

GRANT APPLICATION SUMMARY SHEET

Grant Name: TDEC Waste Reduction 19-20
Department: PUBLIC WORKS
Grantor: TENNESSEE DEPT. OF ENVIRON. & CONSERVATION
Pass-Through Grantor (If applicable):
Total Applied: \$500,000.00
Metro Cash Match: \$500,000.00
Department Contact: Sharon Smith
 862-8715
Status: NEW

Program Description:
 Funding for curbside recycling trucks.

Plan for continuation of services upon grant expiration:
 N/A

APPROVED AS TO AVAILABILITY OF FUNDS:

APPROVED AS TO FORM AND LEGALITY:

Homayooni 6-20-18
 Director of Finance Date
 /K #

nick sli 6/22/18
 Metropolitan Attorney Date

APPROVED AS TO RISK AND INSURANCE:

I-3CW 6/22/18
 Director of Risk Management Date
 Services

Dawn King 6.22.18
 Metropolitan Mayor Date

(This application is contingent upon the approval of the application by the Metro Council).



STATE OF TENNESSEE
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 DIVISION OF SOLID WASTE MANAGEMENT
 MATERIALS MANAGEMENT PROGRAM
 WILLIAM R. SNODGRASS TENNESSEE TOWER
 312 ROSA L. PARKS AVENUE, 14TH FLOOR
 NASHVILLE, TN 37243

RESET
PRINT

← RETURN APPLICATION TO THIS ADDRESS

DATE

GRANT APPLICATION

1. APPLICATION IS FOR:

RECYCLING EQUIPMENT USED OIL WASTE REDUCTION OTHER _____

2. APPLICANT INFORMATION

AGENCY / ORGANIZATION NAME: **Metro Government of Nashville & Davidson County** FEIN#: **620694743**

ADDRESS: **750 S. 5th Street** CITY: **Nashville** STATE: **TN** ZIP: **37206** TN COUNTY: **DAVIDSON**

3. TYPE OF ORGANIZATION

COUNTY SOLID WASTE AUTHORITY FOR PROFIT ORGANIZATION PROPRIETORSHIP NOT FOR PROFIT ORGANIZATION

MUNICIPALITY PLANNING REGION CORPORATION PARTNERSHIP OTHER (SPECIFY)

3a. NON-PROFIT ORGANIZATION

CHARTERED IN TENNESSEE? DATE OF CHARTER IRS CLASSIFICATION ATTACH A COPY OF APPROVAL LETTER FOR CHARTER OR 501(c)(3) EXEMPTION

YES NO

4. CONTACT PERSON PROVIDE NAME OF PERSON RESPONSIBLE FOR ALL GRANT ACTIVITIES (i.e. BIDDING, PURCHASING)

CONTACT PERSON NAME: **Sharon Smith** PHONE: **(615) 862-8715** FAX: **(615) 862-8799** E-MAIL: **sharon.smith@nashville.gov**

MAILING ADDRESS: **750 S. 5th Street** CITY: **Nashville** STATE: **TN** ZIP: **37206**

5. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

→ **Assistant Director**
 SIGNATURE OF AUTHORIZED REPRESENTATIVE TITLE

Sharon Smith **06/08/2018**
 PRINTED NAME DATE

(615) 862-8715 **sharon.smith@nashville.gov**
 PHONE NUMBER EMAIL ADDRESS

OFFICIAL USE ONLY

REVIEWER'S SIGNATURE DATE NOTES:

Tennessee Department of Environment & Conservation
Waste Reduction Grant Application – Metropolitan Government of Nashville & Davidson County

I. ESTABLISHMENT OF PRIORITY

Metro Nashville & Davidson County is one of the top 5 counties by population. On this project, Metro Nashville Public Works will be partnering with the Recycling Partnership a national recycling nonprofit organization with the goal to improve recycling in the United States. The Recycling Partnership has committed raising \$500,000 to be use to match funds for the purchase of trucks for Nashville's curbside recycling expansion. In addition, the Recycling Partnership has offered \$150,000 of in-kind technical assistance.

II. PROJECT DESCRIPTION & REGIONAL PLANNING

1. The goal of this project is to expand Metro Nashville's monthly curbside recycling collection to every other week (EOW) in two phases over the next two Fiscal Years. The first year, FY19, Metro will purchase approximately \$4.18 million in capital equipment. This grant application will cover part of the cost to purchase the recycling trucks that will be used for EOW recycling.

Increasing curbside recycling pickup to an every-other-week schedule is a clear priority in both the Livable Nashville near-term recommendations, as well as Metro's Zero Waste Master Plan currently under development. Most of Nashville's peer (Louisville, Memphis, Indianapolis, Raleigh) and aspirational (Austin, Denver, Minneapolis, Seattle) cities offer curbside recycling collection, either weekly or EOW. Many cities have found EOW to be the ideal frequency for residents to remember collection-times and thus develop habits around them—effectively managing municipal collection costs while maximizing landfill diversion.

The Research done by the Recycling Partnership showed potential savings associated with an increased diversion-rate of 5% to 15% – an estimated range based on what other cities have experienced upon launching their EOW programs. Further savings would be realized beyond FY20 as EOW's impact grows.

2. Key activities of this project will be the following:
 - a. FY19 (July 1, 2018 – June 30, 2019)
 - i. Metro Public Works will apply for grant funding to help offset the cost of capital purchases. As part of this process, Metro Government will solicit competitive bids for the purchase the following equipment:
 1. 10 Side-Loading 28YD Automated Recycling Trucks
 2. 5 Rear-Loading 18YD Semi-Automated Recycling Trucks
 3. 1 Rear-Loading 6YD Recycling Truck
 - ii. FY20 (July 1, 2019 - June 30, 2020)
 1. As part of the FY20 budget process, Metro Public Works will submit the operation cost of EOW recycling. This request will include funding for:
 - a. 14 full-time employees to provide collection and outreach

b. A recycling education and outreach campaign

3. This project will expand Metro Nashville's monthly curbside recycling program to EOW. Metro Public Works provides waste and recycling collection in the Urban Services District of Nashville & Davidson County. Public Works currently provides weekly trash collection and monthly curbside recycling collection to 131,698 homes. All the 131,698 customers will have access to the expanded EOW recycling program.
4. Material Collection Map is attached showing Nashville's Urban Services District (see attachment 1)
5. All equipment purchased will be similar to existing trucks used for Nashville's monthly curbside recycling collection. Public Works currently uses side-loading and rear-loading recycling trucks for monthly curbside recycling collection.

III. MATERIAL MANAGEMENT & DIVERSION

1. Metro's curbside recycling program collects the following items:
 - a. ALL PAPER & BOXES : office paper, magazines, junk mail, newspaper, computer paper, notebook paper, phone books, paperback books, construction paper, brown paper bags, milk or juice cartons (including gable top and aseptic containers), cardboard boxes, food boxes, etc.
 - b. ALL PLASTIC BOTTLES & CONTAINERS: drink bottles and their caps, detergent & cleaner bottles and their caps, yogurt/cottage cheese and other dairy "tubs" and their lids and plastic trays, such as the lunchable type containers.
 - c. ALL METAL & ALUMINUM CANS: empty food and drink cans, empty aerosol cans, foils and trays.

All items are collected commingled in 96 rolling recycling carts. The chart below shows the last three fiscal years of material captured for recycling.

| Fiscal Year | Tonnage |
|-------------|-----------|
| 2015 | 11,645.61 |
| 2016 | 11,640.10 |
| 2017 | 11,741.28 |

Research conducted by the Recycling Partnership conservatively estimated an additional 5% of all landfilled waste could be diverted by providing more frequent curbside recycling collection. The table below shows the projected potential diversion at 5% and at 15%.

| | FY 17 Tons | +5% Diversion | +15% Diversion |
|-------------------------------|------------|---------------|----------------|
| Curbside Trash Collection | 112,610 | 106,980 | 95,719 |
| Curbside Recycling Collection | 11,740 | 17,371 | 28,632 |

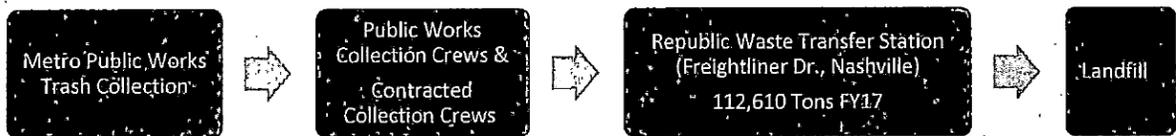
2. No additional material are planned to be added at this time. Research done by the Bloomberg Associates showed Nashville's peer cities that provided weekly or EOW curbside recycling had much higher capture rates than Nashville ranging from 6% of the total landfilled waste in Indianapolis to 59% in Seattle.

In addition, as part of Metro Nashville's Long-term Zero Waste Master Plan still in process, Metro plans to develop "save as you throw" methods to help provide

additional incentives for residents to recycle. Some of these methods include fees for customers using additional trash carts and enforcement of material bans (current materials bans for Davidson County include cardboard, yard waste and electronics).

3. Operationally, this proposal is consistent with current Public Works operations and merely expands current monthly collection to EOW. The charts below show the flow of waste and recycling material collected by Metro Public Works and contractors. The flow of material includes disposal and/or transportation to material markets.

Waste Collection Flow:



Curbside Recycling Collection Flow:



Metro has a recycling processing contract with Waste Management. As shown above, all recyclables are delivered to their Riverhills facility for processing, baling and transportation to markets. All material marketing is handled directly by Waste Management.

4. In addition to this project, Metro Public Works has started a volunteer neighborhood recycling ambassadors program focused particularly in areas of Nashville with low curbside recycling participation and high contamination. The ambassadors are able to distribute related information and resources, answer questions related to waste reduction and recycling and provide new, larger recycling cart stickers with clear instructions in English and Spanish on what can be recycled at the curb.

IV. EDUCATION PLAN

1. As part of Metro's on-going efforts to improve recycling participation and reduce contamination, department staff is in the process of rolling out our "Re-educate on Recycling" program. This program is aimed at reaching residents in Nashville that either don't know about their waste reduction and recycling opportunities or need some

support on how and what to recycle. Our overall message is that citizens in Nashville need to recycle. Our goal is to increase recycling tonnage and participation in Nashville by 10% during the grant period (this project has been funded as part of a TDEC Education & Outreach Grant). The target audience for the education plan will be all residents with access to curbside recycling through Metro Public Works.

Over the past several years recycling tonnage has remained stagnant despite a significant rise in population. A strong variable that has been missing, and we predict will have an impact, is education directly to the residents. We intend to achieve this through the following ways:

- a. The volunteer neighborhood ambassador program mentioned in Section V.
- b. Working with the Recycling Partnership to developing better recycling cart decals with updated graphics. (See Attachment 2)
- c. Using "oops tags" through our front-line staff to tag carts with contamination while also explains what can be recycled. (See Attachment 3)
- d. Implementing a digital marketing plan by doing outreach and education through newsletters, council communications, social media channels, the Metro Nashville Network, Craigslist, and NextDoor.
- e. Engaging more community organizations to help us spread the word about recycling through their digital channels.
- f. Delivering educational presentations to small businesses, neighborhood groups, community organizations and faith communities through partnerships with Turnip Green Creative Reuse and other non-profit organizations.
- g. Begin route audits to specifically target contamination and residents that need guidance on recycling right.

2. Project Timeline

- a. January-May 2018: Prepare design for stickers in collaboration with Recycling Partnership and order them following metro procurement standards. Begin neighborhood ambassador program. Meet with local MRF and front-line staff to get feedback on areas of greatest contamination and need. Tonnage gathered and compared monthly.
- b. June 2018: Neighborhood Recycling Ambassador program in full swing. Digital marketing methods are fully implemented. Front line staff implementing oops tags. Recycling route audits with resident follow up being implemented.
- c. July 2018: Place educational signage on new recycling trucks (See Attachment 4) showing what can be placed in curbside recycling containers. These trucks will act as rolling billboards throughout the county (this portion was funded via the TDOT Litter Grant).
- d. Ongoing: Following meeting with all invested parties (MRF, staff, lead volunteers) to discuss progress. Post contamination study to complete grant proposal and to track progress. Continue tracking tonnage, number of household reached, etc.

3. The educational message of this program is focused on educating people about what can be recycled and the importance of participating in Nashville's curbside recycling program. Educational messaging will also focus on proper ways to recycle that will reduce contamination such as not bagging recyclables.

4. Partners in education portion of the project include TDEC through funding of the Education & Outreach Grant, TDOT through the annual litter grant to provide signage on recycling trucks and the Recycling Partnership who developed recycling cart decals and oops tags. Public Works will also partner with Turnip Green Creative Reuse to help with conducting recycling educational programs for adults and children.

V. PROJECT SUSTAINABILITY

1. See attached
 - a. Equipment Priority Worksheet
 - b. Grant Budget Worksheet
 - c. Vehicle Specifications (See attachment 5)

2. Funding of operational expenses will come from the General Fund, revenue from recyclable material and cost savings in landfill tipping fee reductions. Research conducted by the Recycling Partnership showed that Metro stands to save significant funds on curbside-recycling operations by avoiding landfill tipping-fees for recycled waste. The chart below conservatively models near-term savings associated with an increased diversion-rate of 5% to 15% – an estimated range based on what other cities have experienced upon launching their EOW programs. Further savings would be realized beyond FY20 as EOW's impact grows.

| | FY 17 Tons | +5% Diversion | +15% Diversion |
|---|-------------------|----------------------|-----------------------|
| Curbside Trash Collection | 112,610 | 106,980 | 95,719 |
| Curbside Recycling Collection | 11,740 | 17,371 | 28,632 |
| Incremental Savings from Tipping Fee Reduction (\$36.94/ton) | | \$207,990 | \$415,981 |

3. See attached Metro General Services, Fleet Division's Acquisition Policy (See Attachment 6)

4. The plan will be evaluated in two ways by the Metro Public Works staff. First, Metro currently has approximately 75% of the total eligible homes participating in the monthly curbside recycling program. The success of the EOW program will be evaluated in the increased number of residents participating in curbside recycling. Secondly, as recycling because more frequent and participation increases, the program will be evaluated on the increase in tonnage recycled and decrease in tonnage landfilled. Sharon Smith, Assistant Director for Metro Public Works will be responsible for performing the evaluation.

Narrative Prepared by: Sharon Smith
Name of Preparer's Organization: Metro Nashville Public Works
Telephone: 615-862-8715
Email Address: Sharon.smith@nashville.gov

Equipment Priority Worksheet

Project Name: Metro Nashville Every Other Week Recycling

Vendor Number: Edison ID 54038 Edison Vendor ID 0000000004

Identify project equipment and facility improvements requested. As the grant may not fully fund proposed project, provide in priority order the ranking of equipment. Identify project dependent equipment first. Identify the quantity, documented estimate unit cost for each equipment type. Indicate the storage location (primary or home) where applicant will maintain equipment. When complete transfer appropriate information to the Grant Budget Worksheet.

| A. Eligible Equipment (Capital Purchases) | B. Priority Order | C. Quantity | D. Documented Estimate Unit Cost | E. Total Cost | F. Location(s) |
|--|-------------------|-------------|----------------------------------|----------------|----------------|
| Recycling Carts with RFID, Specify Capacity: | | | | | |
| Recycling Collection Container, Specify Capacity: | | | | | |
| Roll Off Containers, Specify Size: | | | | | |
| Compactor (Recycling Only) | | | | | |
| Receiver Box, Specify Size: | | | | | |
| Truck with gross vehicle weight rating (GVWR) of 10,000 pounds or higher | 1 | 10 (28YD) | \$330,000.00 | \$3,300,000.00 | |
| Truck with gross vehicle weight rating (GVWR) of 10,000 pounds or higher | 1 | 5 (18 YD) | \$258,000.00 | \$1,290,000.00 | |
| Truck with gross vehicle weight rating (GVWR) of 10,000 pounds or higher | 1 | 1 (6YD) | 126,500.00 | \$126,500.00 | |
| Chippers | | | | | |
| Densifier | | | | | |
| Grinders | | | | | |
| Waste-to-Energy, Specify: | | | | | |
| Forklift | | | | | |
| Skid Steer Loader | | | | | |
| Infrastructure development, Specify: | | | | | |
| Professional fees, Specify: | | | | | |
| Other: | | | | | |
| (Total all Light Green Columns) Sub-Total: | | | | \$4,715,500.00 | |
| (Total all Light Blue Columns) Sub-Total: | | | | | |
| (Total all Light Green and Blue Columns) Total Amount Requested: | | | | \$1,000,000.00 | |

Continue:

Enter sum of column E. for light green into Sub-Total Row 1 in Budget Sheet Item "20-Capital Purchase in the first column "Grant Contract"

Enter sum of column E light blue into sub-Total Row 2 AND in the Budget Sheet Item-"4,15-Professional Fee, Grant Award" in the first column "Grant Contract"

Enter sum of column E Sub-Totals light green and light blue in Total Row 3 AND in Budget Sheet "25 Grant Total" in the first column "Grant Contract"

Enter Grantee Match Percent Here: 50% County Tier Here: 2

Attachment #2 GRANT BUDGET WORKSHEET

The grant budget line-item amounts below shall be applicable only to expense incurred during the following
Applicable Period: _____ **Application for Fiscal Year:** _____

| POLICY 03 Object Line-item Reference | EXPENSE OBJECT LINE-ITEM CATEGORY ¹ | GRANT CONTRACT | GRANTEE PARTICIPATION ³ | TOTAL PROJECT |
|---|---|-------------------|---------------------------------------|-----------------------|
| 1, 2 | Salaries, Benefits & Taxes | | | |
| 4, 15 | Professional Fee, Grant & Award ² | | | |
| 5, 6, 7, 8, 9, 10 | Supplies, Telephone, Postage & Shipping, Occupancy, Equipment Rental & Maintenance, Printing & Publications | | | |
| 11, 12 | Travel, Conferences & Meetings | | | |
| 13 | Interest ² | | | |
| 14 | Insurance | | | |
| 16 | Specific Assistance To Individuals | | | |
| 17 | Depreciation ² | | | |
| 18 | Other Non-Personnel ² | | | |
| 20 | Capital Purchase ² | \$500,000.00 | \$500,000.00 | \$1,000,000.00 |
| 22 | Indirect Cost | | | |
| 24 | In-Kind Expense and Forced Account | | | |
| 25 | GRAND TOTAL | | | \$1,000,000.00 |

¹ Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, *Uniform Reporting Requirements and Cost Allocation Plans for Subrecipients of Federal and State Grant Monies, Appendix A*. (posted on the Internet at: <http://www.state.tn.us/finance/act/documents/policy3.pdf>).

² Applicable detail follows this page if line-item is funded.

³ A Grantee Match Requirement is detailed by this Grant Budget, and the maximum total amount reimbursable by the State pursuant to this Grant Contract, as detailed by the "Grant Contract" column above, shall be reduced by the amount of any Grantee failure to meet the Match Requirement.

NOTE:

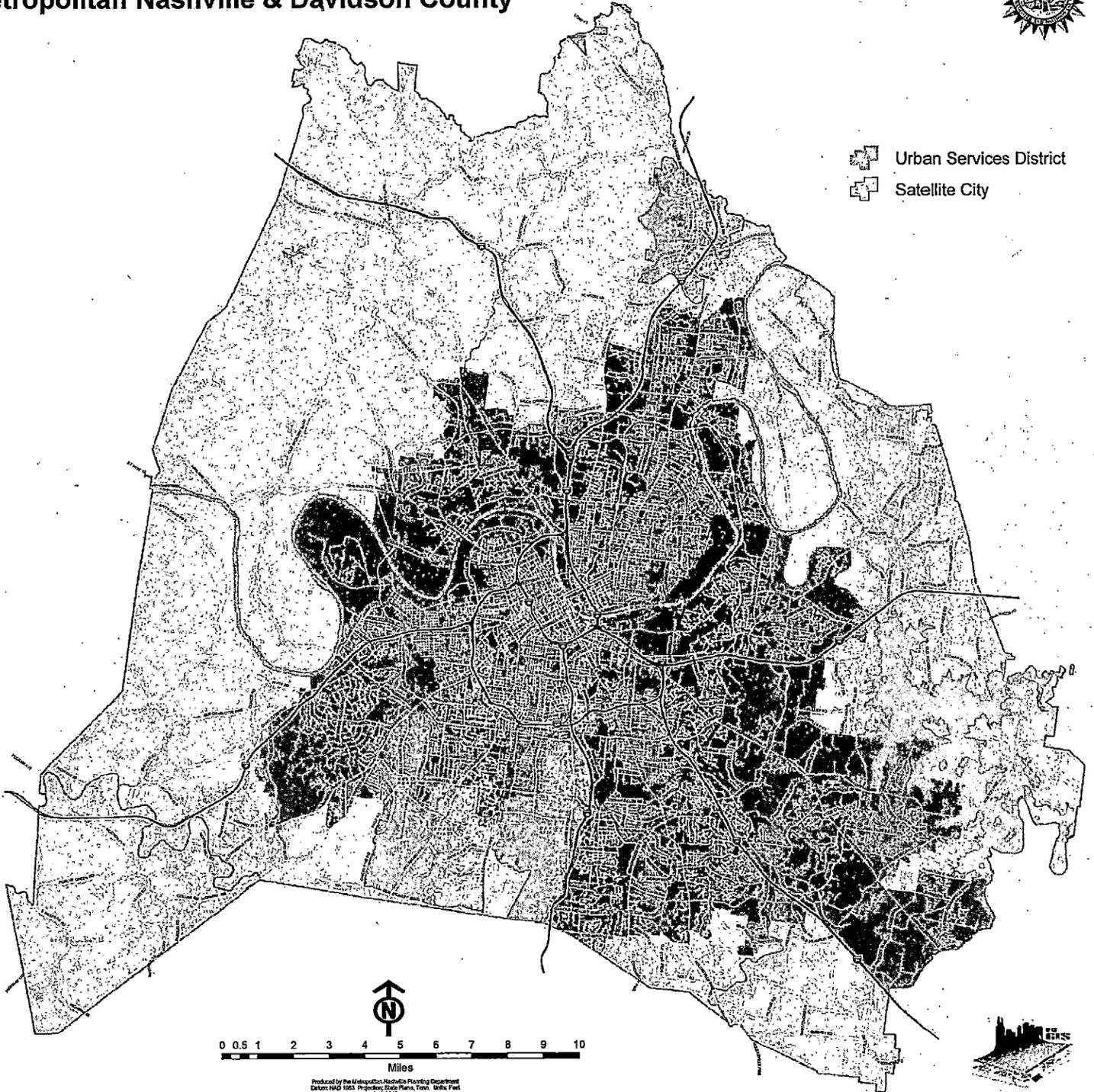
Item - 20 Capital Purchase: Any county expenditure for land, equipment, buildings, leasehold improvements, and other fixed assets

**Urban Services District
Metropolitan Nashville & Davidson County**

Attachment 1



-  Urban Services District
-  Satellite City



Produced by the Metropolitan Nashville Planning Department
October 1993 Edition; Update/Plan, Tenth, Sixth Print
April 2018

Attachment 2



RECYCLE/RECICLAR

THANK YOU FOR RECYCLING THESE LOOSE IN YOUR CART:

RECICLE ESTOS OBJETOS EN SU CONTENEDOR DE RECICLAR



Cans
Latas



Aluminum and Steel Cans

empty and rinse
Latas de aluminio y acero



Cartons
Cartones

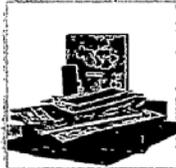


Food and Beverage Cartons

empty and replace cap
Cartones de comida y bebida



Paper
Papel



Mixed Paper, Newspaper, Magazines, and Flattened Cardboard

Papel y cartón limpio



Plastic Containers
Plástico



Kitchen, Laundry, Bath: Bottles and Containers

empty and replace cap
Botellas y envases

NO! LEAVE THESE OUT
NO INCLUIR



Do Not Bag Recyclables
No Garbage
Bolsas Que No Sean Recicles. No Gasura.



No Plastic Bags or Plastic Wrap
(return to retail)
No Bolsas de Plástico



No Yard Waste
No Desechos de Jardín



No Food or Liquid
(empty all containers)
No Guácala,
No Comida o Líquidos



No Clothing or Linens
(use donation programs)
No Ropa o Ropa de Cama



No Tanglers
(no hoses, wires, chains, or electronics)
No Enredadores

Metro Nashville
Public Works
Improving the Quality of Life for Metropolitan Nashville and our Region

615.862.5000
nashville.gov/recycle

OOPS!

Unfortunately, we could not collect today due to errors.

Desafortunadamente no hemos podido hacer la recolección hoy debido a ciertos errores



**Do not bag recyclables
No garbage**

*Bolsas Que No Sean Recicles.
No Basura.*



**No bags or plastic wrap
(return to retail)**

No Bolsas de Plástico



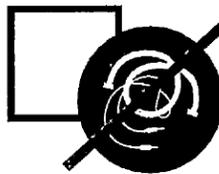
**No food or liquid
(empty all containers)**

*No Guácala.
No Comida o Líquidos*



**No clothing or linens
(use donation programs)**

No Ropa o Ropa de Cama



**No tangles
(no hoses, wires,
chains, or electronics)**

No Enredadores



No yard waste

No Desechos de Jardín

Please correct this and we will collect next time.

Por favor haga las correcciones necesarias y haremos la recolección la próxima vez.

- Yard Waste Food/Waste Bagged Recyclables
- Tangles Clothes/Linens Bags

Address:

RECYCLE



CANS



CARTONS



**PAPER &
CARDBOARD**



**PLASTIC
CONTAINERS**



Brought to you by the Department of Public Works

**NOBODY
TRASHES
TENNESSEE**

TENNESSEE DEPARTMENT
OF TRANSPORTATION

NASHVILLE.GOV/RECYCLE

615-862-5000

Attachment 5

Bid Name for Vehicle

Rear Load 18 Cubic Yard High Compaction Recycling Truck, Public Works, Replacing Decal

Minimum Specifications:

The vehicle shall meet or exceed all applicable Federal Motor Vehicle and State of Tennessee Standards in effect at the time of manufacture. Vehicle shall be exactly to factory specifications with the exception of the following minimum specifications:

Autocar ACX Cab Over with Heil Dura Pack 5000 Body or approved equal. Chassis must be manufactured in the United States. *(Please note, all substitutions shall be submitted in iSupplier's Online Discussion section on or before the deadline for questions and will be approved in advance of the deadline for submission of offers. Failure to make substitution requests in advance of the deadline for submission of offers shall result in your offer being deemed non-responsive.)*

Bidding Make, Model, Year _____

I. Cab & Chassis

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | Seats: Air ride driver's seat and fixed passenger seat. | |
| 2. | Upholstery: Cordura, Grey or neutral in color. | |
| 3. | Sun Visors – Driver and Passenger | |
| 4. | Tilt-telescopic steering column. | |
| 5. | Floor Covering: Manufacturer's standard commercial grade rubber floor mats. | |
| 6. | Four additional sets of keys for a total of six (6) per unit. | |
| 7. | Air Conditioning: Integral factory air conditioner with fresh air heater and defroster. Roof mounted unit is not acceptable. | |
| 8. | Dual air horns mounted under cab. | |
| 9. | Gauges: Tachometer, air cleaner restrictor indicator, air pressure gauge, voltmeter, fuel gauge, coolant temperature gauge, speedometer, hour meter gauge, engine oil pressure gauge, transmission temperature. | |
| 10. | All interior lighting in compliance with all federal, state and local laws. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 11. | Safety Equipment: Reflector triangles, metal head rechargeable fire extinguishers and first aid kit. Reflective triangles and fire extinguisher shall be mounted in the cab in a convenient access area. | |
| 12. | Mirrors: Dual Electric West Coast style mirrors Bright Finish, with dual convex 8" diameter mirrors one on each side of the vehicle. | |
| 13. | Windshield Wipers: Dual variable speed, intermittent delay-type. | |
| 14. | Windows: Standard factory tint. Roll-Up RH and LH door mirrors. | |
| 15. | Color: White. | |
| 16. | GVWR: Gross Vehicle Weight Rating to be 40,000 lbs. minimum. | |
| 17. | Cab over, low profile cab. Entire cab shall be constructed of 2-sided galvanized steel, including the doors. Cab shall have wraparound front windshield with rear corner windows. Body builders harness shall not require the body builder to drill through the cab for harness pass through. | |
| 18. | Cab-to-Axle: Meets specifications required for refuse body. Chassis manufacturer must ensure that cross member and components are located in proper locations and do not require relocation by the body builder. To shorten the total production time, chassis must be designed for compatibility with body bid. | |
| 19. | Frame: Minimum 120,000 PSI double channel, 1/4" inner frame, minimum RBM 4,220,000. | |
| 20. | Wheelbase: Meets specifications for refuse body. | |
| 21. | Fuel Tank: Largest capacity factory installed, minimum of 75 gallons. Heated fuel – water separator. | |
| 22. | Front tow pins or hooks. Removable hooks are acceptable if supplied with the truck. | |
| 23. | Steel channel front bumper painted black. Front mounted pump must be mounted behind the bumper without the need to extend the bumper. | |
| 24. | <p>Engine: Diesel; Vehicle Performance: The vehicle, when fully loaded and equipped shall be capable of the following minimum performance on dry, level paved roads in good condition:</p> <ul style="list-style-type: none"> ▪ From a standing start the vehicle shall attain a true speed of 35 MPH within 25 sec. ▪ The vehicle attains a minimum top speed of 70 MPH ▪ The vehicle shall be able to maintain a speed of at least 25 MPH on any grade up to and including 6 percent | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| | <ul style="list-style-type: none"> ▪ Minimum engine is Cummins ISX, 350 hp @ 2100 rpm and 1450 ft-lbs of torque (NO EXCEPTIONS). | |
| 25. | Cooling System: Antifreeze protection to -20° F. 1300 square inch radiator. | |
| 26. | DPF System with outboard mounted single exhaust stack and side diffuser. | |
| 27. | Transmission: Allison 4500 RDS 6-speed automatic with neutral to range inhibitor, transmission cooler and oil resistant transmission mounts. Transynd Lube. | |
| 28. | Allison Transmission Output Retarder for 4500RDS | |
| 29. | Power Steering: Manufacturer's standard. | |
| 30. | Brakes: Severe Service Meritor "S" Cam Air Brakes, minimum of 18.7 CFM air compressor; Bendix DV-2 heated automatic reservoir tank with ABS brakes and heated WABCO 1800 air dryer; Front and Rear automatic slack adjusters, with Meritor, Bendix, Haldex, or approved equal on all brakes; 16.5" X 6" "Q" + front brakes and 16.5 X 7" "Q" + rear brakes; spring actuated parking brake. Unit shall have central air tank drain manifold mounted under battery box with valve to charge wet tank; pull cords are not acceptable. | |
| 31. | Wheels and Tires: Front Wheels 22.5" x 9.00"; Front Tires 315/80R22.5 20 PR; Rear Wheels 22.5" x 8.25", 11R22.5 H 16 PR Goodyear G182 tubeless radial with on/off highway tread. Goodyear brand is required. | |
| 32. | Front Axle: Minimum full 20,000 lbs with oil lubricated bearing with visible seals; 20,800 lbs capacity front suspension all steel construction with shock absorbers and static load cushions. | |
| 33. | Rear Axle: Minimum 30,000 lbs. capacity, single speed rear axle ration 60-65 MPH, 31,000 lbs. rear suspension. Single Axle full locking wheel differential. | |
| 34. | Engine shut down system with alarm, lights and buzzer, monitoring high coolant temperature, low oil pressure, low coolant level and high transmission temperature. | |
| 35. | Alternator: Minimum 160 amps, Delco or equal, with capacity for proposed electrical load plus 20% margin. | |
| 36. | Battery: Three (3) 12 volt maintenance free 2,850 CCA and amp-hour rating appropriate for proposed electrical load plus 20% margin. Battery cut-off switch. Circuit Protection is required. | |
| 37. | Lights: All exterior lighting to be LED including headlights, turn signals, and roof marker lights. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 38. | Daytime running lights. | |
| 39. | Backup Alarm: Factory (preferred) or dealer installed. | |
| 40. | 12-volt system with circuit protection. | |
| 41. | 12 Volt power point in the cab. | |
| 42. | Engine idle shutdown shall be enabled at 5 minutes. | |
| 43. | Radio: AM/FM Radio, roof mounted, with left & right speakers. | |
| 44. | Dash must have on board diagnostics capable of reading DPF soot level percentage, engine fault codes with descriptions, and ABS fault codes with descriptions. This must be done without the need to hook up a computer. | |

II. Body

III.

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 1. | Capacity: Structure of body allows high density loading of up to 1,000 lbs. per cubic yard of normal refuse with minimum capacity of 18 cubic yards exclusive of tailgate loading area and space occupied by ejection panel. | |
| 2. | Capacity: Hooper minimum capacity of 3.94 cubic yards. | |
| 3. | Dimensions: Width: Does not exceed 96". | |
| 4. | Dimensions: Height: Maximum height above chassis does not exceed 96". | |
| 5. | Body Materials: Body sides minimum 8 gauge 90,000 PSI high tensile steel. Street side access door with latch, access handle and ladder. | |
| 6. | Body Materials: Roof minimum 8 gauge 90,000 PSI high tensile steel connected to body sides with integral full length roof rails. | |
| 7. | Body Materials: Body floor minimum 7 gauge 90,000 PSI high tensile wear resistant steel. Flat floor with no trough. | |
| 8. | Body Materials: Front wall structure allows access to body interior for inspection and sanitary maintenance. | |
| 9. | Body Materials: Body understructure constructed of 7 gauge 90,000 PSI high tensile steel full-width one-piece cross members interlaced through 7 gauge 80,000 PSI long members. | |
| 10. | Tailgate sides minimum 3/16" 184,000 PSI tensile strength steel. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 11. | Hopper floor minimum 1/4" 184,000 PSI tensile strength floor. | |
| 12. | Hopper front face minimum 1/2" 184,000 PSI tensile strength steel. | |
| 13. | Packing blade and upper panel surface minimum 3/16" 184,000 PSI tensile strength steel. | |
| 14. | Self-cleaning step and grab handle on each side of hopper. | |
| 15. | Left hand and right hand buzzer at rear to signal driver. | |
| 16. | Discharge of Load: Positive ejection without the assistance of clamps, bars, etc. | |
| 17. | Ejection cylinder shall be double-acting telescopic cylinder controllable in both directions at all times during body loading. | |
| 18. | Ejection plates minimum 11 gauge high tensile steel. | |
| 19. | Hydraulic Pump: Heavy duty front mount hydraulic pump, minimum 42 GMP. | |
| 20. | Shut off valve installed in suction line between reservoir and pump. | |
| 21. | System shall have 100 mesh replaceable suction line filter and a 3 micron return line filter. Return line filter also has a bypass monitor that notifies operator when filter needs replacing. | |
| 22. | All exposed hoses require wear sleeves that meet all applicable safety standards. | |
| 23. | All hydraulic cylinders have manufactures working pressure rating of not less than 2,500 PSI. | |
| 24. | All cylinders have chrome plated piston rods and sleeves. | |
| 25. | All pin mounting connections incorporate hardened steel bushings with grease zerk fittings. | |
| 26. | Packer Body Controls: Ejector and tailgate controls mounted left front of packing unit. | |
| 27. | Packer Body Controls: Device to automatically raise engine speed to proper PRM during packing cycle. | |
| 28. | Packer Body Controls: Packing blade controls mounted on the right side of tailgate and have safety buzzer to alert driver on any problems. | |
| 29. | Unit equipped with LED lights and reflectors in accordance with DOT regulations. | |
| 30. | Body equipped with LED duplicated stop, turn and tail lights above and below hopper. | |
| 31. | Body equipped with front and rear flush mount strobe light and in-cab switch. | |
| 32. | Cart Dumpers: Unit shall be equipped with two (2) independently operated Toter rotary actuated cart | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| | dumpers. | |
| 33. | Body mounted according to industry accepted standard, no welding on chassis frame in mounting of body or its components. | |
| 34. | Completely clean of all weld slag and painted one coat of Zinc primer and two coats white in color to match Cab. Conspicuity tape applied as required. | |
| 35. | Rear vision color surveillance camera with in-cab flat screen LED monitor. | |
| 36. | Monitor, camera and cables shall use water proof cables. | |

IV. Warranty

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | Warranty Section: Vendors are to provide bumper-to-bumper, zero deductible coverage with exceptions for fair wear and tear, abuse, accidents and avoidable circumstances for Two years. This warranty covers the entire truck cab, chassis, engine, drive-train, axles, exhaust & after treatment, computer controls for all, and the body. | |

V. Training & Manuals

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | The vendor shall provide Four (4) hours of maintenance training for the Fleet Technicians on all aspects of the vehicle regarding maintenance, operation, with special attention given to emergency resets of the body/truck. | |
| 2. | The vendor shall provide Four (4) hours of Operator training for the Drivers on all aspects of the vehicle regarding normal operation with special attention given to emergency resets of the body/truck. | |
| 3. | Wiring Diagrams/Schematics: A minimum of three (3) paper copies of all "as wired" Input/Output (I/O) sheets including schematics and wiring diagrams shall be provided with each chassis. | |
| 4. | Service Manuals and Illustrated Parts Breakdown: A minimum of two (2) copies of all service manuals and illustrated parts breakdown shall be provided with each | |

| | | |
|----|---|--|
| | chassis. Vendor to provide cross-reference from their part numbers to the OEM part numbers. Electronic version of these documents on CDROM or no-charge on-line access is acceptable. | |
| 5. | Provide on-line access to technical service bulletins and recall notices throughout the service life of the unit. | |
| 6. | Unit bid (cab, chassis, & body) shall be supported for maintenance by a "factory authorized" Dealer located within One Hour driving time from downtown Nashville. Dealer shall have "Factory Trained" technicians and parts stock on hand to provide maintenance of "normal wear" items in a timely manner. | |

VI. Additional Alternatives

The following items are **not to be included in the bid price**. Each item must have a price. These items may or may not be obtained with the purchase of the vehicle. If selected the indicated price will be added to the bid price for the unit. If more than one vehicle is being bought Metro may select to only purchase one or one set of the items listed below.

| Item # | Description | Price |
|----------|---|-------|
| <u>1</u> | The price to supply the electronic connective devices or cables necessary to allow communication between any vehicle electronic control module and Metro-provided diagnostic computers. | |
| <u>2</u> | The price to provide all diagnostic programs to diagnose and effect repairs to the unit, whether on-line access or software to be installed on a Metro-owned computer and updated as necessary, for five years (minimum). | |
| <u>3</u> | Cost of One Year additional Warranty coverage per Section III. Warranty Item #1. This will create Three total years of coverage | |
| <u>4</u> | Cost of Two Years additional Warranty coverage per Section III. Warranty Item #1. This will create Four total years of coverage | |
| <u>5</u> | Cost of Three Years additional Warranty coverage per Section III. Warranty Item #1. This will create Five total years of coverage | |

Bid Name for Vehicle

Automated Side Loading 28 Yard Recycling Truck, Replacing Decal

Minimum Specifications:

The vehicle shall meet or exceed all applicable Federal Motor Vehicle and State of Tennessee Standards in effect at the time of manufacture. Vehicle shall be exactly to factory specifications with the exception of the following minimum specifications:

Autocar ACX – Dual Drive Cab Over Truck with 28 Yard Heil Python Body or approved equal; Chassis must be manufactured in the USA.
(Please note, all substitutions shall be submitted in iSupplier's Online Discussion section on or before the deadline for questions and will be approved in advance of the deadline for submission of offers. Failure to make substitution requests in advance of the deadline for submission of offers shall result in your offer being deemed non-responsive.)

Bidding Make, Model, Year _____

I. Cab & Chassis

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | Seats: Air ride LH and RH driver's low back seats with right hand similar to New York City style. | |
| 2. | Upholstery: Cordura, grey or neutral in color. | |
| 3. | Floor Covering: Manufacturer's standard | |
| 4. | Four (4) additional keys for a total of 6 per unit. | |
| 5. | Sun Visors – Driver and Passenger | |
| 6. | Tilt-telescopic steering column. | |
| 7. | Air Conditioning: Integral factory air conditioner with fresh air heater and defroster. Roof mounted unit is not acceptable. | |
| 8. | Hydraulic cab tilt with air assist—minimum of 60-degree cab-tilt angle—required for serviceability | |
| 9. | Twin air horns mounted under cab. | |
| 10. | Gauges: Tachometer, air cleaner restrictor indicator, air pressure gauge, voltmeter, fuel gauge, coolant temperature gauge, speedometer, hour meter gauge, engine oil pressure gauge, transmission temperature. | |
| 11. | All interior lighting in compliance with all federal, state and local laws. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 12. | Dual (Left & Right side) driver controls, dual seated steer cab. | |
| 13. | Safety Equipment: Reflector triangles, 1 st Aid Kit and fire extinguisher, mounted in cab. | |
| 14. | Mirrors: Dual electric West Coast style mirrors Bright Finish with dual convex 8" mirrors (one on left side & one on right side). | |
| 15. | Windshield Wipers: Dual variable speed, intermittent delay-type. | |
| 16. | Windows: Standard factory tint. | |
| 17. | Color: White | |
| 18. | GVWR: Gross Vehicle Weight Rating to be 66,000 lbs. minimum. | |
| 19. | Cab: Cab Over, low profile cab, with low right and left side entry, the first step for entry should be a maximum of 19" from ground to step. Entire cab shall be constructed of 2-sided galvanized steel, including the doors. Cab shall have wraparound front windshield with rear corner windows. Body builders harness shall not require the body builder to drill through the cab for harness pass through. | |
| 20. | Cab-to-Axle: Meets specifications for refuse body. Chassis manufacturer must ensure that cross members and components are located in proper locations and do not require relocation by the body builder. To shorten the total production time, chassis must be designed for compatibility with body bid. | |
| 21. | Frame: Minimum 120,000 PSI double channel, 1/4" inner frame, minimum RBM 4,220,000. | |
| 22. | Wheelbase: Meets specifications for refuse body. | |
| 23. | Fuel Tank: Largest capacity factory installed, minimum of 75 gallons. Heated fuel – water separator. | |
| 24. | Front tow pins or hooks. Removable hooks are acceptable if supplied with the truck. | |
| 25. | Steel channel front bumper painted black. Front mounted pump must be mounted behind the bumper without the need to extend the bumper. | |
| 26. | <p>Vehicle Performance: The vehicle, when fully loaded and equipped shall be capable of the following minimum performance on dry, level paved roads in good condition:</p> <ul style="list-style-type: none"> ▪ From a standing start the vehicle shall attain a true speed of 35 MPH within 25 sec. ▪ The vehicle shall attain a minimum top speed of 70 MPH ▪ The vehicle shall be able to maintain a speed of at least 25 MPH on any grade up to and including 6 percent. ▪ Minimum engine is Cummins ISX, 350 hp @ 2100 rpm and 1450 ft-lbs of torque (NO EXCEPTIONS). | |
| 27. | Cooling System: Antifreeze protection to -20° F. 1300 square inch radiator. | |
| 28. | Transmission: Allison 4500 RDS 6-Speed automatic with neutral to range inhibitor, transmission cooler and oil resistant | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| | transmission mounts. Transynd transmission fluid. | |
| 29. | Exhaust: Manufacturer's standard | |
| 30. | Power Steering: Manufacturer's standard with adjustable/wheel column. | |
| 31. | Brakes: Severe Service Meritor "S" Cam Air Brakes, minimum of 18.7 CFM air compressor; Bendix DV-2 heated automatic reservoir tank with ABS brakes and heated WABCO 1800 air dryer; Front and Rear automatic slack adjusters, with Meritor, Bendix, Haldex, or approved equal on all brakes; 16.5" X 7" "Q" + front brakes and 16.5 X 8.62 "Q" + rear brakes; spring actuated parking brake. Unit shall have central air tank drain manifold mounted under battery box with valve to charge wet tank; pull cords are not acceptable. | |
| 32. | Wheels and Tires: 10 hole hub piloted steel wheels; front sized 22.5" x 12.25"; rear sized 22.5" x 8.25", tires front Goodyear 425/65R22.5 L ply; rear Goodyear 11R22.5 PR tubeless radial with G182 tread. Goodyear brand is required. | |
| 33. | Front Axle: Minimum full 20,000 lbs with oil lubricated bearing with visible seals; 20,800 lbs capacity front suspension all steel construction with shock absorbers and static load cushions. | |
| 34. | Rear Axle: Minimum 46,000 lbs capacity, single speed rear axle ratio 70-72 MPH; 46,000 lbs capacity rear suspension all steel construction. "Detroit Locker" limited slip or Bendix Smart Automatic Traction Control rear differential providing zero wheel spin, no driver intervention, and full torque. | |
| 35. | Engine shut down system with alarm, lights and buzzer, monitoring high coolant temperature, low oil pressure and low coolant level. | |
| 36. | Alternator: Minimum 160 amps, Delco or equal, with capacity for proposed electrical load plus 20% margin. | |
| 37. | Battery: Three (3) 12 volt maintenance free, 2,850 CCA and amp-hour rating appropriate for proposed electrical load plus 20% margin. Battery cut-off switch. | |
| 38. | Lights: All exterior lighting to be LED including headlights, turn signals, and roof marker lights. | |
| 39. | Daytime running lights | |
| 40. | Backup Alarm: Factory (preferred) or dealer installed. | |
| 41. | 12 Volt power point in the cab. | |
| 42. | 12 Volt system with circuit protectors. | |
| 43. | AM-FM Radio, roof mounted, with stereo speakers left & right. | |
| 44. | Engine idle shutdown shall be enabled at 5 minutes. | |
| 45. | Dash must have on board diagnostics capable of reading DPF soot level percentage, engine fault codes with descriptions, and ABS fault codes with descriptions. This must be done without the need to hook up a computer. | |

II. Body

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 1. | Structure of body allows high density loading of up to 900 lbs. per cubic yard of normal refuse with minimum capacity of 28 cubic yards exclusive of automated side loading packer area. | |
| 2. | Hopper minimum capacity of 5.2 cubic yards. | |
| 3. | Width: Does not exceed 96". | |
| 4. | Height: Maximum height above chassis does not exceed 96" with body down. | |
| 5. | Body sides minimum 8 gauge 80,000 PSI tensile strength steel. | |
| 6. | Roof minimum 8 gauge 80,000 PSI tensile strength steel connected to body sides with integral full length roof rails. | |
| 7. | Body floor shall be flat, full width and constructed of minimum 3/16" abrasion resistant 184,000 PSI tensile strength steel. | |
| 8. | Body floor channels constructed of 3"x6" X 10 gauge formed 80,000 PSI tensile strength steel, one-piece, full width. | |
| 9. | Body cross members are interlaced through 9"x 11" x 7 gauge 80,000 PSI tensile strength steel longitudinal bracing. | |
| 10. | Cleanout access doors on each side behind packer minimum of 7"x13" covered by hinged door held closed by spring loaded latch. | |
| 11. | Sufficient guarding to eliminate blowing refuse out of the truck during transport. The hopper hood shall be designed to not interfere with the arm operation. | |
| 12. | Tailgate latch sides minimum of 10 gauge steel or greater. | |
| 13. | Tailgate has solid rubber seal to prevent leakage. | |
| 14. | Warning light installed in cab to indicate that tailgate is not properly closed and locked in place. | |
| 15. | Hinge assembly two (2) 2" pins. | |
| 16. | Hopper floor minimum 1/4" 184,000 PSI tensile strength steel. | |
| 17. | Packing blade faceplate and upper panel surface minimum 1/4" steel; side plate surface panels minimum 1/4" 80,000 typical yield steel. Packing cylinder with bolt-on lugs at packer panel and body front head. Cylinders can be removed by pulling 2" diameter pins or removing 3/4" bolts | |
| 18. | Fully enclosed hopper, directly behind cab. | |
| 19. | Body shall hydraulically raise to sufficient angle to dump load. | |
| 20. | Proximity switch with warning light in cab that shows when body is raised. All switches connect to a mobile controller to monitor system and aid in troubleshooting. | |
| 21. | Body Props: Two (2) connected tubular aluminum body props to hold empty body in partially raised position for servicing. When props are released and body is raised, props will automatically position themselves in support pockets. Props have 1/4" through shaft hinge, secured under body by positive type chain lock. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 22. | Hydraulic Pump: Front mounted heavy duty Denison tandem vane pump with electric over speed protection, minimum 44 GPM and the ability to operate the collection arm at 18 GPM @800 RPM (engine idle) and operate the packer panel at 44 GPM @1200 RPM with the capacity to fully operate the hydraulics of this truck. | |
| 23. | Shut-off valve installed in suction line between reservoir and pump. | |
| 24. | All hydraulic hoses SAE standard with burst ratio of 4:1 minimum; all hoses and tubing securely clamped to body to prevent vibration, abrasion and noise. | |
| 25. | All exposed hoses require wear sleeves that meet all applicable safety standards. | |
| 26. | Hydraulic system pressure does not exceed 2,500 PSI under normal operating conditions. | |
| 27. | Packing cycle automatic with driver override. | |
| 28. | Packing system emergency stop button located in cab. | |
| 29. | Minimum 50 gallon hydraulic reservoir mounted to frame and equipped with screened fill pipe and cap, filter breather, cleanout cover, oil level sight and temperature gauge. System protected by 3-micron return line filter & 100 mesh (140micron) oil strainer. | |
| 30. | All hydraulic cylinders have manufactures working pressure rating of not less than 2,500 PSI. | |
| 31. | All cylinders have chrome plated piston rods and sleeves. | |
| 32. | All pin mounting connections incorporate hardened steel bushings with grease fittings for auto lube system. | |
| 33. | Arm cylinder shall be cushioned. | |
| 34. | Dump and tailgate controls mounted in cab. | |
| 35. | All controls for body arm mounted in cab with access right hand drive position. | |
| 36. | Device to automatically raise engine speed to proper RPM during packing cycle. | |
| 37. | Extra set of controls for arm operation mounted under right side seat of cab. These controls are for operation from ground level. | |
| 38. | Unit equipped with LED lights and reflectors in accordance with DOT regulations. | |
| 39. | Body equipped with LED stop, turn and tail lights above and below hopper. | |
| 40. | Body equipped with front and rear flush mount strobe light with in-cab switch. | |
| 41. | Amber LED strobe light mounted at top center rear of tailgate body assembly with separate circuit not wired to tailgate circuit. | |
| 42. | Hopper has driver controlled LED work light. | |
| 43. | Spring loaded belt Grabber opening capable of servicing 30 to 100 gallon carts. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 44. | The Lifting mechanism shall be capable of extending, grabbing, raising, dumping and returning a container from any position without the need to "retract" the lift arm. The Lifting mechanism shall have the capability of lifting cans based 16" below street level. | |
| 45. | Lifting mechanism performs lift cycle functions in eight (8) seconds at the designed operating RPM. | |
| 46. | The Lifting capacity shall be a minimum of 450 lbs. at maximum extension. | |
| 47. | Lifting mechanism within the 96" road limit in stowed position with 13" ground clearance. | |
| 48. | Lift arm minimum reach 108". | |
| 49. | A fully automatic Body lubrication system shall grease all moving joints without human intervention. | |
| 50. | Color camera System: Install hopper camera, grabber camera and backup camera on body with display mounted in cab. Display to be a minimum of 7" measured diagonally. | |
| 51. | Body mounted according to industry accepted standard, no welding on chassis frame in mounting of body or its components. | |
| 52. | Completely clean of all weld slag and painted one coat of Zinc primer and two coats white in color. | |

III. Warranty

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | Warranty Section: Manufacturer's standard bumper to bumper warranty Two years / 100k miles. Metro Nashville does not accept engine hours to be a determining factor for warranty consideration. The warranty is to fully cover the following; engine, driveline, axles, body, chassis, bed, automated assembly, electronics, exhaust and after treatment system, fuel injectors, turbo's, and all electronics (wiring, computers, programs, etc.) Diagnostic charges are to be included as a part of the warranty coverage. Towing costs are also to be included if the truck is not drivable during the warranty period. Excluded are normal wear and tear items. | |
| 2. | Provide copies of warranty for assembled and delivered unit. | |
| 3. | Provide copies of warranty for systems and components as provided by individual product suppliers incorporated into the truck. | |

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|--|--|
| 4. | The successful proposer shall be the primary point of contact and liaison for design, performance and warranty discrepancies for the service life of the vehicle. | |
| 5. | Unit bid shall be supported for maintenance by a "factory authorized" Dealer located within a One (1) Hour drive from downtown Nashville. Dealer shall have "Factory Trained" technicians and parts stock on hand to provide maintenance of "normal wear" items in a timely manner. | |
| 6. | Provide a loaner unit/s when the truck has been in the shop for Five (5) consecutive working days and the warranty work is projected to exceed Ten (10) working days. The loaner unit shall be provided on the Eleventh (11 th) working day of the truck being out of service. | |

IV. Training & Manuals

| Item # | Description | Meets or Exceeds Specification "Yes or No" |
|--------|---|--|
| 1. | One day of Factory Authorized training for the mechanics on all aspects of repair and maintenance for the truck. Special attention to be given concerning how to retract or store the arm, lower the bed, etc., when normal functions have failed. | |
| 2. | One day of Factory Authorized training for the drivers on all aspects of the truck and its' functions. | |
| 3. | Wiring Diagrams/Schematics: A minimum of three (3) paper copies of all "as wired" Input/Output (I/O) sheets including schematics and wiring diagrams shall be provided with each chassis. Electronic version of these documents on CDROM or no-charge on-line access is acceptable. | |
| 4. | Service Manuals and Illustrated Parts Breakdown: A minimum of two (2) copies of all service manuals and illustrated parts breakdown shall be provided with each chassis. Vendor to provide cross-reference from their part numbers to the OEM part numbers. Electronic version of these documents on CDROM or no-charge on-line access is acceptable. | |
| 5. | Provide on-line access to technical service bulletins and recall notices throughout the service life of the unit. | |

V. Additional Alternatives

The following items are **not to be included in the bid price**. Each item must have a price. These items may or may not be obtained with the purchase of the vehicle. If selected the indicated price will be added to the bid price for the unit.

| Item # | Description | Price |
|--------|---|-------|
| | The price to supply the electronic connective devices or cables necessary to allow communication between any vehicle electronic control module and Metro-provided diagnostic computers. | |
| | The price to provide all diagnostic programs to diagnose and effect repairs to the unit, whether on-line access or software to be installed on a Metro-owned computer and updated as necessary, for five years (minimum). | |
| Item # | Description | Price |
| 1. | ADD: Warranty Option #1: List the price to continue the warranty as described in Section III. Warranty Item #1 for an additional year plus 50k miles more. This option takes effectively takes the total warranty to Three (3) years & 150k miles. | |
| 2. | ADD: Warranty Option #2: List the price to continue the warranty as described in Section III. Warranty Item #1 for an additional two (2) year plus 100k miles more. This option effectively takes the total warranty to Four (4) years & 200k miles. | |
| 3. | ADD: Warranty Option #1: List the price to continue the warranty as described in Section III. Warranty Item #1 for an additional Three (3) year plus 100k miles more. This option effectively takes the total warranty to Five (5) years & 200k miles. | |



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY
ADMINISTRATIVE ORDER

| | |
|--|--|
| SUBJECT: Acquisition and Disposal Program | ORDER NO.: 05-09 REVISION NO.: 01 |
| ISSUED BY: Department of General Services | EFFECTIVE DATE: October 1, 2014 |

1. Governing Authority

Executive Order No. 031

2. Background

The efficient and effective delivery of many services by Metro agencies is dependent upon the availability of appropriate, well maintained motor vehicles and equipment. OFM is responsible for the cost-effective acquisition of vehicles and equipment to meet the needs of Metro agencies.

Pursuant to the Metropolitan Code of Laws, the Department of Finance, Procurement Division is responsible for vehicle and equipment disposal. However the responsibility was delegated to the Department of General Services by a departmental memorandum of understanding dated, December 21, 2004.

All acquisition and disposal activities shall be consistent with state law, the Metropolitan Charter, and the Metropolitan Code of Laws.

3. Applicability

This order applies to all motor vehicles and equipment rented or leased by or titled to any Metro agency. Requests for exemptions from any of the provisions of this order must be submitted in writing to the Director of General Services for review (except as may be otherwise indicated herein).

4. Definitions

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

- Agency – A Metro agency, department, institution, board, bureau, or authority issued vehicles or equipment through OFM.
- Agency Fleet Coordinator – Employee designated in each agency to serve as the primary contact and liaison between the agency and OFM and to manage and monitor the agency's use of vehicles, equipment, and the OFM fuel program (reference General Services Administrative Order 08-14).
- Agency Head – An agency's chief executive officer or designee.
- Equipment – All units managed and maintained by OFM that do not meet the definition of a vehicle.
- Fleet Addition – A vehicle or piece of equipment that would increase the fleet inventory.
- Long Term Lease – A lease for a period greater than one year. Also referred to as a capital lease.
- Metro – Metropolitan Government of Nashville and Davidson County.
- OFM – Department of General Services, Office of Fleet Management.
- Operating Costs – The recurring costs of installation, maintenance, insurance, fuel, etc. that are essential for the proper functioning and use of a vehicle or equipment of any type.
- Short Term Lease – A lease for a period of one year or less. Also referred to as an operating lease.
- Unit – A term for any or all vehicles and equipment subject to this order.
- Vehicle – Any self-propelled, rubber-tired unit capable of being licensed in the state of Tennessee for over the road travel.

5. Acquisition of Vehicles and Equipment

Each Metro agency must submit to OFM requests for vehicles and equipment costing more than \$5,000 per unit (regardless of the funding source). An agency must also notify OFM before purchasing any units costing \$5,000 or less per unit and that will be maintained by OFM.

Annually, OFM will prepare a capital budget request for approved fleet additions and replacements and initiate acquisition. Purchases of vehicles and equipment will be completed in accordance with Metro Procurement Code and Regulations through the Department of Finance, Procurement Division.

- 5.1 Funding. Agency acquisition requests must include funding information, and the funding source must be annotated in EBS. The following requirements are applicable.

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

- 5.1.1 4% Fund – Agencies must submit requests to purchase units with 4% funds and replacement priority information to OFM. Annually, the Department of General Services will use the information to develop budget authority and 4% funds requests for replacement and additional units.
- 5.1.2 Enterprise Fund – Agencies must submit requests to purchase units with enterprise funds along with certifications of funding availability not only for purchases but also the associated operating expenses. The Agency Head must sign and send certification of funding to both OFM and the Department of Finance, Office of Management and Budget for approval.
- 5.1.3 Grant – Agencies must process requests to purchase units with grant funding through the Department of Finance, Division of Grants Coordination. Additionally, for grant funded purchases of units managed and maintained by OFM, an agency must:
- notify the OFM asset manager (615-862-6787) of any grant request that includes units to be maintained by OFM;
 - provide OFM with justification for grant funded purchases (*e.g.*, for new program, expanding program, new federal/state/local requirements, *etc.*);
 - identify the source for funding operating costs of new units and provide documentation of Director of Finance approval if operating costs are to be absorbed by the general fund;
 - provide OFM with documentation of Director of Finance approval to request grant funded units, which were not specified in the original grant budget (*e.g.*, near an existing grant program's year end, an agency may wish to purchase equipment not originally included in the grant budget by seeking approval from the grantor to amend the original grant budget);
 - ensure that all units are purchased off of Metro contract;
 - ensure that a separate grant account business unit has been created within EBS by the Department of Finance and the associated information is provided to OFM before any unit is ordered;
 - ensure that units are tracked in the fixed assets system and identified as being grant funded;
 - acknowledge and adhere to all the following requirements:

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

- OFM shall have final approval regarding unit specifications;
- vehicles must be purchased while manufacturer order banks are open, and will not be purchased off the lot unless a contracted vendor has the unit on hand and will sell it at or less than the contract price;
- grant funded units will not be replaced with Metro funds unless approved by the Director of Finance; and
- OFM shall have final approval authority for purchases of units managed and maintained by OFM.

5.1.4 **Other Sources of Funding** – Agency requests for units to be replaced or added to the fleet inventory with other funding sources (not described in the subsections above) must include:

- documentation of the funding source(s); and
- certification of funding availability in the annual operating budget – it must be signed by the agency head and submitted to both OFM and the Department of Finance, Office of Management and Budget for approval.

5.2 **Fleet Additions.** Each Metro agency must submit written requests for fleet additions to OFM along with specifications and verification that:

- current agency units are being used as originally presented for budget justification;
- no existing units are available to replace worn out units or to be reassigned to meet new program requirements;
- funding is available to pay for the additional unit operating and replacement costs;
- the additional unit is for a new or expanded program and it will be used ...
 - a minimum of 6,000 miles annually if it is a motor vehicle less than 1 ton GVWR;
 - a minimum of 3,200 miles annually if it is a motor vehicle greater than 1 ton GVWR; or
 - consistently with the applicable replacement cycle published by OFM if it is equipment.

5.3 **Fleet Replacements.** OFM will establish a standard anticipated service life for all types of units enabling Metro to obtain the best value considering a balance of maximizing use duration and minimizing life-cycle operating costs. Annually, OFM will review the fleet and prepare a listing of units

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

predicted to meet replacement criteria and, then, coordinate with all agencies to identify specific units for replacement in the next budget year.

5.3.1 Replacement Criteria:

- unit was destroyed; or
- unit meets the replacement criteria, established each budget cycle by OFM, which are based upon comparison with other similar classified units and include:
 - operating service months (age);
 - life-to-date miles/hours (odometer/hour meter reading);
 - operating cost (less fuel);
 - application (operating environment);
 - condition; and
 - reliability.

5.3.2 Agency Priorities – Agencies must review OFM lists of units meeting replacement criteria to determine and communicate replacement priorities.

5.4 Vehicles Authorized for Acquisition. OFM will determine final specifications for vehicles and equipment in concert with user agencies. The specifications will be developed to ensure that units meet operational requirements as well as comply with economical, standard specifications to the extent possible.

5.4.1 Standard Vehicles – OFM will authorize for acquisition the most economical vehicles to purchase and operate which are suitable for the purposes for which they are obtained, and do not include unnecessary features or options.

Typically, compact and mid-size automobiles are authorized for acquisition. However, if compact or mid-size vehicles for specific jobs are too small to satisfy the operating needs, an agency may request OFM approval for another type of vehicle.

5.4.2 Sport Utility Vehicles (SUVs) – To request an SUV, and agency must document, in a cost/benefit analysis, that it would likely be more economical and practical than an auto or a pick-up truck.

5.4.3 Replacements – Replacement units will be of “like kind” except in instances when an Agency Head provides and OFM approves written justification outlining a need to meet new, different, or expanded program requirements.

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

- 5.5 Ordering Units. All units with a purchase price of \$5,000, or greater must be ordered by OFM. Emergent requirements that justify orders after the manufacturer's cutoff date (e.g., replacement of a damaged unit) or changes in Metro's contracted vendor(s), will be considered on a case-by-case basis.

Units will not be purchased off-contract from dealer stock without the written approval of OFM and the Department of Finance, Procurement Division.

Options and accessories (e.g., tool boxes, lights, cranes, lifts, etc.), which were not requested as part of the original order, are subject to the approval of OFM, and any associated expense is the responsibility of the requesting agency.

- 5.5 Purchasing Used (Secondhand) Units. All purchases of secondhand vehicles and equipment shall be consistent with state law, the Metropolitan Charter and the Metropolitan Code of Laws. Further, the Department of Finance, Procurement Division must consult with OFM prior to authorizing such purchases, and used units must be inspected by OFM prior to purchase to ensure the unit's condition is as advertised.

5.5.1 Commercial Vendors – Competitive bid pricing shall be evaluated based upon the general range of value of the purchased item through a listing in a nationally recognized publication, through an appraisal by a licensed appraiser, or through other reliable means approved by the purchasing agent, and the price falls within the documented range.

5.5.2 State and other Government Entities – In accordance with M.C.L. § 4.12.090, "*the purchasing agent may purchase from any federal, state or local governmental unit or agency secondhand articles or equipment or other materials, supplies, commodities and equipment without public advertising and competitive bidding.*" In such cases, pricing shall be evaluated based upon the general range of value of the purchased item through a listing in a nationally recognized publication, through an appraisal by a licensed appraiser, or through other reliable means approved by the purchasing agent, and the price falls within the documented range.

- 5.6 Leasing Units. With the exception of "*leases of equipment (exclusive of office equipment) and motor vehicles used for seasonal construction or repair work including, but not limited to street and road paving and*

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

construction projects,” M.C.L. § 5.04.020, provides that “leases for equipment or automobiles shall be approved by resolution of the metropolitan council if the annual expenditure for the lease exceeds five thousand dollars per year.” To request a leased unit, a user agency must provide the Metro Council with documentation of a lease-versus-buy analysis that shows the lease to be more advantageous to Metro than unit ownership.

OFM encourages use of short term leases in lieu of purchase when unit use would not warrant purchase (e.g., crane trucks, bucket trucks, construction equipment, etc. that are under contract for short term rental or lease). All leasing shall be conducted through leasing contracts established by the Department of Finance, Procurement Division.

Upon the lease of any units to be managed and maintained by OFM, the user agency must notify OFM and provide lease documentation to the Department of Finance, Financial Operations to determine if the units must be entered in the Fixed Assets module as a fixed asset (capitalized) or tracked asset.

- 5.8 Donated Units. Agencies are authorized to take possession of donated units upon Metro Council approval, provided that it is in accordance with Executive Order No. 007.

Upon approval of a donated unit, the agency must notify both OFM and the Department of Finance, Financial Operations. Donated units shall be titled, registered, licensed and marked as Metro-owned and shall not be returned to the donor. Donated units may not be replaced with appropriated funds without approval of the Director of Finance.

- 5.9 Acquisition Record-Keeping. Agencies must provide purchase documentation to OFM as necessary for the inclusion of units in the fixed asset system as a tracked asset.

The OFM asset manager shall establish and maintain (at minimum and in digital format as appropriate) a central file of the following acquisition information for all units:

- agency request documentation;
- approval documentation;
- budget request and budget amendment (if applicable) information;
- grant information (if applicable);
- requisition and Invitation to Bid (ITB) or Request for Proposal (RFP);

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

- contract;
- purchase order;
- dealer invoice;
- manufacturer's statement of origin (if applicable);
- odometer statement (if applicable); and
- line set ticket (medium and heavy duty units only).

6. Disposal

Each Metro agency must arrange the disposal of all vehicles and equipment with the OFM Asset Manager (615-862-6787). OFM will evaluate units submitted for disposal to determine condition and possible reassignment or removal from service. The funding source of units will also govern disposal as follows.

- 6.1 4% Fund. Units purchased with 4% funds will be processed as surplus property, and proceeds from their sale will be credited to the vehicle and equipment capital replacement program budget.
- 6.2 Enterprise Fund. Units purchased with enterprise funds will be processed as surplus property, and proceeds from their sale will be credited to the respective enterprise agency.
- 6.3 Grant. The disposal of units purchased in whole or in part with grant funds shall be in accordance with grantor guidelines.
- 6.4 Other Source of Funding. Units funded by other sources will be processed as surplus property. The user agency must consult with the Department of Finance and provide OFM with documentation directing the disposition of sales proceeds.

7. Transfer of Units

The transfer of any unit directly between Metro agencies must be approved by OFM. If approved, the fixed asset and fleet systems shall be updated to ensure operating costs for the unit are distributed correctly. Any transferred units will retain their original identification (decals).

8. Compliance and Enforcement

Department of General Services
ADMINISTRATIVE ORDER 05-09, REV. 01

All employees share in the responsibility for compliance with this order. Any violations should be brought to the attention of an appropriate agency supervisor. Further, the Agency Fleet Coordinator is responsible for overseeing and managing compliance and ensuring the maintenance of comprehensive documentation demonstrating that the agency is in compliance with all requirements of this order.

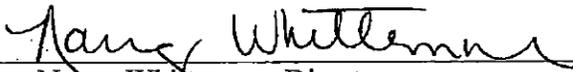
Each Agency Head is responsible for the enforcement of this order and may issue policy and procedures that are more restrictive than or supplementary to the requirements of OFM administrative orders, policies, and procedures.

9. Disciplinary Action

Disciplinary action to be taken when employees violate the requirements of this order shall be consistent with policies and procedures set by each agency and, to the extent applicable, the rules of the Civil Service Commission.

10. Order Documentation

Administrative Orders are issued to Agency Heads via email and are posted on the Inside Metro website under General Services.



Nancy Whittemore, Director
Department of General Services

9-2-2014

Date:

METRO PUBLIC WORKS

Authority

The Public Works Title VI Coordinator is Charles Boddie, Human Resources Manager. Mr. Boddie reports to the Deputy Director of Public Works. His Title VI responsibilities include compliance planning, monitoring, training and reporting to various governmental grantors and as required by Metro. The contact information for Mr. Boddie is as follows:

Office: 615-862-8710

E-mail: charles.boddie@nashville.gov

Mission

The mission of Metro Nashville Public Works is to provide professional expertise, transportation, infrastructure and neighborhood environmental products to people who live, work, travel through, or play in Metro Nashville so they can experience clean neighborhoods, safe and efficient transportation.

Organizational Environment

(See attached organizational chart)

Federal Funding in the Public Works Department

The department has been awarded over \$1.063 million in Federal funds for FY'18 (July 1, 2017-June 30, 2018) that are used to achieve the goals and initiatives as defined in the departmental mission statement. (Please note, this figure only includes monies which PW has received and does not include funds promised for future projects.) These resources are primarily applied to capital needs for bikeways, sidewalks, traffic signal systems, streets, roads, intersections and bridges.

Contracted Program Overview

The department utilizes contracts with various firms for professional services related to survey, design and construction monitoring of bikeways, sidewalks, traffic signal systems, streets, roads, intersections and bridges county-wide (GSD and USD) which include:

- Engineering, construction, maintenance and repair services for streets, roads, bridges, sidewalks and bikeways; this includes, but is not limited to, traffic signals, signs, pavement markings, and guardrails
- Implementation of FastTrac infrastructure development program including installation of new infrastructure and support systems
- Certain off-street parking facilities and also on-street parking operations and enforcement
- Recycling and disposal of solid waste

- Refuse collection, street cleaning, and street lighting for the Urban Services District (USD) area only
- Communications to general public about all of the above geared to enhance their mobility, safety and health within Davidson County. These contracts are vital to the department in attaining its goals.

Minority Participation on the Solid Waste Regional Board –

11 Members

- 8 Caucasian
- 2 African-American
- 1 Hispanic

Minority Participation on the Traffic and Parking Commission –

9 Members

- 8 Caucasian
- 1 African-American

Minority Participation on the Transportation Licensing Commission --

7 Members

- 5 Caucasian
- 2 African-American

Number of Complaints Received Last Year – None

Statement of Non-discrimination

In compliance with Title VI of the Civil Rights Act of 1964, Metro Public Works will ensure equal opportunity in all aspects of its programs and services without regard to race, color, or national origin.

Public Works Organizational Chart by Division FY'18

