointed out the necessity for a robust public transportation network in advancing their efforts.

• Vice Chair Miller and CEO Bland would be participating on discussion panels for GNRC’s “Regional Convening on Transportation” next week. This event, which would be opened by Tennessee Governor Bill Lee, is a precedent to the Nashville Area Metropolitan Planning Organization updating the region’s long-range transportation plan over the coming year.

• RTA Items
  ▪ The first of four locomotives scheduled for rehabilitation on the WeGo Star has been placed in service, and the second is being scheduled for shipment to the rebuilder. The rebuilt locomotive features the new paint scheme featuring the WeGo Brand.
  ▪ Last week, the RTA Board awarded a contract for rebuilt passenger cars for the Star. This project would replace all passenger cars with newer equipment that has been completely refurbished to Federal Railroad Administration (FRA) Standards. These cars will be entering service in 2020.
  ▪ We will be issuing an invitation for bids for construction of the expansion to the Mt. Juliet Park & Ride lot tomorrow. This lot, which has been over capacity for some time, will see increased capacity by more than 100 cars as well as pedestrian and landscaping enhancements.

VIII. **Other Business:** There was no other business at this time.

IX. **Adjournment:** The meeting was adjourned at 3:25 p.m.
Nashville Metropolitan Transit Authority
of Nashville & Davidson County, Tennessee

Board Action Item

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<thead>
<tr>
<th>Item Number:</th>
<th>M-A-19-028</th>
<th>Meeting Date:</th>
<th>11/21/19</th>
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<tbody>
<tr>
<td>Item Title:</td>
<td>FY2019 Annual Audit Report</td>
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**BACKGROUND:**

The Comprehensive Annual Financial Report for the fiscal year ended June 30, 2019 is attached, and there will be hard copies available at the meeting. The attached copy of the audited Statement of Operations for FY2019 in the format normally presented to the Committee. We are pleased to report that the Nashville Metropolitan Transit Authority (Nashville MTA) once again received a “clean” opinion on the report from our auditors and that no material internal control weaknesses were encountered during the audit.

**RECOMMENDATION:**

The Operations & Finance Committee recommend to the Board the acceptance of the Comprehensive Annual Financial Report for the fiscal year ended June 30, 2019.

**APPROVED:**

____________________________________
Board Secretary

____________________________________
Date

November 21, 2019
## Metropolitan Transit Authority

### Statement of Operations Compared to Budget

**For the Period Ending June 30, 2019**

<table>
<thead>
<tr>
<th>Actual Month</th>
<th>Month Budget</th>
<th>Month End Variance</th>
<th>F / U</th>
<th>Prior Year Y-T-D</th>
<th>Actual Y-T-D</th>
<th>Budget Y-T-D</th>
<th>Y-T-D Variance</th>
<th>F / U</th>
<th>Annual Budget</th>
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**Revenue from Operations:**
- **Passenger Fares**: $652,295, $633,075, $19,220, F U $7,199,132, $6,733,178, $7,757,000, ($1,023,822) U $7,757,000
- **Access Ride**: 102,624, 76,101, 26,523, F U 852,456, 889,474, 864,900, 24,574 F 864,900
- **Contract Revenues**: 211,953, 220,322, (8,369) U 2,565,142, 2,651,805, 2,630,432, 21,373 F 2,630,432
- **Advertising**: 74,333, 83,500, (9,167) U 1,066,245, 905,027, 1,000,000, (94,973) U 1,000,000
- **Other Non-Trans Revenue**: 128,575, 92,098, 36,477 F 1,145,314, 1,284,788, 1,055,200, 229,588 F 1,055,200

**Total Operating Revenue**: 1,169,780, 1,105,096, 64,684 F 12,928,289, 12,464,272, 13,307,532, (843,260) U 13,307,532

**Federal/State/Local Income:**
- **Local Assistance**: 0, 0, 0 F 48,635,900, 48,635,900, 48,635,900, 0 F 48,635,900
- **State Assistance**: 88,355, 0, 88,355 F 4,723,500, 4,992,655, 4,904,300, 88,355 F 4,904,300
- **Federal Assistance - CMAQ**: 0, 0, 0 F 1,919,812, 427,374, 427,350, 24 F 427,350
- **Federal Assistance - JARC/New Free**: 96,236, 108,425, (12,189) U 1,310,667, 1,084,397, 1,301,110, (216,713) U 1,301,110


**Capital Revenue:**
- **Capital Operating Reimbursement**: 3,750,000, 5,621,924, (1,871,924) U 9,688,300, 13,121,925, 13,121,924, 1 F 13,121,924
- **Capital ADA Reimbursement**: 0, 0, 0 F 2,625,000, 2,625,000, 2,625,000, 0 F 2,625,000

**Total Capital Income**: 3,750,000, 5,621,924, (1,871,924) U 12,313,300, 15,746,925, 15,746,924, 1 F 15,746,924

**Total Revenue**: $5,104,371, $6,835,445, ($1,731,074) U $81,731,468, $83,351,523, $84,323,116, ($971,593) U $84,323,116

**Expenses from Operations:**
- **Labor and Fringes**: $4,954,884, $5,199,724, $244,840 F $56,913,356, $58,948,457, $59,692,767, $744,310 F $59,692,767
- **Services**: 828,421, 786,267, (42,154) U 8,829,759, 9,952,060, 9,294,560, (657,500) U 9,294,560
- **Fuel**: 378,401, 440,769, 62,368 F 4,427,080, 4,545,441, 5,330,280, 784,839 F 5,330,280
- **Parts, Materials and Supplies**: 386,017, 578,541, 192,524 F 6,544,101, 5,157,635, 6,205,556, 862,921 F 6,202,556
- **Utilities**: 107,723, 98,801, (8,922) U 1,253,906, 1,201,348, 1,267,100, 65,752 F 1,267,100
- **Casualty and Liability**: 169,067, 173,120, 4,053 F 2,160,628, 2,183,978, 2,121,800, (62,178) U 2,121,800
- **Other**: 27,632, 41,837, 14,205 F 652,151, 389,789, 596,053, 206,264 F 596,053

**Total Operating Expenses**: 6,852,145, 7,319,059, 466,914 F 80,780,981, 82,378,708, 84,323,116, 1,944,408 F 84,323,116

**Surplus / (Deficit) before GASB 33**: ($1,747,774), ($483,614), ($1,264,160) U $950,487, $972,815, $0, $972,815 F $0

**Capital Grant Revenue**: 2,471,341, 2,471,341, 0 F 18,648,773, 52,142,229, 52,142,229, 0 F

**GASB 75 OPEB Expense**: 0, 0, 0 F (4,007,119), (3,996,654), (3,996,654) U

**GASB 68 Pension Disclosure**: 0, 0, 0 F (897,283), 903,189, 903,189

**Depreciation**: (1,201,091), (1,201,091) U (15,720,801), (17,759,289), (17,759,289) U

**Surplus / (Deficit)**: ($433,075), ($483,614), $50,539 F ($547,363), $32,888,125, $0, $32,888,125 F $0
BACKGROUND:

The EasyRide Program is an employer-paid transit pass program to provide employee commuter benefits on Regional Transportation Authority of Middle Tennessee (RTA) and Nashville Metropolitan Transit Authority (Nashville MTA) services in Middle Tennessee under the name WeGo Public Transit. The program has been used predominantly by the State of Tennessee, Vanderbilt University, Vanderbilt University Medical Center, and Metro Nashville Public Schools, with several other smaller users.

Over the course of the past two performance audit reports conducted by the Office of the Tennessee Comptroller of the Treasury, RTA received findings relative to the lack of formal agreements between itself and employers participating in the EasyRide program. During review of the program, staff found that program pricing for the business community varied considerably, causing considerable confusion for the staff’s understanding of the program and how to sell it. This structure also causes disproportional staff management time every month to track revenue and ridership to prepare invoices. In addition, the lack of an established, consistent pricing structure with defined and predictable monthly or annual costs for participants is a significant barrier to program recruitment of the business community. Current and potential business customers have expressed a strong preference for a consolidated pass program – one which their employees could utilize a single pass for both Nashville MTA and RTA services. Although the original finding of the Comptroller of the Treasury recommended that RTA have individual contracts with each customer, staff expressed the verbal opinion that a consolidated program could work, provided that there was specific documentation relative to pricing structure and revenue splits between the Nashville MTA and RTA and that compensation to the RTA under the program was fair relative to overall use.

In order to both address the findings of the Comptroller of the Treasury and to expand usage of the EasyRide program, Nashville MTA and RTA want to revise the EasyRide program to address the following program objectives:

- All: Simplify program transportation benefits;
- All: Simplify program administration;
- All: Simplify program fee structure to better predict costs and revenues for annual budgeting;
- MTA/RTA: Protect existing program revenue;
- MTA/RTA: Grow program participation to increase overall ridership and operating revenue;
- MTA/RTA: Increase transparency between the two agencies on program revenue and ridership;
- Business Partners: Manage and reduce both direct and indirect transportation costs;
- Business Partners: Provide sustainable and competitive employee benefits.

Given the significant change anticipated in program structure and the varying needs of current and prospective business partners, it would be extremely difficult to recommend a specific structure to address these objectives at this time. As such, staff recommends that the Board authorize development of a pilot program, under which staff could work with existing and prospective EasyRide customers to test products and program structure with opener provisions to adjust arrangements as specific issues come to light. Following testing of these pilot programs, staff expects to return to the RTA and Nashville MTA boards with a recommended structure for more permanent adoption. As currently envisioned, based on discussions with business partners, the new program
will likely include at least two pass programs – a WeGo Per Tap Pass and a WeGo Annual Pass. As we refine the program and reach out to the business community, there may be other offerings to consider. However, whatever offerings come out of the revised program will have to meet the objectives defined above.

RECOMMENDATION:

The Operations & Finance Committee recommends to the Board to provide management the flexibility to work with the business community in developing and entering into pilot agreements for the EasyRide Program. These agreements would stay within the confines of the program objectives defined above and meet the overall requirements for greater formalization of the program as required by the Comptroller of the Treasury. At the point a new EasyRide Program has been developed, we will come back to the Committee and Board for discussion and possible approval of a new permanent EasyRide Program.

APPROVED:

____________________________________
Board Secretary

_________________________________
Date

November 21, 2019
Nashville Metropolitan Transit Authority  
of Nashville & Davidson County, Tennessee

Board Action Item

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<td>Item Title:</td>
<td>Resolution to Amend Gillig Purchase Contract</td>
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**BACKGROUND:**

In March 2019, the Board approved a purchase agreement with Gillig, LLC for the acquisition of 19 40-foot Low Floor Hybrid Diesel Electric Buses to replace vehicles that had reached the end of their useful life. The maximum amount of the purchase contract was $14,782,000 ($778,000 per bus) based on a hybrid diesel electric propulsion system. Funding has been secured through a competitive Federal Section 5339b grant, matched with Tennessee Department of Transportation (TDOT) and Metro Capital funds. Buses are scheduled for delivery during late 2020, with final configuration decisions required by mid-December.

Subsequent to this award, Operations staff conducted an evaluation of our hybrid diesel electric program and recommend the Board amend this purchase and planned future purchases for the immediate future of heavy-duty transit coaches from hybrid diesel electric to clean diesel propulsion. This recommendation is based on cost effectiveness, extreme challenges with the reliability of these systems, and very limited emissions benefit from the hybrid diesel electric technology. Additional explanations are below.

**Cost**

- Acquisition of hybrid diesel electric buses comes at a premium of $243,000 per bus (a 45% increase) relative to clean diesel; this purchase of 19 buses totals $4,617,000. Based on experience with our older hybrids, we are finding that in addition to the initial cost of the buses, the Battery and Hybrid Power Management Systems require significant overhaul at mid-life above and beyond normal mid-life bus rehabilitation activities. In January 2019, the Board approved a project in the amount of $1,482,222 to undertake this work on 21 older buses ($70,582 per bus), excluding labor.

- Acquisition and cost premium could be justified if it were offset by fuel cost savings from lower fuel consumption over the life of the bus. Our hybrid-electric fleet sees a 23% improvement in fuel efficiency relative to clean diesel buses of similar configuration and age. However, based on our current average utilization and fuel pricing (approximately 39,000 miles per year per bus and $2.00 per gallon for ultra-low sulfur diesel fuel at the present time). Annual fuel cost savings is only about $3,424 per bus or $41,000 over the 12-year life of the bus.

- The buses are being funded with Federal Transit Administration 5339(b) Competitive Bus and Bus Facilities funds that are specifically targeted toward “state of good repair” projects. For rolling stock, there is no restriction or preference given to propulsion type. As such, these funds can be used to acquire clean diesel buses, and the savings would be applied toward our next bus replacement project. In the past, we have used other types of funding (such as Congestion Mitigation Air Quality and 5339(c) Low/No Emissions Competitive Grant funds) in which clean diesel buses would not be eligible.

**Reliability**

- The most pressing concern with respect to our hybrid diesel electric fleet are reliability issues. Given the increasing volume of on-board accessories, power draws on the bus are significant. This requires heavy loads from the electrical system and is particularly exacerbated in summer months, when air conditioning is in high use. Our newest buses should be the most reliable, but we have observed the opposite. The
buses are performing well overall, but defects resulting from the hybrid drive system have created an inordinate number of out-of-service defects. These defects are costly in terms of technician repair time once out of warranty. They pull technicians from other necessary work and most often occur while the bus is in service, resulting in an excessive number of service disruptions. They also reduce the number of buses available for service, requiring us to retain additional older buses to enhance our spare ratio. The repairs required when the hybrid system malfunctions can be significant. Voltage spikes created by defects in the hybrid system can damage air conditioning motors and other sensitive on-board equipment that is very expensive to repair.

- Out of 55 buses delivered from 2017-2019, we have experienced 435 out-of-service defects caused by the hybrid propulsion system on 46 buses. On an average day, 5% of the fleet is out of service for defects solely related to the hybrid drive system. The frequency of failure would be significant alone but is made worse by the fact that most of these failures occur when the bus is either in service, or immediately before entering service, which results in service disruption and/or delay. Engineering staff from the bus manufacturer and hybrid drive supplier have spent extensive time on the property and have not yet been able to isolate a root cause.

**Emissions**

- Since the Nashville MTA began acquiring hybrid-electric buses in 2009, Environmental Protection Agency (EPA) Standards for diesel emissions have decreased. This resulted in the Clean Diesel engine, which significantly reduces emissions through the introduction of particulate traps and urea injection, as well as increasingly sophisticated electronic engine controls and the use of ultra-low sulfur diesel fuel. As such, the emissions from a current model year clean diesel bus will be lower than that of our earlier version hybrid-electric buses, especially for particulate matter. The pollutants of most concern with respect to diesel engines are nitrogen oxides (NOx) and particulate matter (PM). The table below compares evolving EPA standards for these emissions and the current level of actual emissions from the engines in our fleet, as certified by the California Air Resources Board:

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<thead>
<tr>
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<th>NOx*</th>
<th>PM*</th>
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<tbody>
<tr>
<td>2002 EPA Standard</td>
<td>2.4</td>
<td>0.1</td>
</tr>
<tr>
<td>2007 EPA Standard</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>2010 EPA Standard</td>
<td>0.2</td>
<td>0.01</td>
</tr>
<tr>
<td>2019 Cummins 6.7-liter engine (used on hybrids)</td>
<td>0.14</td>
<td>0.002</td>
</tr>
<tr>
<td>2019 Cummins 8.9-liter engine (used on clean diesel)</td>
<td>0.17</td>
<td>0.001</td>
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*Measurements are in grams per brake-horsepower hour.

- Emission reduction through the hybrid diesel electric program is accomplished through the reduced emissions of the underlying diesel engine (the 6.7-liter Cummins) and the 23% reduction in clean diesel engine use due to the electric propulsion system. We anticipate emissions to be more than 50% lower with the clean diesel fleet, which accounts for greater use of the clean diesel engine. NOx emissions are approximately 66% higher on a unit basis with the clean diesel bus but still substantially lower than historic experience.
RECOMMENDATION:

The Operations & Finance Committee recommends to the Board to amend the existing purchase contract with Gillig, LLC for the acquisition of 19 40-foot Low-Floor Hybrid Diesel Electric buses to the acquisition of 19 40-foot Low-Floor Clean Diesel Buses, and that the total sum of this purchase be reduced from $14,782,000 ($778,000 per bus) to $10,165,000 ($535,000 per bus). Funding for this purchase will still be comprised of 2018 Federal 5339b discretionary award funding, matched by the TDOT and Metro Capital funding.

APPROVED:

__________________________________________  ____________________________  
Board Secretary                              Date

November 21, 2019
BACKGROUND:

In December 2015, Nashville Metropolitan Transit Authority (Nashville MTA) awarded Gresham Smith and Partners (GS&P) an Indefinite Delivery, Indefinite Quantity (IDIQ) Contract for three years for a not-to-exceed amount of $2 million with two additional one-year options. The original three-year term expired on December 17, 2018. In April 2018, the Board approved a one-year extension until December 31, 2019, and an increase in the not-to-exceed amount to $3 million. This contract allows Nashville MTA to retain a qualified professional architectural and engineering firm to perform services associated with any projects or lease holding improvements necessary to maintain and improve the Nashville MTA operations on a task order basis. The agreement contains reasonable and competitive hourly rates that were negotiated prior to contract execution.

CURRENT STATUS

The contract expires on December 31, 2019. Current contract allocation is approximately $2.6 million with approximately $2.1 million invoiced to date. Nashville MTA is engaged in multiple projects using these services, including the Murfreesboro Pike Transit Signal Priority (TSP) project and the Hillsboro Transit Center, and expects to continue these projects through completion. Given current project allocations, the Murfreesboro Pike TSP project task order requires supplemental funding and Board authorization.

- Project Management support for the Murfreesboro Pike TSP project has been overseen by GS&P for several years. Nashville MTA uses GS&P to provide a consistent level of professional project management and coordination of the project with the Federal Transit Administration (FTA) along with maintaining a collaborative team environment with all stakeholders under the oversight of Nashville MTA. In April 2018, the Nashville MTA Board approved a not-to-exceed value of $500,000 associated with this effort. The project schedule has been extended until December 2020 to include project closeout, software implementation, and project liquidation with the FTA. With this project schedule extension, an additional $143,000 is required. Funding for this effort has been identified using project contingency funds via Congestion Mitigation and Air Quality (CMAQ) and local funding.

RECOMMENDATION:

The Operations & Finance Committee recommends to the Board to provide the Chief Executive Officer the authority to execute a one-year contract extension through December 31, 2020 with GS&P and increase the not-to-exceed value of the entire contract from $3 million to $3.5 million.

Additionally, we request the Committee to recommend to the Board provide the Chief Executive Officer the authority to amend the task order under this contract for the continued support of the Murfreesboro Pike TSP project to reflect an increase in not-to-exceed value from $500,000 to $643,000.

Funds are available in the previously identified funding sources as identified in the Nashville MTA Capital Plan to cover the additional costs associated with this contract.
Nashville Metropolitan Transit Authority
of Nashville & Davidson County, Tennessee

Board Action Item

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<th>M-A-19-032</th>
<th>Meeting Date:</th>
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<tbody>
<tr>
<td>Item Title:</td>
<td>Trapeze Sole Source Agreement</td>
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BACKGROUND:
Trapeze Group enterprise software and hardware products are used by WeGo Public Transit for a variety of operations, including route scheduling, fixed-route operations, Access, payroll, real-time information, call center operations, and customer information. Each year, Trapeze Group provides notice of its warranty and maintenance fees for the various products the company provides.

In October 2018, the Nashville Metropolitan Transit Authority (Nashville MTA) Board of Directors approved sole source support/warranty and maintenance expenses for Trapeze software products for the FY2019 operational budget in the amount of $730,000.

In addition, future software and hardware purchases are required to maintain and improve WeGo services. These capital and/or operational expenses have been calculated not to exceed $2 million. Recent software and hardware enhancements include, but are not limited to, TripBroker, Transit Signal Priority improvements transfer Computer Aided Device/Automatic Vehicle Location (CAD/AVL) hardware to new vehicles, View Point Business Intelligence for analytical reporting; and software enhancements, such as payroll, support/maintenance and replacement parts. All future Trapeze software and hardware purchases would be task order based on available funds.

RECOMMENDATION:

In order to maintain the level of maintenance support under Information Technology operations, the Operations & Finance Committee recommends to the Board to approve a sole source support/warranty and maintenance agreement for $769,544 with an additional not-to-exceed amount of $2 million for future enhancements for a total of $2,769,544.

APPROVED:

______________________________
Board Secretary

November 21, 2019
Date
Nashville Metropolitan Transit Authority  
of Nashville & Davidson County, Tennessee

Board Action Item

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<tr>
<th>Item Number:</th>
<th>M-A-19-033</th>
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<tbody>
<tr>
<td>Item Title:</td>
<td>Nashville MTA 2020 Committee &amp; Board Meeting Schedule</td>
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**BACKGROUND:**

Attached is the proposed schedule for the 2020 committee and board meetings. Notes for some of the dates are as follows:

- July 23 – Historically, the Nashville Metropolitan Transit Authority (Nashville MTA) Board chooses to have an abbreviated meeting either as a board or a committee in July.

- November 19 – Thanksgiving falls on the fourth Thursday, so the November meeting will be on the third Thursday.

- December 17 – In recent years, the Nashville MTA Board has met earlier in December to free up the week prior to Christmas for travel and family plans for Nashville MTA Board members and staff.

**RECOMMENDATION:**

We recommend the proposed 2020 meeting dates be adopted and approved by the Board.

**APPROVED:**

______________________________  ________________________  
Board Secretary  Date

November 21, 2019
2020 MTA Board Meetings Schedule

Location:

**WeGo Central Office**
400 Dr. Martin L. King Jr. Blvd.
Nashville, TN 37219

<table>
<thead>
<tr>
<th>Month</th>
<th>Committee &amp; Board Meeting</th>
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<tbody>
<tr>
<td>January</td>
<td>23</td>
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<td>February</td>
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<td>March</td>
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<td>November</td>
<td>19*</td>
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<tr>
<td>December</td>
<td>17*</td>
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* These dates ARE NOT the fourth Thursday of the month.