August 7, 2017

TO: Members of the MAG Management Committee

FROM: Teri Kennedy, Transportation Improvement Program Manager

SUBJECT: CALL FOR PROJECTS: MAG FEDERAL FUNDS

The Maricopa Association of Governments (MAG) is pleased to announce a Call for Projects for Federal Highway Administration suballocated funding allocated as Congestion Mitigation and Air Quality Improvement Program (CMAQ-2.5), Congestion Mitigation and Air Quality Improvement Program (CMAQ), Transportation Alternatives (TA-MAG), and Surface Transportation Block Grant Program (STBGP-MAG). Total funding available for this announcement is estimated at $42.8 million. **Completed and signed project applications are due to MAG by 10:00 a.m., Monday, September 25, 2017. Late applications will not be accepted.**

CMAQ funding levels for the FY 2018 PM-10 Certified Street Sweepers is $1,755,209. Funding levels by program area and for the construction/procurement workphase years of FY2021 and FY2022 for the Paving of Unpaved Roads using CMAQ PM-2.5 totals $1,582,602; for the Paving of Unpaved Roads using CMAQ totals $10,000,000; for the Bicycle and Pedestrian facilities using CMAQ totals $17,670,860; for the Bicycle and Pedestrian facilities using TA-MAG totals $8,426,767; for Safe Routes to Schools eligible activities using TA-MAG totals $800,000; and for Pinal County Arterial/Bridge projects using STBGP-MAG totals $2,559,416.

**Federal Fund Project Application Workshop**
A Federal Fund Project Application Workshop will be held at the time and place noted below to explain and discuss the application process for PM-10 Certified Street Sweepers, Paving of Unpaved Roads, Bicycle/Pedestrian, Safe Routes to School, and Pinal County Arterial/Bridge projects.

**Monday, August 21, 2017**
10:00 a.m.- noon
MAG Offices, Suite 200 – Saguaro Room
302 North 1st Avenue, Phoenix

The Workshop will include an overall presentation and modal breakout sessions to answer questions and review program guidelines, eligibility, and discuss general project questions. The Workshop will also cover the ADOT Policies and Procedures for the disposal of older street sweepers. Member agencies...
considering submitting an application are encouraged to send at least one participant to this workshop. Additionally, follow-up open working groups will be held to answer questions on the applications:

- Tuesday September 12, 2017, 10:00 a.m. - 11:00 a.m., MAG Office, Suite 200, Chaparral Room
- Tuesday September 19, 2017, 11:00 a.m. - noon, MAG Office, Suite 200, Chaparral Room

Please park in the garage under the building, bring your ticket, parking will be validated. For those using bicycles, please lock your bicycle in the bike rack in the garage.

Applications
All applications are required to be complete and be submitted both electronically in the native format (Excel) via e-mail or electronic storage media and a full signed copy (Portable Document Format (PDF) or printed hard copy accepted) to MAG by the due date of **10:00 a.m., Monday, September 25, 2017.** Late Applications will not be accepted. Applications are now available as Microsoft Excel workbooks for download from the following MAG web page: [https://www.azmag.gov/Programs/Transportation/Programming-and-Finance/Transportation-Improvement-Program-TIP/TIP-Modal-Applications](https://www.azmag.gov/Programs/Transportation/Programming-and-Finance/Transportation-Improvement-Program-TIP/TIP-Modal-Applications)

Support and reference information is also available on the website.

If there are any questions, please contact me at: tkennedy@azmag.gov or at (602) 254-6300. We look forward to receiving your application during this open Call for Projects.

Attachments:
- Memoranda from the MAG Air Quality Planning Program Specialist
- MAG Administration of Safe Routes to School Studies - Fact Sheet

cc: FHWA Arizona Division, Planning
ADOT Local Public Agency Section
MAG Intergovernmental Representatives
MAG Public Works Directors
Transportation Review Committee
Air Quality Technical Advisory Committee
Bicycle/Pedestrian Committee
Street Committee
Transportation Safety Committee
August 7, 2017

TO: Members of the MAG Management Committee

FROM: Dean Giles, Air Quality Planning Program Specialist

SUBJECT: PM-10 CERTIFIED STREET SWEeper PROJECTS FOR FY 2018 CMAQ FUNDING

The Maricopa Association of Governments is soliciting PM-10 Certified Street Sweeper Projects for FY 2018 federal Congestion Mitigation and Air Quality Improvement (CMAQ) funding in the Maricopa County PM-10 and West Pinal PM-10 nonattainment areas from member agencies. Member agencies are invited to attend a workshop that will include a review of the application form on August 21, 2017, from 10:00 to 12:00 noon at the MAG Offices. The workshop will also cover the Arizona Department of Transportation (ADOT) Policies and Procedures for the disposal of older street sweepers. The application form and materials are attached and are also available on the MAG website at https://www.azmag.gov/Programs/Transportation/Programming-and-Finance/Transportation-Improvement-Program-TIP/TIP-Modal-Applications. Signed project applications for PM-10 Certified Street Sweeper Projects for FY 2018 CMAQ funding are due to MAG by 10:00 a.m., on September 25, 2017. Late applications will not be accepted.

The purchase of PM-10 certified street sweeper projects supports the measure “PM-10 Efficient Street Sweepers” in the Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area. In addition, the MAG 2012 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area includes PM-10 Certified Street Sweepers. The purpose of the PM-10 certified street sweeper program is to reduce particulate emissions reentrained by vehicles traveling on paved roads.

The FY 2018 Unified Planning Work Program and FY 2018-2022 MAG Transportation Improvement Program, identify $1,755,209 in CMAQ funding to purchase PM-10 Certified Street Sweepers. A minimum local cash match of 5.7 percent on the CMAQ eligible portion of the project is required.

Project requests should include PM-10 Certified Street Sweepers which meet South Coast Air Quality Management District Rule 1186 certification standards. The list of Rule 1186 Certified Street Sweepers, dated June 1, 2016, is provided. Please attach a detailed price summary from the vendor that itemizes the equipment features for the proposed sweeper project. Additional costs for equipment beyond the specifications necessary for compliance with Rule 1186-certification are not eligible for reimbursement. Examples of ineligible equipment are attached. A separate application should be completed for each PM-10 certified street sweeper requested.
MAG staff will estimate the emission reductions for each sweeper project in accordance with federal CMAQ guidance, and cost-effectiveness based on the amount of CMAQ funding requested. Methods contained in the MAG Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, September 30, 2011, will be used to calculate the emissions reduction and cost-effectiveness. The cost-effectiveness for each sweeper project will be used to rank order the eligible candidates for CMAQ funding.

In general, the methodology estimates air quality benefits from PM-10 certified street sweepers based on the reduction in reentrained dust emitted from vehicles traveling on the roadway. PM-10 certified street sweepers may be eligible for CMAQ funding if they replace a noncertified sweeper, replace an older certified street sweeper (based on MAG replacement policy), increase the frequency of sweeping, and/or expand the area swept in the PM-10 nonattainment area.

The MAG Street Committee will initially review the project applications for data completeness in October 2017. On October 26, 2017, the MAG Air Quality Technical Advisory Committee may make a recommendation to forward a ranking of the sweeper projects to the MAG Management Committee. The recommendation may be considered by the MAG Management Committee in November 2017 and the MAG Regional Council in December 2017. It is anticipated that the project ranking would be retained for any additional FY 2018 CMAQ funds that may become available to the region.

After Regional Council approval of funded projects, MAG will issue a formal notification in a letter to the project sponsor to proceed with procurement activities leading up to the purchase of the sweeper (i.e., preparation of the specifications, bid package, bid advertisement, and council approvals). When the funding is authorized, MAG will notify member agencies with a second letter advising that the funding is available and that execution of a contract to purchase the street sweeper (i.e., purchase order) can proceed. If approved for a sweeper, MAG is requesting that the street sweeper be purchased and reimbursement be requested by the agency within one year from the date of the MAG letter. It is important to note that the member agencies comply with the ADOT Federal Property Management Standards (attached) for PM-10 certified street sweepers purchased with CMAQ funds. The ADOT Federal Property Management Standards requires that each jurisdiction obtain ADOT approval prior to disposal of a CMAQ-funded street sweeper. Also, the Federal Highway Administration has advised MAG that the procurement of CMAQ funded street sweepers should proceed after funding has been approved.

If you have any questions, please contact me at (602) 254-6300.

Attachments

cc: Transportation Review Committee
    Air Quality Technical Advisory Committee
    Intergovernmental Representatives
    Street Committee
    Public Works Directors
PM-10 CERTIFIED STREET SWEEPER APPLICATION
CMAQ Funding Available for Federal Fiscal Year 2018

General Instructions:
This form is to be used to request federal Congestion Mitigation and Air Quality (CMAQ) funding available through the Maricopa Association of Governments (MAG) for PM-10 certified street sweepers. An estimated $1,755,209 in FY 2018 CMAQ funding is available regionwide.

This application form includes: Part A - Contact Information, Part B - Cost and Funding Information, Part C - Methodology, Part D - Supplemental Information, Part E - Signature, and Part F - Checklist (These 6 parts are in one tab). Separate tabs are provided for Attachment 1 - list of eligible street sweepers for CMAQ reimbursement, Attachment 2 - list of example equipment not eligible for CMAQ reimbursement, and Map - a map of the PM nonattainment areas and monitor locations. Alternative application forms are available upon request.

TRANSMITTAL INSTRUCTIONS and SCHEDULE

Application Submittal Requirements
All applications are due on Monday, September 25, 2017 by 10:00 a.m. Both an electronic and printed copy of the application and all attachments are required.

The electronic copy of the application includes the following:

a. A completed Excel spreadsheet application in MS Excel format (Please do not send a PDF or Fax instead of the spreadsheet)
b. A PDF or FAXed copy of the Excel spreadsheet with the signature block in Part E signed and dated
c. A PDF or FAXed copy of all required attachments

The printed copy of the application includes the following:

a. A printout of the completed Excel spreadsheet application, with the signature block in Part E signed and dated
b. Printed copies of all required attachments

MAG Mailing address
Electronic applications should be sent to the following address:
mailto: MAG Staff

Printed copies should be addressed as follows:

Maricopa Association of Governments
ATTN: Teri Kennedy,
302 N. 1st Avenue, Suite #300,
Phoenix, AZ 85003.

If a complete, signed electronic copy is received by the submittal deadline, applicants have five working days to submit a printed copy of the application.

Application Workshops and Open Working Group Meeting Schedule*

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Room</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, August 21, 2017</td>
<td>10:00 - Noon</td>
<td>Saguaro</td>
<td>Workshop on MAG Transportation Programming and Federal Fund Project Applications</td>
</tr>
<tr>
<td>Tuesday, September 12, 2017</td>
<td>10:00-11:00 AM</td>
<td>Chaparral</td>
<td>Open Working Group - Federal Fund Project Applications</td>
</tr>
<tr>
<td>Tuesday, September 19, 2017</td>
<td>11:00 - Noon</td>
<td>Chaparral</td>
<td>Open Working Group - Federal Fund Project Applications</td>
</tr>
</tbody>
</table>

* All meetings are on the 2nd floor of the MAG Offices at 302 N. 1st Avenue, Phoenix, Az 85003

MAG Contact Information

<table>
<thead>
<tr>
<th>Contact Name</th>
<th>Phone</th>
<th>E-Mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG Offices</td>
<td>602-254-6300</td>
<td></td>
</tr>
<tr>
<td>Teri Kennedy</td>
<td>602-254-6300</td>
<td><a href="mailto:TKennedy@azmag.gov">TKennedy@azmag.gov</a></td>
</tr>
<tr>
<td>Dean Giles</td>
<td>602-254-6300</td>
<td><a href="mailto:DGiles@azmag.gov">DGiles@azmag.gov</a></td>
</tr>
<tr>
<td>Stephen Tate</td>
<td>602-452-5010</td>
<td><a href="mailto:State@azmag.gov">State@azmag.gov</a></td>
</tr>
</tbody>
</table>
PM-10 CERTIFIED STREET SWEEPER APPLICATION  
CMAQ Funding Available for Federal Fiscal Year 2018

All information in Parts A, B, C, D and E are required.

PART A - CONTACT INFORMATION

Contact Information

1. Agency Name (Please select one)  
2. Name:  
3. Phone:  
4. E-Mail:  
5. Mailing Address: 

PART B - FUNDING INFORMATION

6. Please attach a detailed price summary for the proposed equipment from the vendor. Additional costs for optional equipment beyond the specifications necessary for compliance with Rule 1186-certification are not eligible for reimbursement.

7. Funding Information  
   (a) Total Cost of Sweeper  
   (b) Total Cost Eligible for Reimbursement (See the Attachment 1 for Rule 1186 List of Eligible Sweepers)  
   (c) Costs not eligible for reimbursement. The Local Agency is responsible for these costs. \( = 7a - 7b \) (See Attachment 2 for list of example ineligible equipment for CMAQ reimbursement)  

<table>
<thead>
<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
</tr>
</tbody>
</table>

8. Reimbursement Information  
   (a) Federal Share of Total Cost Eligible for Reimbursement (Cannot be more than 94.3% of Total Eligible Cost for Reimbursement as listed in #7b) = 7b * 94.3%  
   \[ \text{Federal Share} = \frac{\text{7b} \times 0.943}{1} \]  
   \[ \text{The total cost in question 7b is} \ 0 \]  

   | Amount | Funding Type | Share of Eligible Cost (See #7)  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>CMAQ</td>
<td>The total cost in question 7b is $0</td>
</tr>
</tbody>
</table>

   (b) Local Share of Total Cost Eligible for Reimbursement (Cannot be less than 5.7% of Total Cost Eligible for Reimbursement as listed in #7b) = 7b * 5.7%  

   | Amount | Funding Type | Share of Eligible Cost (See #7)  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>Local</td>
<td>The total cost in question 7b is $0</td>
</tr>
</tbody>
</table>

9. Project Funding Based on Information from #7 & #8  

<table>
<thead>
<tr>
<th>Federal Share = 8a</th>
<th>Local Share = 7c + 8b</th>
<th>Total Cost of Sweeper</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

2018 SS Application Form

Page 2 of 5
### PM-10 CERTIFIED STREET SWEEPER APPLICATION

**CMAQ Funding Available for Federal Fiscal Year 2018**

### PART C: METHODOLOGY INFORMATION

Information in Part C is used to calculate a CMAQ cost effectiveness score for the requested street sweeper.

10. The requested PM-10 certified street sweeper will (Select Yes or No for all that apply):

| (a) Replace a noncertified street sweeper |   |   |   |
|   |   |   |   |
| (b) Expand service area |   |   |   |
| (c) Increase sweeping frequency |   |   |   |
| (d) Replace an older certified street sweeper |   |   |   |

11. For the requested sweeper, please provide the information for roadway types in the table below for:

<table>
<thead>
<tr>
<th>Arterial Street</th>
<th>Collector Street</th>
<th>Residential Street</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Sweeping cycle length (measured in days between sweepings)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Lane miles to be swept per cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Average weekday traffic per lane being swept</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) If values were entered in the &quot;Other&quot; column, please specify what &quot;Other&quot; means:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. If "expand service area" was "yes" in question #10, please provide the following information for the roadway types in the table below:

<table>
<thead>
<tr>
<th>Arterial Street</th>
<th>Collector Street</th>
<th>Residential Street</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Previously unswept lane miles to be swept by the new sweeper: If values were entered in the &quot;Other&quot; column, please specify what &quot;Other&quot; means:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. If "increase sweeping frequency" was "yes" in question #10, please provide the following information for the roadway types in the table below:

<table>
<thead>
<tr>
<th>Arterial Street</th>
<th>Collector Street</th>
<th>Residential Street</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Previous cycle length (measured in days between sweepings): If values were entered in the &quot;Other&quot; column, please specify what &quot;Other&quot; means:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. If “replace an older PM-10 certified street sweeper” was “yes” in question #10, please provide information in the following boxes: (Note that at least one of a, b, or c must exceed useful life standards.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Useful Life Standard</th>
<th>Optional: Space for Additional Comments if Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Number of hours in service of the sweeper that is being replaced</td>
<td>12,000 hours</td>
<td></td>
</tr>
<tr>
<td>(b) The month and year that the older certified sweeper was put into service</td>
<td>8 years</td>
<td></td>
</tr>
<tr>
<td>(c) Number of miles (including deadhead miles) on the sweeper that is being</td>
<td>96,000 miles</td>
<td></td>
</tr>
<tr>
<td>replaced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) An estimate of the percent of time the older sweeper was out of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the past year due to repairs and maintenance issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Please explain why the older sweeper was out of service.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Will the requested certified street sweeper be used to sweep streets within 4 miles of a PM-10 monitor? If yes, please specify which monitor.  
[Link to MAG for PM-10 Map]

16. Have local resources been committed such as staff or equipment to support the operation of the PM-10 certified street sweeper? (Please select Yes or No)  
If yes, please provide details (e.g., number, type and cost of employees, equipment, and maintenance).

17. Please indicate in what geographical area(s) the requested certified street sweeper will operate (e.g., Glendale Ave. to Thomas Rd.; 19th Ave. to Central Ave).

18. Please provide a map of the area to be swept by the proposed sweeper.  
Please attach a PDF when submitting and transmitting application. If available, please submit a GIS shape showing swept area.

19. Please indicate if your agency would be willing to provide MAG with additional information on the requested PM-10 certified street sweeper. (Please select Yes or No)
PM-10 CERTIFIED STREET SWEEPER APPLICATION
CMAQ Funding Available for Federal Fiscal Year 2018

20. Please indicate the total number of sweepers currently owned and operated by your agency for sweeping streets:

(a) PM-10 certified: 
(b) Noncertified: 

PART E - SIGNATURE PAGE

As the jurisdiction’s manager/administrator or designated representative, I certify that the information contained in this application is accurate and complete and that the local funds for this project will be included in the sponsoring MAG member agency’s local current CIP/TIP or budget document if the project is selected for federal funding.

| Signature: |
| Name: |
| Title: |
| Date: |

PART F - CHECK LIST (OPTIONAL)

This check list is optional, but is included to facilitate applicant review and verification that all required fields in the form have been completed

<p>| Part A - Fields 1-5 are complete |
| Part B - Fields 6-9 are complete |
| Part C - Fields 10-15 are complete |
| Part D - Fields 16-20 are complete |</p>
<table>
<thead>
<tr>
<th>Examples of Additional Street Sweeper Equipment Not Eligible for Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Automatic lubrication system (Autolube, grease jockey system)</td>
</tr>
<tr>
<td>2. Hopper access step</td>
</tr>
<tr>
<td>3. Hydrant hopper wash down system</td>
</tr>
<tr>
<td>4. Conveyor flush kit with hydrant</td>
</tr>
<tr>
<td>5. 1000 pounds per square inch (PSI) wand</td>
</tr>
<tr>
<td>6. Dual HiBack air-suspended seats</td>
</tr>
<tr>
<td>7. Hand hose</td>
</tr>
<tr>
<td>8. Hopper sound suppression</td>
</tr>
<tr>
<td>9. Right hand steer chassis upcharge</td>
</tr>
<tr>
<td>10. Air horn (reimbursable when conventional electric horn is not included)</td>
</tr>
<tr>
<td>11. AM/FM radio; CD</td>
</tr>
<tr>
<td>12. Training</td>
</tr>
<tr>
<td>13. Magnet bar</td>
</tr>
<tr>
<td>14. Stainless steel hopper</td>
</tr>
<tr>
<td>15. Sweeper, truck and wheel yellow paint</td>
</tr>
<tr>
<td>16. Additional roof-mounted air conditioner</td>
</tr>
<tr>
<td>17. Holder rear mount for five-gallon pail</td>
</tr>
<tr>
<td>18. Cigarette lighter with 12v</td>
</tr>
<tr>
<td>19. Foam filled tire</td>
</tr>
<tr>
<td>20. Window tinting</td>
</tr>
<tr>
<td>21. Move exhaust port to left side of vehicle</td>
</tr>
<tr>
<td>22. John Deere auxiliary engine - Tier iT4</td>
</tr>
</tbody>
</table>
CERTIFIED STREET SWEEPERS UNDER SCAQMD RULE 1186

(AS OF JUNE 1, 2016*)

SCAQMD Rule 1186 requires local governments within the South Coast Air Quality Management District (see Figure below) to procure certified street sweepers for new equipment purchases or new street sweeping contracts made after January 1, 2000 (there are no retrofit requirements under Rule 1186).

Various SCAQMD regulations also require procurement of certified street sweepers to implement specific rule requirements. This list of equipment is updated periodically based on certifications test results and in response to new information.

The SCAQMD Governing Board adopted Rule 1186 street sweeper testing and certification procedures in September of 1999. Enclosed is a list of equipment that has met the Rule 1186 certification standards. (The equipment may either be new or upgraded to meet certification specifications). Questions on equipment capabilities and options should be directed to your local distributor and/or the manufacturer. Questions regarding the Rule requirements can be directed to Mike Laybourn, Air Quality Specialist, at (909) 396-3066 or mlaybourn@aqmd.gov.

* Additional sweepers may be certified based on future tests. You can call 1 (800) CUT-SMOG or visit www.aqmd.gov for the most recent list of Rule 1186 certified equipment.
**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)**

**RULE 1186 CERTIFIED STREET SWEEPERS AS OF JUNE 1, 2016**

The following is a list of street sweeping equipment that has currently been certified for SCAQMD Rule 1186. All certified equipment must be operated and maintained in accordance with the manufacturer’s specifications. Future testing may qualify additional equipment. Call 1 (800) CUT-SMOG for the current list.

<table>
<thead>
<tr>
<th>MAKE*</th>
<th>MODEL*</th>
<th>DUST CONTROL SYSTEMS*</th>
</tr>
</thead>
</table>
| CHALLENGER MANUFACTURING | CHALLENGER | • THREE (3) 0.03 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM  
• FOUR (4) 0.03 INCH DIAMETER ORIFICE NOZZLES CENTRALLY LOCATED BETWEEN THE MAIN BROOM AND THE CONVEYOR  
• WATER PUMP TO PROVIDE 25 POUNDS PER SQUARE INCH WATER PRESSURE DURING OPERATION; MAXIMUM OF 45 POUNDS PER SQUARE INCH |
| ELGIN | AIR CUB (LX/DX) CROSSWIND FURY | • DIAMOND GRID DUST SEPARATION SCREEN  
• LOUVERED CENTRIFUGAL DUST SEPARATOR  
• ONE (1) 0.06 INCH DIAMETER ORIFICE NOZZLE CENTRALLY LOCATED ABOVE FAN INLET IN THE HOPPER  
• TWO (2) 0.047 INCH DIAMETER ORIFICE NOZZLES LOCATED INSIDE THE SUCTION TUBE  
• FOUR (4) 0.051 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM  
• PUMP TO PROVIDE 40 POUNDS PER SQUARE INCH WATER PRESSURE |
| ELGIN | CROSSWIND J | • DIAMOND GRID DUST SEPARATION SCREEN  
• S-TRAP CENTRIFUGAL SEPARATOR  
• FOUR (4) 0.06 INCH DIAMETER ORIFICE NOZZLES LOCATED INSIDE HOPPER  
• THREE (3) 0.059 INCH DIAMETER ORIFICE NOZZLES LOCATED INSIDE SUCTION TUBE  
• THREE (3) 0.057 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM  
• WATER PUMP TO PROVIDE 80 POUNDS PER SQUARE INCH WATER PRESSURE |

* In order to ensure compliance with Rule 1186 requirements, all certified equipment must be operated and maintained in accordance with the manufacturer's specifications. End users are responsible for ensuring that the dust control systems are in place for each certified sweeper. Note: The make and model of the sweeper must have the dust control system(s) specified above to be in compliance. (Standard or older models may not have all the systems). Please contact the manufacturer if you would like to ensure that your sweeper(s) are Rule 1186 compliant.
**South Coast Air Quality Management District (SCAQMD)**  
**Rule 1186 Certified* Street Sweepers as of June 1, 2016**

The following is a list of street sweeping equipment that has currently been certified for SCAQMD Rule 1186. All certified equipment must be operated and maintained in accordance with the manufacturer’s specifications. Future testing may qualify additional equipment. Call 1 (800) CUT-SMOG for the current list.

<table>
<thead>
<tr>
<th>Make*</th>
<th>Model*</th>
<th>Dust Control Systems*</th>
</tr>
</thead>
</table>
| Elgin         | Pelican P & S Pelican SE (Wet Suppression)  | - Four (4) 0.06 inch diameter orifice nozzles centrally located between the main broom and the conveyor  
                |                                             | - Two (2) 0.057 inch diameter orifice nozzles located at each gutter broom  
                |                                             | - Water pump to provide 80 pounds per square inch water pressure |
| Elgin         | Pelican P (Waterless Suppression)           | - Gutter/main broom fully enclosed shroud system  
                |                                             | - Two centrifugal dust evacuation fans  
                |                                             | - Synthetic multi-pocket filter with hydraulic shaker for dust removal |
| Elgin         | Pelican P (Combination)                     | - All of the features of the wet and waterless suppression Pelican P street sweeper with the equipment operated in either the wet or waterless mode |
| Elgin         | Eagle E Eagle F Eagle (CNG) Broom Bear Road Wizard | - Four (4) 0.06 inch diameter orifice nozzles centrally located between the main broom and the conveyor  
                |                                             | - Three (3) 0.057 inch diameter orifice nozzles located at each gutter broom  
                |                                             | - Water pump to provide 80 pounds per square inch water pressure |
| Elgin         | Eagle F (Waterless)                         | - Gutter/main broom fully enclosed shroud system  
                |                                             | - Centrifugal dust evacuation fan  
                |                                             | - Synthetic multi-pocket filter with hydraulic shaker for dust control |
| Elgin         | Eagle F (Combination)                       | - All of the features of the wet and waterless Eagle F street sweeper with the equipment operated in either the wet or waterless mode |

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)**

**RULE 1186 CERTIFIED STREET SWEEPERS AS OF JUNE 1, 2016**

The following is a list of street sweeping equipment that has currently been certified for SCAQMD Rule 1186. All certified equipment must be operated and maintained in accordance with the manufacturer’s specifications. Future testing may qualify additional equipment. Call 1 (800) CUT-SMOG for the current list.

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<th>DUST CONTROL SYSTEMS*</th>
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</table>
| ELGIN | GEOVAC         | • DIAMOND GRID DUST SEPARATION SCREEN  
• FOUR (4) 0.06 INCH DIAMETER ORIFICE NOZZLES CENTRALLY LOCATED IN THE HOPPER  
• TWO (2) 0.059 INCH DIAMETER ORIFICE NOZZLES LOCATED INSIDE THE SUCTION TUBE  
• TWO (2) 0.057 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM  
• FOUR (4) 0.06 INCH DIAMETER ORIFICE NOZZLES LOCATED AT THE EXTENSION BROOM  
• WATER PUMP TO PROVIDE 80 POUNDS PER SQUARE INCH WATER PRESSURE |
| ELGIN | WHIRLWIND MV   | • DIAMOND GRID DUST SEPARATION SCREEN  
• FOUR (4) 0.06 INCH DIAMETER ORIFICE NOZZLES CENTRALLY LOCATED IN THE HOPPER  
• TWO (2) 0.059 INCH DIAMETER ORIFICE NOZZLES LOCATED INSIDE THE SUCTION TUBE  
• TWO (2) 0.057 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM  
• FOUR (4) 0.60 INCH DIAMETER ORIFICE NOZZLES LOCATED AT THE EXTENSION BROOM  
• PUMP TO PROVIDE 80 POUNDS PER SQUARE INCH WATER PRESSURE |

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<tr>
<td><strong>GLOBAL ENVIRONMENTAL PRODUCTS</strong></td>
<td><strong>M3</strong></td>
<td><strong>ENCLOSED ELEVATOR SYSTEM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>R3</strong></td>
<td><strong>STEEL OR MIXED POLYESTER MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>M4</strong></td>
<td><strong>ONE (1) 0.072 INCH DIAMETER ORIFICE NOZZLE PER EACH GUTTER BROOM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>M4 HSD</strong></td>
<td><strong>TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES PER EACH SIDE OF THE MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>THREE (3) 0.057 INCH DIAMETER ORIFICE NOZZLES IN SPRAY BAR LOCATED BEHIND THE MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES IN SPRAY BAR LOCATED UNDERNEATH THE CAB</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WATER PUMP TO PROVIDE 40 POUNDS PER SQUARE INCH WATER PRESSURE</strong></td>
</tr>
<tr>
<td><strong>JOHNSTON</strong></td>
<td><strong>310</strong></td>
<td><strong>FOUR (4) 0.072 INCH DIAMETER ORIFICE NOZZLES LOCATED IN FRONT SPRAY BAR</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>TWO (2) 0.072 INCH DIAMETER ORIFICE NOZZLES PER EACH GUTTER BROOM</strong></td>
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<td></td>
<td><strong>ONE (1) 0.026 INCH DIAMETER ORIFICE NOZZLE LOCATED IN THE FAN SUCTION HOOD</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>WATER PUMP TO PROVIDE 50 POUNDS PER SQUARE INCH WATER PRESSURE</strong></td>
</tr>
<tr>
<td><strong>JOHNSTON</strong></td>
<td><strong>3000</strong></td>
<td><strong>ENCLOSED ELEVATOR SYSTEM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MX450</strong></td>
<td><strong>STEEL OR MIXED POLYESTER MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4000</strong></td>
<td><strong>ONE (1) 0.072 INCH DIAMETER ORIFICE NOZZLE PER EACH GUTTER BROOM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>4000 SDS</strong></td>
<td><strong>TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES PER EACH SIDE OF THE MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td><strong>MST 350</strong></td>
<td><strong>THREE (3) 0.057 INCH DIAMETER ORIFICE NOZZLES IN SPRAY BAR LOCATED BEHIND THE MAIN PICK UP BROOM</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES IN SPRAY BAR LOCATED UNDERNEATH THE CAB</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WATER PUMP TO PROVIDE 40 POUNDS PER SQUARE INCH WATER PRESSURE</strong></td>
</tr>
</tbody>
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**South Coast Air Quality Management District (SCAQMD)**  
**Rule 1186 Certified Street Sweepers as of June 1, 2016**  
The following is a list of street sweeping equipment that has currently been certified for SCAQMD Rule 1186. All certified equipment must be operated and maintained in accordance with the manufacturer’s specifications. Future testing may qualify additional equipment. Call 1 (800) CUT-SMOG for the current list.

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</table>
| JOHNSTON | VT605 VT610 VT650 V501 V651 V801 | • Two (2) 0.039 inch diameter orifice nozzles per gutter broom  
• Three (3) 0.042 inch diameter orifice nozzles per suction broom  
• Three (3) 0.039 inch diameter orifice nozzles per suction nozzle  
• Multi-position suction nozzle two arm facility  
• One (1) 0.042 inch diameter orifice nozzle for the impeller fan  
• Water pump to provide 50 pounds per square inch water pressure |
| JOHNSTON | 770 CYCLONE | • Three (3) 0.067 inch diameter orifice nozzles for gutter brooms  
• Two (2) 0.07 inch diameter orifice nozzles for center curtain  
• Four (4) 0.055 inch diameter orifice nozzles for front bumper  
• Two (2) 0.067 inch diameter orifice nozzles for front curb spray  
• Two (2) 0.07 inch diameter orifice nozzles on left and right side of pick up head  
• Three (3) 0.082 inch diameter orifice nozzles for pick up head front side  
• Seven (7) 0.079 inch diameter orifice nozzles for pick up head rear side  
• Three (3) 0.079 inch diameter orifice nozzles for windrow path  
• Two (2) 0.045 inch diameter orifice nozzles for pick up head suction  
• One (1) 0.079 inch diameter orifice nozzle for blower fan outlet  
• Pump to provide 50 pounds per square inch water pressure |
| NESCON | X-BROOM | • Three (3) 0.079 inch diameter orifice nozzles located at each side broom  
• Five (5) 0.079 inch diameter orifice nozzles across front bumper  
• Five (5) 0.050 inch diameter orifice nozzles in main broom housing  
• Water pump to provide 50 pounds per square inch water pressure |

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)**  
**RULE 1186 CERTIFIED STREET SWEEPERS AS OF JUNE 1, 2016**  
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| SCHWARZE | EV-1 | • Twelve (12) polyester dry filter cartridges (maintained to ensure proper integrity)  
   • Filtration cleaned three times per minute  
   • Filtration system active at all times |
| SCHWARZE | EV-2 | • Eight (8) polyester dry filter cartridges (maintained to ensure proper integrity)  
   • Filtration system operated at all times  
   • Each filter cleaned three times per minute |
| SCHWARZE | DXR | • Polyester dry filter cartridges (maintained to ensure proper integrity)  
   • Filtration system active at all times  
   • Filtration cleaned four times per minute and a half |
| SCHWARZE | A4000/ A4STORM | • Four (4) 0.036 inch diameter orifice nozzles located on the sweeping head  
   • Two (2) 0.036 inch diameter orifice nozzles inside hopper  
   • Two (2) 0.036 inch diameter orifice nozzles for each gutter broom  
   • Four (4) 0.036 inch diameter orifice nozzles inside hopper on spray bar  
   • Water pump to provide 70 pounds per square inch water pressure |
| SCHWARZE | M5000/M6000/ M6 AVALANCHE | • Five (5) 0.036 inch diameter orifice nozzles on main broom  
   • Three (3) 0.036 inch diameter orifice nozzles for each gutter broom  
   • Water pump to provide 70 pounds per square inch water pressure |

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)**  
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| **SCHWARZE** | A 7000/ A7 TORNADO A7 ZEPHYR A 8000/ A8 TWISTER A 9000/ A9 MONSOON | • SAWTOOTH DUST SEPARATION SCREEN, SELF DUMPING DUST SEPARATOR, FAN CENTRIFUGE  
• FIVE (5) 0.036 INCH DIAMETER ORIFICE NOZZLES LOCATED ON THE SWEEPING HEAD  
• TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES LOCATED ON HEAD INTAKE TUBE  
• TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES IN RIGHT HAND GUTTER BROOM  
• FOUR (4) 0.036 INCH DIAMETER ORIFICE NOZZLES LOCATED ON HOPPER SPRAY BAR  
• WATER PUMP TO PROVIDE 70 POUNDS PER SQUARE INCH WATER PRESSURE  
• TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES IN LEFT HAND GUTTER BROOM (REQUIRED IF BOTH GUTTER BROOMS ARE USED) |
| **SCHWARZE** | S348-I/ SUPERVAC VORTEX S348-LE/ SUPERVAC GALE FORCE | • FOUR (4) 0.036 INCH DIAMETER ORIFICE NOZZLES ON HOPPER SPRAY BAR  
• TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES IN HOPPER  
• TWO (2) 0.036 INCH DIAMETER ORIFICE NOZZLES ON RIGHT HAND GUTTER BROOM  
• WATER PUMP TO PROVIDE 70 POUNDS PER SQUARE INCH WATER PRESSURE |
| **STEWART-AMOS** | STARFIRE S-4, S-5, AND S-6 | • FOUR (4) 0.05 INCH DIAMETER ORIFICE NOZZLES CENTRALLY LOCATED BETWEEN THE MAIN BROOM AND THE ELEVATOR  
• FOUR (4) 0.05 INCH DIAMETER ORIFICE NOZZLES LOCATED BENEATH THE FRONT BUMPER OF THE CHASSIS  
• TWO (2) 0.05 INCH DIAMETER ORIFICE NOZZLES LOCATED IN FRONT OF EACH GUTTER BROOM  
• WATER PUMP TO PROVIDE 40 POUNDS PER SQUARE INCH WATER PRESSURE |

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### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

#### RULE 1186 CERTIFIED STREET SWEEPERS AS OF JUNE 1, 2016

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| PYTHON  | S2000  | - Four (4) 0.008 inch diameter orifice nozzles mounted above and ahead of a 36 inch fill diameter rear broom  
- Water line with 0.02 inch diameter orifice and three (3) 0.06 diameter outlets above each 42 inch diameter gutter broom  
- Pump to provide 24 pounds per square inch water pressure during operation  
*Please note that the gutter and rear broom sizes are different than the standard model |
| PYTHON  | S3000  | - Four (4) 0.008 inch diameter orifice nozzles mounted above and ahead of rear broom  
- Water line with 0.02 inch diameter orifice and three (3) 0.06 diameter outlets above each gutter broom  
- Pump to provide 24 pounds per square inch water pressure during operation |

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| TENNANT | SENTINEL | • GUTTER/MAIN BROOM FULLY ENCLOSED SHROUD SYSTEM  
• DUAL FAN VACUUM SYSTEM (OPERATED AT ALL TIMES)  
• SYNTHETIC-SINGED POLYESTER FILTER (MAINTAINED TO ENSURE PROPER INTEGRITY) |
| TENNANT | 830 I / 830 II | • GUTTER/MAIN BROOM FULLY ENCLOSED SHROUD SYSTEM  
• DUAL FAN VACUUM SYSTEM (OPERATED AT ALL TIMES)  
• SYNTHETIC-SINGED POLYESTER FILTER (MAINTAINED TO ENSURE PROPER INTEGRITY) |
| TYMCO | 210  
300  
350  
435 | • CYCLONIC, MULTIPASS, CENTRIFUGAL SEPARATION  
• CENTER DEBRIS DEFLECTOR ASSEMBLY PERPENDICULAR TO THE PICK UP HEAD  
• TWO (2) 0.043 INCH DIAMETER ORIFICE NOZZLES FOR EACH GUTTER BROOM  
• ONE (1) 0.063 INCH DIAMETER ORIFICE NOZZLE FOR EACH GUTTER BROOM  
• ONE (1) 0.063 INCH DIAMETER ORIFICE NOZZLE LOCATED IN THE HOPPER  
• ONE (1) 0.063 INCH DIAMETER ORIFICE NOZZLE LOCATED IN BLOWER HOUSING  
• WATER PUMP WITH A MINIMUM SYSTEM RELIEF VALVE SET AT 25 POUNDS PER SQUARE INCH. |

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| Tymco | 600 600 BAH FHD 500X | - Cyclonic, multipass, centrifugal separation  
- Center debris deflecter assembly perpendicular to the pick up head  
- Front debris deflecter curtain assembly parallel to the pick up head  
- Low emission dust guards (only applicable to cabover trucks)  
- Three (3) 0.063 inch diameter orifice nozzles for each gutter broom  
- Two (2) 0.043 inch diameter orifice nozzles for each gutter broom  
- One (1) 0.093 inch diameter orifice nozzle located in the hopper  
- One (1) 0.093 inch diameter orifice nozzle located in blower housing  
- Two (2) [minimum] hopper baffle curtains  
- Water pump with a minimum system relief valve set at 25 pounds per square inch. |
| Tymco | DST - 4 | - Cyclonic, multipass, centrifugal separation  
- Self contained multiple filtration system utilizing PTFE membrane filters  
- Two (2) 0.043 inch diameter orifice nozzles for each 32 inch diameter gutter broom  
- One (1) 0.063 inch diameter orifice nozzles for each 32 inch diameter gutter broom  
- One (1) 0.063 inch diameter orifice nozzle located in the hopper  
- Water pump with a minimum system relief valve set at 25 pounds per square inch. |

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| TYMCO | DST - 6 | - Cyclonic, multipass, centrifugal separation  
- Self contained multiple filtration system utilizing PTFE membrane filters  
- Three (3) 0.063 inch diameter orifice nozzles for each gutter broom  
- Two (2) 0.043 inch diameter orifice nozzles for each gutter broom  
- One (1) 0.094 inch diameter orifice nozzle located in the hopper  
- Two (2) [minimum] hopper baffle curtains  
- Water pump with a minimum system relief valve set at 25 pounds per square inch |
| VACALL | VS10/10D, VF10 VS13/13D, VF13 VS14/14D, VF14 VS16/16D, VF16 VS20/20D, VF20 | - Four (4) 0.062 inch diameter orifice nozzles located in front of each 36 inch gutter broom  
- Four (4) 0.062 inch diameter orifice nozzles located in front of the transfer broom  
- Ten (10) 0.125 inch diameter orifice nozzles located inside the pick up head  
- Six (6) 0.181 inch diameter orifice nozzles located inside the scrubber collar of the pick up head  
- 48 inch power vacuum nozzle  
- Minimum 300 gallon gravity feed water supply system with water continuously supplied to all nozzles  
- Low velocity dust collection air chamber  
- Minimum of six (6) expanded metal screens |

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<tr>
<td>WAYNE SWEEPERS</td>
<td>CENTURION</td>
<td>• <strong>SEVEN (7)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES ON SPRAY BAR UNDERNEATH THE CAB</td>
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<tr>
<td></td>
<td></td>
<td>• <strong>TWO (2)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES PER GUTTER BROOM</td>
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<td>• (GUTTER BROOMS CAN BE OPERATED WITHOUT WATER SPRAYS IF FULLY ENCLOSED SHROUD SYSTEM IS UTILIZED AND MAINTAINED PER THE MANUFACTURERS SPECIFICATIONS)</td>
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<tr>
<td></td>
<td></td>
<td>• <strong>THREE (3)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES ON SPRAY BAR ABOVE CONVEYOR</td>
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<td>• 300 GALLON WATER TANK</td>
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<td>• WATER PUMP TO PROVIDE MINIMUM OF SEVEN GALLONS PER MINUTE</td>
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<td>• SINGLE FAN VACUUM SYSTEM</td>
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<td></td>
<td></td>
<td>• GLAZED, POLYESTER FILTER SYSTEM (MAINTAINED TO ENSURE PROPER INTEGRITY)</td>
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<tr>
<td>WAYNE SWEEPERS</td>
<td>GLADIATOR</td>
<td>• <strong>THREE (3)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM</td>
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<td></td>
<td>• <strong>SIX (6)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES ACROSS FRONT BUMPER</td>
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<td>• <strong>FOUR (4)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES AT THE REAR BROOM</td>
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<td></td>
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<td>• WATER PUMP TO PROVIDE 60 POUNDS PER SQUARE INCH WATER PRESSURE</td>
</tr>
<tr>
<td>WAYNE SWEEPERS</td>
<td>WARRIOR</td>
<td>• <strong>THREE (3)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES LOCATED AT EACH SIDE BROOM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>SIX (6)</strong> 0.0925 INCH DIAMETER ORIFICE NOZZLES ACROSS FRONT BUMPER</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• WATER PUMP TO PROVIDE 60 POUNDS PER SQUARE INCH WATER PRESSURE</td>
</tr>
</tbody>
</table>

* In order to ensure compliance with Rule 1186 requirements, all certified equipment must be operated and maintained in accordance with the manufacturer's specifications. End users are responsible for ensuring that the dust control systems are in place for each certified sweeper. Note: The make and model of the sweeper must have the dust control system(s) specified above to be in compliance. (Standard or older models may not have all the systems). Please contact the manufacturer if you would like to ensure that your sweeper(s) are Rule 1186 compliant.
ARIZONA DEPARTMENT OF TRANSPORTATION
POLICIES AND PROCEDURES

FIN-11.08 FEDERAL PROPERTY MANAGEMENT STANDARDS

Effective: October 18, 2010
Supersedes: FIN-11.08 (1/28/2010)
Responsible Office: Fixed Assets
Phone: (602) 712-8028

8.01 PURPOSE
To establish uniform standards governing the use and disposition of property acquired, in whole or in part, with federal funds or whose cost was charged to a project supported by a federal grant.

8.02 SCOPE
This policy applies to all recipients or subrecipients of federal funds through a pass-through entity. The policy is limited to those items whose acquisition cost is at least $5,000 per unit.

8.03 DEFINITIONS

Acquisition Cost
Net invoice unit price of the property including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the property usable for the purpose for which it was acquired. Other charges, such as the cost of installation, transportation, taxes, professional services, duty, or protective in-transit insurance can be included or excluded from the cost in accordance with generally accepted accounting principles.

Common Rule
49 CFR 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, the federal regulation which governs all grants subject to this policy.

Federal Awarding Agency
Agency of the federal government that awards the grants. These agencies include, but are not limited to:

A. United States Department of Transportation (DOT)
   1. Federal Highway Administration (FHWA)
   2. Federal Transit Authority (FTA)
   3. Federal Aviation Administration (FAA)
   4. Federal Motor Carrier Safety Administration (FMCSA)
   5. National Highway Transportation Safety Administration (NHTSA)
   6. Federal Railroad Administration (FRA)

B. United States Department of the Interior (DOI)
   1. Bureau of Indian Affairs (BIA)
   2. Bureau of Land Management (BLM)
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant</td>
<td>A sum of money given by one governmental entity to some other entity for the purpose of achieving some goal or supporting some program.</td>
</tr>
<tr>
<td>Pass-through Entity</td>
<td>A non-federal entity that provides a federal grant to a subrecipient to carry out a federal program.</td>
</tr>
<tr>
<td>Personal Property</td>
<td>Property which is non-financial in nature, which has a useful life of at least one year, and which is used in operations, except real property. Personal property is further classified as one of the following:</td>
</tr>
<tr>
<td></td>
<td>A. Tangible—having physical existence.</td>
</tr>
<tr>
<td></td>
<td>B. Intangible—having no physical existence, such as patents, software, inventions, and copyrights.</td>
</tr>
<tr>
<td>Real Property</td>
<td>Land, Buildings, Improvements, and related property rights, which are used in operations.</td>
</tr>
<tr>
<td>Recipient</td>
<td>A non-federal entity, such as ADOT, that expends federal awards received directly from a federal awarding agency to carry out a federal program.</td>
</tr>
<tr>
<td>Subrecipient</td>
<td>A non-federal entity that expends funds from a federal grant received from a pass-through entity to carry out a federal program. Examples would be Pima Association of Governments (PAG), Maricopa Association of Governments (MAG), as well as cities and towns, Metropolitan Planning Organizations (MPO’s), and Councils of Government (COG’s). An entity that receives funding from a subrecipient is also a subrecipient. (Note: The terms and conditions of the federal award are carried forward from the recipient to the subrecipient.)</td>
</tr>
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**8.04 PROCEDURES FOR ALL FEDERALLY-FUNDED PERSONAL PROPERTY**

A. When statutory authority exists, title to property purchased in whole or part with federal funds shall be vested in the recipient or subrecipient upon acquisition. The recipient or subrecipient is, however, responsible for adherence to any applicable federal program compliance requirements (49 CFR 18 Section 32).

B. Use of Personal Property—federally-funded personal property may be used under the following conditions:

1. Property shall be used by the recipient or subrecipient in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by federal funds.

2. When no longer needed for the original program or project, the property may be used in other activities currently or previously supported by a federal agency.

3. The recipient or subrecipient shall make property available for use on other projects or programs currently or previously supported by the federal government, providing such use will not interfere with the work on the projects or programs for which it was originally acquired.
4. The recipient or subrecipient shall not use property acquired with grant funds to compete unfairly with private companies that provide equivalent services, unless specifically permitted or contemplated by federal statute.

5. When acquiring replacement property, the recipient or subrecipient may use the property to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property, subject to the approval of the awarding agency, as well as ADOT.

(Note: The federal awarding agency may be entitled to a share of the trade-in amount. Sections 8.04.I.1 and 8.04.I.2 show how this amount is calculated.)

6. For ADOT-owned property, any such transactions are subject to the rules for disposal of ADOT property described in ADOT Policy FIN-11.02, ‘Control and Inventory of ADOT Property.’

C. Property obtained under a federal grant may be titled to, be in the physical custody of, and be carried on the financial statements of, a recipient or subrecipient. However, from the perspective of the federal awarding agency, ADOT is the agency to whom the federal agency has granted funds; as such, the federal awarding agency expects ADOT to ensure that federal regulations are followed.

D. Federal regulations permit states to impose their own requirements on their subrecipients. The State of Arizona does have more strict requirements, which apply to ADOT’s subrecipients, as they apply to ADOT. Therefore, transactions, as described herein, may be subject to approval by ADOT.

E. In the normal course of business, ADOT may grant funds to a subrecipient (e.g., Maricopa Association of Governments, or MAG), which in turn grants them to its own subrecipient (e.g., a city or town). When this additional granting occurs, ADOT expects that ADOT’s subrecipient will ensure compliance with all federal and state requirements, and further expects that ADOT’s subrecipient (MAG, in this example) will handle all communications with its subrecipient, including, but not limited to:

1. The gathering of information to complete the annual inventory, as described in Section 8.06 of this policy, ‘Inventorying Federally-Funded Property Owned by Subrecipients.’

2. All rules governing the disposition of federally-funded property, as described in Section 8.07 of this policy, ‘Disposition of Federally-Funded Property Owned by Subrecipients.’

F. All federally-funded property, regardless of whether title is held by ADOT or by a subrecipient, is subject to the provisions of 49 CFR 19, also known as the Common Rule.

G. Property management requirements for federally-funded personal property include:

1. Maintain property records that contain:
   a. description of property
   b. vendor
   c. model
   d. manufacturer
   e. serial number
f. name of title holder

g. acquisition date

h. cost of property

i. accumulated depreciation

j. net book value

k. federal awarding agency

l. percentage of federal participation

m. percentage of recipient or subrecipient participation

n. location, use, and condition of property

o. date of disposal and sale price or trade-in value

p. contact person, with phone number

2. An annual physical inventory, which includes a report of all assets purchased in whole, or in part, with funds from the federal awarding agency when required by that agency. For property owned by ADOT, the inventory must reconcile to the financial statements as of the end of ADOT’s fiscal year (June 30). Guidelines for inventorying property owned by subrecipients are discussed in Section 8.06, ‘Inventorying Federally-Funded Property Owned by Subrecipients.’ In either case, the inventory is to be submitted to the federal awarding agency by October 31.

3. A control system to prevent loss, damage, or theft.

4. Adequate maintenance procedures.

5. Sales procedures (if authorized or required to sell property) which ensure the highest possible return.

H. Disposition of Personal Property—When original or replacement equipment is no longer needed for the original program or project, or for other activities currently or previously supported by a federal agency, the property may be sold, with the federal awarding agency having the right to a share of the proceeds. Examples of how this share is calculated are shown in Sections 8.04.1.1 and 8.04.1.2 of this policy.

I. Federal Awarding Agency's Share of Sale Proceeds: When a recipient or subrecipient sells, by any means (e.g. trade-in, auction, etc.), property purchased with federal funds, the federal awarding agency is entitled to a share of the proceeds, calculated using one of the following methods:

1. The federal awarding agency has the right to a calculated amount:

   Current market value
   Or
   proceeds from sale  \( \times \) Awarding agency's share
   (including trade-in)  (federal participation %)

If the grant agreement calls for the recipient or subrecipient to fund a percentage of the purchase price, that purchase price is calculated net of the trade-in amount, regardless of how much, if any, of the trade-in amount the federal awarding agency is entitled to.

Example: The following facts are assumed:
FIN-11.08 FEDERAL PROPERTY MANAGEMENT STANDARDS

Effective: October 18, 2010
Supersedes: FIN-11.08 (1/28/10)

1. The purchase price of replacement property is $200,000. The trade-in allowance provided by the vendor is $20,000. The net invoice price is $180,000. The percent of new property to be funded by the subrecipient is 20%. The percent of traded-in property which was funded by the federal agency is 85%.

In this example:
- Amount of trade-in allowance to federal agency = $17,000 (20% of $850,000)
- Amount of trade-in allowance to subrecipient = $3,000 ($20,000 less $17,000)
- Amount of purchase of new property funded by subrecipient = $36,000 ($180,000 * 20%)
- Amount of cash outlay by recipient or subrecipient = $33,000 ($36,000 less $3,000)

2. Should the property include an attachment not eligible for federal participation, the trade-in allowance will be pro-rated between the original purchase and the attachment based on their relative costs. It is the responsibility of the recipient or subrecipient to provide documentation of these costs.

Example: The following facts are assumed:
- Purchase price of replacement property = $200,000
- Trade-in allowance provided by vendor = $20,000
- Net invoice price = $180,000
- Percent of new property to be funded by subrecipient = 20%
- Purchase price of federally-funded traded-in property = $90,000
- Purchase price of subrecipient-funded attachment, not eligible for federal participation = $10,000
- Total cost of traded-in property = $100,000
- Percent of traded-in property allocated to subrecipient-funded attachment = 10% ($10,000 / $100,000)
- Percent of traded-in property which was funded by federal agency (before accounting for attachment) = 85%

In this example:
- Amount of trade-in allowance directly allocated to subrecipient = $2,000 ($20,000 * 10% not eligible for federal participation)
- Amount of trade-in allowance allocated to original purchase = $18,000 ($20,000 less $2,000)
- Amount of remaining trade-in allowance to federal agency = $15,300 ($18,000 * 85% federal share on traded-in property)
- Amount of regaining trade-in allowance to subrecipient = $2,700 ($18,000 less $15,300)
- Total trade-in allowance to subrecipient = $4,700 ($2,000 plus $2,700)
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Supersedes: FIN-11.08 (1/28/10)

3. If appropriate disposition action is not taken by the recipient/subrecipient of the equipment, the federal awarding agency may direct the action to be taken.

J. Salvage Credits—Any proceeds received from the sale of salvage or scrap material are to be credited to the project to which the material was originally charged, or to a similar project.

8.05 PROCEDURES FOR ALL FEDERALLY-FUNDED REAL PROPERTY

A. Title to real property under a grant will vest, upon acquisition, in the recipient or subrecipient, as applicable. The recipient or subrecipient is, however, responsible for adherence to any applicable federal program compliance requirements under the Code of Federal Regulations (CFR) 49 CFR 13 Section 31.

B. Real property will be used for the originally-authorized purposes for as long as is needed for those purposes, and the recipient or subrecipient shall not dispose of or encumber its title or other interests.

C. When real property is no longer needed for the originally-authorized purpose, the subrecipient will notify ADOT, in writing, of its intentions regarding the property. One of the following options is to be selected:

1. Retention of title, after compensating the awarding agency an amount computed by multiplying the awarding agency’s percentage of participation by the fair market value of the property. If real property acquired with federal funds is disposed of and replaced with real property under the same program, the net proceeds from the disposition may be used as an offset to the cost of the replacement property.

2. Sale of property, with the awarding agency being compensated in an amount equal to the awarding agency’s percentage of participation by the sales price, after reducing said price by actual and reasonable selling and fix-up expenses. Procedures shall be in place to provide for as competitive a sales process as practicable, with the intent of realizing the highest possible return.

(Note: Examples of how to calculate the federal awarding agency’s share of the sales proceeds are found in Sections 8.04.I.1 and 8.04.I.2 of this policy.)

3. Transfer of title to the awarding agency, with the recipient or subrecipient being compensated in an amount calculated by multiplying the recipient’s or subrecipient’s percentage of participation by the fair market value of the property.

8.06 INVENTORYING FEDERALLY-FUNDED PROPERTY OWNED BY SUBRECIPIENTS

When required by the federal awarding agency, an annual inventory is submitted of all assets purchased, in whole or in part, with federal funds, regardless of whether or not the property is in ADOT’s physical custody or is carried on ADOT’s financial statements. For property owned either by ADOT’s subrecipients (e.g. MAG), or a subrecipient’s subrecipients (e.g. a city or town), the following rules must be followed.

A. The inventory from all subrecipients must include all information described in 8.04.G.1 of this policy.
B. The inventory must reconcile to the financial statements as of the end of the entity's fiscal year (generally June 30).

C. The inventory must be submitted by ADOT's subrecipient (e.g. MAG) to the ADOT Fixed Assets Manager by October 31.

8.07 DISPOSITION OF FEDERALLY-FUNDED PROPERTY OWNED BY SUBRECIPIENTS

A. When federally-funded property is removed from service, voluntarily or otherwise, all parties involved must adhere to both federal and State of Arizona requirements. While federal requirements apply primarily to capital assets, those assets costing at least $5,000 per unit, the State of Arizona has more strict requirements, both in terms of the processes to be followed and the fact that the State’s requirements apply to all property, not just property costing at least $5,000 per unit.

B. No property is to be transferred to another entity, removed from the physical custody of the subrecipient, or deleted from the subrecipient’s financial records without written approval from the ADOT Fixed Assets Manager. This approval will be communicated through ADOT’s subrecipient (e.g. MAG).

C. When property has been disposed of, it is the responsibility of the subrecipient to make sure the property is not included in the next inventory forwarded to ADOT, as described in Section 8.06 of this policy.

D. When the subrecipient has received its funding from ADOT’s subrecipient (e.g. a city receiving funding from MAG), the flow of communication, and any required documentation, is as follows. All of this communication must be in writing.

1. The subrecipient (e.g. city) will inform MAG.
2. MAG will inform the ADOT Fixed Assets Manager.
3. The ADOT Fixed Assets Manager will inform MAG of the approval and of any additional required steps.
4. MAG will inform the subrecipient (e.g. city).

E. The following are requirements which are unique to the various categories of disposition:

1. MISSING/STOLEN—The subrecipient must obtain a police report from a local law enforcement agency.

2. ACCIDENTAL DESTRUCTION—The subrecipient must provide details about the destroyed property.

3. DONATION—Approval of both the federal awarding agency and ADOT are required prior to any donation.

4. SURPLUS—When property obtained under a federal grant is no longer needed for the purpose for which it was obtained, the property may be used in other activities currently or previously supported by a federal agency. When the subrecipient has determined that no such use is available, the property may be removed from service (‘surplused’). Approval of both the federal awarding agency and ADOT are required.

5. CANNIBALIZATION/ON-SITE DESTRUCTION—When it is determined that federally-funded property has value as a component of other property (‘cannibalization’) or if it is
determined that the most effective way to dispose of such property is to destroy it on-site, an email, letter, or memorandum must be submitted and forwarded to the ADOT Fixed Assets Manager. This email, letter, or memorandum must contain the property’s description, pictures of the property, and the reason for the request.

6. TRADE-IN/SELLING WITH REPLACEMENT—Trading in federally-funded property as partial payment on replacement property, or selling, may be done with approval of both the federal awarding agency and ADOT. The subrecipient must send an email, letter, or memorandum; this email or memorandum must include a complete description of the item(s) to be traded, a complete description of the item(s) to be purchased, a copy of the vendor quote which specifies price, trade-in amount, and net cost, and the reason for the request. No purchase order should be placed for replacement equipment without affirmative approval of the ADOT Fixed Assets Manager. For selling, the subrecipient must prepare an email, letter, or memorandum including the same information as for a trade-in, except that the manner of the sale is to be specified. The federal awarding agency is entitled to a share of the proceeds per the examples shown in Sections 8.04.1.1 and 8.04.1.2 of this policy, as applicable.

7. TRADE-IN/SELLING WITHOUT REPLACEMENT—if a subrecipient wants to sell federally-funded property without intending to obtain replacement within the next funding cycle, the subrecipient may do so. However, the federal awarding agency is still entitled to its share of the proceeds, per the examples shown in Sections 8.04.1.1 and 8.04.1.2 of this policy, as applicable. The forwarding of this share is administered using either of the following methods:

a. The subrecipient forwards the funds to the entity from which it received funds for the original purchase. If a city or town is selling the property, the funds would be forwarded to the subrecipient (in this example, MAG, although it would apply equally to any subrecipient). In this example, or if MAG sells the property, MAG will account for the funds internally and make adjustments to the current or future year distribution from the federal awarding agency.

b. The subrecipient notifies the entity from which it received funds for the original purchase (again, either MAG or ADOT, as applicable). Both the subrecipient and (in this example) MAG will track the funds, with the intent of properly applying the funds to a purchase of replacement property made at some future date.

F. SALVAGE CREDITS—if any proceeds are received from the sale of salvage or scrap material, the federal awarding agency is entitled to a share of these proceeds, as calculated in the examples shown in Sections 8.04.1.1 and 8.04.1.2 of this policy.

8.08 SUPPLIES
Title to supplies acquired under a grant will vest, upon acquisition, in the recipient or subrecipient as applicable. If, after termination or completion of the award, there is a residual inventory of unused supplies whose fair market value exceeds $5,000, and if the supplies are not needed for any other federally-sponsored programs or projects, the recipient or subrecipient shall compensate the awarding agency for its share.

8.09 COPYRIGHTS
The awarding agency reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for federal government purposes:
A. The copyright in any work, such as a book, publication, or other copyrightable material developed under a grant, or contract under a grant.

B. Any rights of copyright to which a recipient, subrecipient, or a contractor purchases ownership with grant support.

8.10 PATENTS

The inventor of a patentable invention developed under a federally-funded grant retains rights to the invention. All contracts initiated by any pass-through entity or subrecipient must include the following clause, suitably modified to identify the parties, "The subrecipient or contractor will retain all rights provided for the State in this clause, and the State will not, as part of the consideration for awarding the subrecipient or contract, obtain rights in the subrecipient’s or contractor’s subject inventions (37 CFR Part 401).

8.11 CONTACT INFORMATION

The ADOT Fixed Assets unit may be contacted at:

206 S. 17th Avenue, Mail Drop 203B
Phoenix, AZ 85007
(602) 712-8028 (manager)
(602) 712-6592
Email: Fixedassets@azdot.gov

8.12 CORRESPONDING POLICIES

FIN-11.02 Control and Inventory of ADOT Property

8.13 CORRESPONDING FEDERAL REGULATIONS

37 CFR 401 Rights to Inventions Made by Nonprofit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements.

49 CFR 18 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (also known as the Common Rule).
TO: Members of the MAG Management Committee

FROM: Dean Giles, Air Quality Planning Program Specialist

SUBJECT: PM-10 PAVING UNPAVED ROAD PROJECTS FOR FISCAL YEAR 2021 AND FISCAL YEAR 2022 CMAQ FUNDING

The Maricopa Association of Governments is soliciting PM-10 Paving Unpaved Road Projects for FY 2021 and FY 2022 federal Congestion Mitigation and Air Quality Improvement (CMAQ) funding in the Maricopa and Pinal PM-10 and PM-2.5 nonattainment areas from member agencies. The paving of dirt roads, alleys, and shoulders is included in the MAG 2012 Five Percent Plan for PM-10. The purpose of the PM-10 Paving Unpaved Road Projects is to reduce particulate emissions. Member agencies are invited to attend a workshop that will include a review of the application form on August 21, 2017, from 10:00 a.m. to 12:00 noon at the MAG Offices. The application form is available at https://www.azmag.gov/Programs/Transportation/Programming-and-Finance/Transportation-Improvement-Program-TIP/TIP-Modal-Applications. Signed project applications for PM-10 Paving Unpaved Road Projects for FY 2021 and FY 2022 CMAQ funding are due to MAG by 10:00 a.m., on September 25, 2017. Late applications will not be accepted.

For the Maricopa and Pinal PM-10 nonattainment areas, the FY 2018-2022 MAG Transportation Improvement Program (TIP) contains $5,500,000 in FY 2021 CMAQ funding for Paving Unpaved Road Projects. The TIP also contains $4,500,000 in FY 2022 CMAQ funding for Paving Unpaved Road Projects. A minimum local cash match of 5.7 percent on the CMAQ eligible portion of the project is required.

For the Pinal PM-2.5 nonattainment area, the TIP contains $784,610 in FY 2021 CMAQ PM-2.5 funding for Paving Unpaved Road Projects projects. The TIP also contains $797,992 in FY 2022 CMAQ PM-2.5 funding for Paving Unpaved Road Projects. The Arizona Department of Transportation allocates CMAQ PM-2.5 funding to MAG for programming projects that reduce PM-10 and PM-2.5 in portions of the West Central Pinal PM-2.5 Nonattainment Area located within the planning boundaries of both MAG and the Sun Corridor Metropolitan Planning Organization. A minimum local cash match of 5.7 percent on the CMAQ eligible portion of the project is required. Jurisdictions in the West Central Pinal PM-2.5 Nonattainment Area that may apply include the City of Maricopa and Pinal County as well as Pinal County as the lead agency for the City of Casa Grande in the Sun Corridor planning area.

Federally-funded Paving Unpaved Road Projects follow the Arizona Department of Transportation (ADOT) Project Development Process. Information on the Project Development Process may be...
obtained from the MAG Transportation Programming Guidebook or by contacting the ADOT Local Public Agency Section at (602) 712-8427.

In accordance with federal CMAQ guidance, MAG staff will estimate the emissions reduction for each paving project and cost-effectiveness based on the amount of CMAQ funding requested. Methods contained in the MAG Methodologies for Evaluating Congestion Mitigation and Air Quality Improvement Projects, September 30, 2011, will be used to calculate the emissions reduction and cost-effectiveness. The cost-effectiveness and PM-10 emission reduction for each paving project will be used to rank order the PM-10 Paving Unpaved Road Projects for CMAQ funding.

The MAG Street Committee will initially review the project applications for data completeness in October 2017. The MAG Air Quality Technical Advisory Committee may make a recommendation to the Transportation Review Committee on a ranking of the proposed PM-10 Paving Unpaved Road Projects on October 26, 2017. The MAG Transportation Review Committee may consider the PM-10 Paving Unpaved Road Projects in December 2017. The recommendations may be considered by the MAG Management Committee, the Transportation Policy Committee, and the MAG Regional Council in January 2018.

If there are questions regarding the application or process, please contact Teri Kennedy or me at (602) 254-6300.

cc: Transportation Review Committee  
    Air Quality Technical Advisory Committee  
    Intergovernmental Representatives  
    Street Committee  
    Public Works Directors
Conducting SRTS studies is a proactive approach to identifying safety improvements for K-8 students walking and biking to school. The recommendations are used as a tool by local agencies, schools and school districts to prioritize improvements and can be used to leverage future funding within five and ten year budgets, or for seeking local, state or federal aid funding.

SRTS studies are requested by local agencies in coordination with schools and school districts, as stakeholders, in order to promote partnerships toward the goal of encouraging walking and biking to school.

Recommendations identified in the study are developed by third party, engineering consultants qualified to conduct SRTS studies, in close coordination with the stakeholders.

The consultant will take a “fresh look” at each school area in order to incorporate infrastructure, as well as enforcement, education, encouragement programs into recommendations developed that are meaningful, reasonable, and effective solutions to address issues unique to each school and community.

The tasks completed by the consultant include:

- Collect data: vehicle, pedestrian, bicyclist counts as well as any available crash data,
- Conduct pick-up and drop-off event observations,
- Conduct parent and student surveys,
- Assess pedestrian and bicyclist facilities,
- Develop SRTS report to include walking and biking route maps.

The main deliverable of a SRTS study is a report documenting the study process, findings, and recommendations, as well as the walking/biking route maps. Potential federal aid funding sources for implementing recommendations will be included in the report.

In order to help expedite and streamline the process, MAG has obtained approval from the Arizona Department of Transportation (ADOT) to carry out the SRTS studies through existing MAG consultant contracts. There will be no need for an IGA between local agencies and MAG and the required local match can be met with in-kind services. Local agencies will no longer have to process reimbursement payments to ADOT for these projects. Once the funds awarded to local agencies have been authorized, we can get right to work on the scope in coordination with the local agency and school/district staff. Once the scope has been approved by these stakeholders, MAG will assign task orders to on-call consultants.

The SRTS studies will have a six to eight month timeline. All tasks in the scope will be completed by the consultant assigned the task order, in close coordination with the Stakeholders. Throughout the scope development and study timeline, stakeholders will have the opportunity to:

- Refine the study scope
- Identify issues and barriers
- Participate in development of recommendations
- Review study documents
- Form partnerships

A complete list of SRTS Studies projects currently programmed for FY2018-2020 can be found at http://srts.azmag.gov