CHERRIOTS

2019-2021
SECTION 5310 (ODOT) FORMULA GRANT APPLICATION

FOR PROJECTS LOCATED WITHIN MARION AND POLK COUNTIES

DECEMBER 14, 2018

2019-2021 Section 5310(ODOT) Formula Grant Application
for Projects Located Within Marion and Polk Counties

INTRODUCTION

- Read the Cherriots *2019-2021 Section 5310(ODOT) Formula Grant Application Instructions* prior to completing this application.
- Each project submitted for funding consideration must have its own application.
- DO NOT submit the application for subrecipients on the "Funding Opportunities" section of the ODOT RPTD website. Only submit this application to Salem Area Mass Transit District (SAMTD) following the instructions referenced above.
- Selection criteria are detailed in the *Application Instructions*.
- This form must be filled out using the online form and submitted in Adobe .pdf format. Paper applications will NOT be accepted.
- Signature pages should be scanned and attached as separate pages to each application.

Submittal Checklist

Make sure

✓ Application is complete, signed, and dated

Submit

✓ Proof of agency status (template included in application packet)

✓ Maintenance Plan (if submitting an application for preventive maintenance)

A. ORGANIZATION INFORMATION

Name of Organization: City of Woodburn

Employer Identification Number (EIN): 936002282

Contact Person: Kathleen McClaskey

Contact Person Title: Transit Manager

Address: 270 Montgomery Street, Woodburn, OR 97071

Telephone: 503-982-5245

Email: Kathleen.McClaskey@ci.woodburn.or.us

Type of Organization (check one)

Government Agency	◉
Private Not-for-Profit	○
Other	○

Area of service (check one)

Inside Marion and Polk Counties	◉
Outside Marion and Polk Counties	○
Both inside and outside Marion and Polk Counties	○

Organization Days and Hours of Operation

Day	**Hours**
Sunday	
Monday	7:00 AM – 7:00 PM
Tuesday	7:00 AM – 7:00 PM
Wednesday	7:00 AM – 7:00 PM
Thursday	7:00 AM – 7:00 PM
Friday	7:00 AM – 7:00 PM
Saturday	
Please list any planned periods of service closure greater than 3 days (i.e., closed the week between Christmas Day and New Year's Day)	

Total transportation program costs by year

FY18 (historical data, if applicable)	FY19 (projected, if applicable)	FY20 (projected)	FY21 (projected)
$ 631,000	$ 644,000	$ 663,000	$ 683,000

Risk Assessment

	Yes	No
Are any FTA-funded buildings that your transit agency owns located in a flood zone?	○	●
If yes, do you have flood insurance?	○	○
Did your agency have any turnover of management or financial staff in the last two years?	○	●
Does your agency have an accounting system that allows you to completely and accurately track the receipt and disbursement of funds related to the award?	●	○
Does your agency have a system in place that will account for 100 percent of each employee's time?	○	●
Did your staff members attend required trainings and meetings during prior grant awards?	●	○
Was your agency audited by the Federal government in the past two years?	○	●
If yes, did the audit result in one or more audit findings?	○	●
Did your agency stay on budget in the past two years?	●	○

	Manual	Automated	Combined
What type of accounting system does your agency use?	○	○	●

B. PROJECT INFORMATION

Project Title (*will be used for reviewer reference and in public comment process. Example: Mobility Management for City of Utopia Transit Service)*

Woodburn Preventive Maintenance Program

Project service area to be served (*indicate the geographic features that define your service area such as streets, rivers, or jurisdictional boundaries)*

North boundary	Woodburn City Limits
West boundary	Woodburn City Limits
South boundary	Woodburn City Limits
East boundary	Woodburn City Limits
Other general geographic area (i.e., within the City of Woodburn)	Within Woodburn City Limits

Optional: please provide a map of your service area as a separate single page 8.5"x11" attachment.

Start date

July 1, 2019

Project Service Types (check all that apply) *What type of services will be supported with this Section 5310(ODOT) grant?*

A. Open to the general public at all times	☑
B. Open only to seniors and individuals with disabilities	☑
C. Demand response	☑
D. Open to the general public on a space-available basis	☐
E. Limited to defined clientele (i.e., group residential home)	☐
F. Deviated route	☐
G. Other (define): Preventive Maintenance	☐

Project Type (check one) *Select the project type that you wish to include in your application.*

Project Type	Existing Service	New Service
A. Purchased service	☐	☐
B. Mobility Management	☐	☐
C. Replacement Vehicle(s)	☐	☐
D. Service Expansion and Right-sizing Vehicles	☐	☐
E. Preventive Maintenance	☑	☐
F. Equipment	☐	☐
G. Signs and Other Bus Stop Amenities	☐	☐
H. Passenger Shelters	☐	☐
I. Facilities (Bus Barns and Other Buildings)	☐	☐

Total Section 5310(ODOT) funds requested

$ 120,000

Total grant funds requested by year

	FY20	FY21
Section 5310 project	$ 60,000	$ 60,000

Scalable Section 5310(ODOT) Grant Request

You are strongly encouraged to request the full amount of funding that is needed for each project, including funding for new projects; however, funding is limited. Describe the scalability of your 5310(ODOT) funding request, how you scaled down your request and what aspects of the program would not be funded under this funding scenario below. Then enter your scaled down request amounts.

Scalability Description:

Scalability Description – Our scaled request is reduced by 5% from our original request. Funding at this level would require deferring maintenance on many of our vehicles, including getting more life out of our tires.

	FY20	FY21
Scaled request:	$ 57,000	$ 57,000

Identify the project's additional sources of funding in the table below

Estimated Additional Project Resources	
Source of Funds	**Dollar Amount**
2019-2021 Section 5310(ODOT) Grant Request (*Important!)*	$ 120,000
Local Resources (to meet matching requirements)	$ 13,735
Federal Resources	$
Other (provide description):	$
Project Grand Total	**$** 133,735

Coordinated Plan

Is project derived from the *Cherriots Coordinated Public Transit – Human Services Transportation Plan* dated August, 2016? ◉ Yes ○ No If yes, what page(s)? p. 67

If no, explain why the project is not part of the Coordinated Plan.
For example: Is the project part of another plan (please name)? Is the plan still being finalized?

1. **Project Description**
   a.) **Describe services or capital investment to be provided by Section 5310 funding by answering the questions below based on the type of project** *(limit 500 words)*:

- For Purchased Service projects, please provide the following:
  - Explain how your project is planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when general public transit is either insufficient, inappropriate, or not available.
  - Is this project part of a group of activities or projects that are dependent on each other (for example, a new transit service that requires capital and operating funds)?
  - Does your agency have an existing contract with Cherriots and/or ODOT to provide transit services? If yes, name the contractor. If no, describe how the transit agency will procure the service and name contractor.
- For Mobility Management projects, please:
  - Explain how your project is planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when general public transit is either insufficient, inappropriate, or not available.
  - Identify the estimated number of customer contacts, customers trained, or mobility products/services produced. Describe the method you will use to measure output from the project.
- For Vehicle Purchases (replacement or expansion vehicles), please:
  - Describe how the vehicles will be used in service to seniors and individuals with disabilities
- For Equipment, Signs, Amenities, and Shelter projects:
  - Will this project disturb the ground? If yes, an environmental worksheet including site map(s) showing placement of each item must be submitted to Cherriots and ODOT, and approved by FTA prior to payment for any ground-disturbing activities. Submittal of the draft environmental worksheets at the time of this application is optional.
  - Describe why these equipment, signs, amenities, and/or shelters are needed and how they will be used in providing transit service to seniors and individuals with disabilities.
- For Facilities including Transit Centers, Bus Barns, and Transit Agency Building projects:
  - Will this project disturb the ground? If yes, an environmental worksheet including site map(s) showing placement of each item must be submitted to RPTD and approved by FTA prior to payment for any ground-disturbing activities.
  - Explain why this facility project is needed and how the facility will be used in providing transit service to seniors and individuals with disabilities
  - Provide a description of the facility project request as one of the following:
    - Siting and Right-of-Way, Planning, Architecture, Engineering, Project Management, Construction Contracting, Inspecting and Permitting, Interior Surfaces and Furnishings

(limit 500 words).

This program funds the maintenance of Woodburn's fleet of 3 full sized buses, 3 cutaways, and 4 minivans. Effective preventive maintenance is provided to each vehicle to manage risk and improve safety, reduce operational cost, manage asset life cycle cost, and maximize equipment availability. Preventive maintenance services were contracted to a commercial provider in July 2017, which resulted in significantly more efficient and cost effective service. Woodburn's preventive maintenance contractor employs ASE certified mechanics.
Woodburn Transit Service (WTS) provides transportation services to the general public, with the vast majority being seniors and persons with disabilities. Woodburn's Fixed Route and complementary paratransit programs operate within the city limits of Woodburn. The volunteer medical program transports clients to medical appointments outside of Woodburn to areas between Salem to Portland.

WTS provides a high level of service to the public through it Fixed Route, Dial-A-Ride, and Demand Response programs by ensuring that they have access to grocery, medical and other resources. WTS also provides individualized telephone and in-person trip planning assistance, which involves coordinating with services provided by other regional providers, such as CARTS, CAT, and SMART. WTS regularly coordinates the transportation needs of clients from area social service agencies, such as AFS, Salud Clinic, Senior & Disability Services, etc. Transportation coordination for mobility challenged clients frequently involves trips to the home to better determine their accessibility needs and our strategies for providing services. As needed, WTS employees provide home visits to help determine the best transportation options for persons with disabilities. Employees also provide hands on assistance to help clients learn how to use the system.

b.) Describe how this project coordinates with other services to provide services to seniors and individuals with disabilities. *Limit 200 words.*

Woodburn Transit takes an active role in providing customized transportation services. With features such as computerized dispatching and real time GPS vehicle tracking, the City's AVL tablet system enables us to provide efficient and highly customized trip coordination.

As needed, WTS employees visit the homes of older adults and people with disabilities to help plan trips and determine accessibility needs and the best mode of transportation for them. If

c.) Expected Outcomes

- For Purchased Service projects, please provide:
  - Estimated number of unduplicated individuals (older adults and individuals with disabilities) this project proposes to support in the biennial grant period
  - Estimated number of one-way rides this project proposes to provide in the biennial grant period
- For Mobility Management projects, please:
  - Identify the estimated number of customer contacts, customers trained, or mobility products/services produced. Describe the method you will use to measure output from the project.
- For all projects, please explain why is this project the best method to address the needs identified in the Coordinated Plan? *Limit 400 words.*

Woodburn's Preventive Maintenance program is an essential component of our ability to provide necessary transportation services to our residents. Quality preventive maintenance is an essential component of our ability to provide clean, safe, reliable, efficient, sustainable and affordable public transportation service for people traveling within Woodburn with a focus on those who do not have other transportation options; and to strive to provide residents, visitors, and workers traveling to or from Woodburn with efficient and convenient regional connections.

Woodburn offers Dial-A-Ride door to door service to enhance local mobility for seniors and persons with disabilities. These services enhance the quality of life for Woodburn residents who depend on the local transit system to access needed services.

d.) Is this project part of a group of activities or projects that are dependent on each other (for example, a bus washing station that is dependent on a facility)? If yes, please describe.

e.) For vehicle purchases and preventive maintenance projects, a Vehicle Preventive Maintenance Plan must be submitted by the time the grant agreement is signed. A plan reflecting current fleet policies, fleet procedures, and vehicle and lift equipment manufacturer's recommended maintenance schedules is required. You may attach supporting documentation.

Electronic document attached ☐

2. Project Budget

Enter all costs involved in the **total** cost of the project.

Type	Amount
Labor (payroll)	$

Contracted services	$
Materials and supplies	$
Purchased Service	$
Preventive maintenance	$ 133,735
Capital equipment	$
Technology	$
Marketing	$
Other (describe)	$
Other (describe)	$
Other (describe)	$
Project Total	$ 133,735
Amount requested in this grant	$ 120,000

2a. Describe the source of your local match funds in the field below (examples: funds from your budget or STF funds). If the matching funds are not available now, describe when they will be (examples: next fiscal year, month/year). Please be specific.

City General Fund

3. Provide the timeline of the project in the following table

	Milestone Description	Completion Date
1	Project Begins	July 1, 2019
2	Project Concludes	June 30, 2021
3		
4		
5		
6		
7		
8		
9		
10		

4. Is your application for a new vehicle? ○ Yes (continue to #5) ◉ No (go on to Section C)

5. Enter the following information about each vehicle to be replaced:

Year	Make/ Model	Vehicle Category*	VIN	Total Seats	ADA Seats	Current Mileage	Vehicle Condition	Maintenance History (Issues, repairs, etc.)
		Choose						
		Choose						
		Choose						
		Choose						
		Choose						

5a. Will you use the ODOT/DAS state price agreement contract? (Yes○ No○)

If No, describe the needs not addressed in state contracts (e.g., no contracts for trolley-style vehicles, no contracts for buses larger than 44 passengers, etc.). Note that under new FTA guidelines, piggybacking on outside contracts is strictly limited.

5b. Vehicles to be purchased:

Vehicle Category*	Qty (#)	Cost Each ($)	Total ($)	No. Seats w/ADA Deployed	No. of ADA Stations	Total Capacity	Fuel Type*	Estimated Order Date	Estimated Delivery Date*
Choose							Choose		
Choose							Choose		

Choose							Choose		
Choose							Choose		
Choose							Choose		
Totals:		**Grand Total:**							

Vehicle Category Descriptions: http://www.oregon.gov/ODOT/PT/resources/guidance-library/vehicle-descriptions-usefullife-standards.pdf
**Fuel Type Options: (G) Gas, (D) Diesel, (B) Biodiesel, (HG) Hybrid-gas, (HD) Hybrid-diesel, (CNG) Compressed Natural Gas, (OF) Other alternative Fuel.*
Estimated Delivery Date: *Minimum 160 days if ADA accessible.*

6. **For Facilities projects only (including Transit Centers, Bus Barns, and Transit Agency Buildings), please complete the questions below about your facility project. Please be brief, but thorough, and answer all questions. If your project is tentatively accepted for funding, you may be asked to complete a supplemental application.**

A. Total scope of entire facility project

B. Portion of project scope applied for in this grant. (If all, state this)

C. Proposed total square feet of facility

D. Other secured funding sources for this project

E. Other anticipated funding sources for this project

F. Who are the designated partner agencies for this project?

G. Who are the other stakeholders for this project, and how is their support being enlisted?

H. Describe how support from local elected officials or bodies has been formally received for this project.

I. Describe how the project fits into the regional coordinated plan.

J. Has this project been thoroughly discussed with your Rail and Public Transit Section Regional Transit Coordinator and has the Regional Transit Coordinator been involved with preliminary project planning efforts? (Yes No).

K. H as your local Area Commission on Transportation been involved and is it in support of this project? (Yes No).

L. Project Milestones: List each of the project's major phases or milestones below. Include associated costs and completion date for each item.

Estimated final completion date of all project activities

M. Is property for facility owned by your agency or an affiliate body? (Yes No).

If an acquisition, has a firm offer been made on this project, and when?

N. Has preliminary project planning been accomplished for this project? (Yes No).

O. Have requisite local agency planning, zoning, building permits and all approvals been applied for and received for this project? (Yes No).

P. Does this project involve changes to any railroad rights of way? (Yes No).

Q. Have all relevant project documents been attached to your grant application? If not, please send them via email to ted.stonecliffe@cherriots.org. (Yes No).

R. Is there any other information you wish reviewers to understand about this project? Yes No). If yes, please explain on next page:

C. ORGANIZATIONAL CERTIFICATION

By submitting this document via email to Salem Area Mass Transit District (SAMTD), I certify that the submitted materials and data included are complete, true and correct. Also, I certify that my organization is:

- Eligible to enter into agreements with SAMTD;
- Has the legal, managerial and operational capacity to do the work to be paid for by the Section 5310 Program;
- Not debarred or suspended from federal grants;
- In compliance with federal, state and local laws and regulations including, and not limited to, those pertaining to passenger transportation, civil rights, labor, insurance, safety and health, as applicable;
- Complies with the laws or rules of the Section 5310 Program;
- Properly uses and accounts for the Section 5310 Program's goals; and
- Will operate the project or service in a safe, prudent and timely manner.

Signature of Authorized Organization Officer	Title	Date
Kathleen McClaskey	Transit Manager	01/09/2019

Private Nonprofit Agency – Corporation Status Inquiry and Certification

If your agency or organization is claiming eligibility as a Section 5310 or STF Program applicant based on its status as a private nonprofit organization, you must obtain verification of its incorporation number and current legal standing from the Oregon Secretary of State Information Retrieval/ Certification & Records Unit (IRC Unit). The "Status Inquiry" document must be attached as an appendix to the application. To assist your agency or organization in obtaining this information, use one of these two methods:

To obtain Corporate Records Information over the Internet, go to:
http://sos.oregon.gov/business/Pages/find.aspx Enter the name of your agency or organization. If its status is active, print the page and submit it as proof.

Private Non-profits

Legal Name of Non-profit Applicant:

State of Oregon Articles of Incorporation Number:

Date of Incorporation:

Certifying Representative

Name (print):	
Title (print):	
Signature:	Date:

Woodburn 5310 (ODOT) Grant Application
Project: Woodburn Preventive Maintenance Program
Answer, Section 1. Project Description, b.):
Woodburn Transit takes an active role in providing customized transportation services. With features such as computerized dispatching and real time GPS vehicle tracking, the City's AVL tablet system enables us to provide efficient and highly customized trip coordination.

As needed, WTS employees visit the homes of older adults and people with disabilities to help plan trips and determine accessibility needs and the best mode of transportation for them. If clients are unsure of how to use the fixed route or Paratransit (Dial-A-Ride), staff will offer to ride with them on a trip to help learn to maneuver the transit system. Woodburn Transit also provides individualized telephone and in-person trip planning assistance, which involves coordinating with services provided by other regional providers, such as CARTS, CAT and SMART. We regularly coordinate the transportation needs of clients from area social service agencies, such as AFS, Salud Clinic, Senior & Disability Services, etc.

Answer, Section 1. Project Description, c.):
Woodburn's Preventive Maintenance program is an essential component of our ability to provide necessary transportation services to our residents. Quality preventive maintenance is an essential component of our ability to provide clean, safe, reliable, efficient, sustainable and affordable public transportation service for people traveling within Woodburn with a focus on those who do not have other transportation options; and to strive to provide residents, visitors, and workers traveling to or from Woodburn with efficient and convenient regional connections.

Woodburn offers Dial-A-Ride door to door service to enhance local mobility for seniors and persons with disabilities. These services enhance the quality of life for Woodburn residents who depend on the local transit system to access needed services.

Preventive Maintenance Plan

2019-2021

Goals and objectives

It is the objective of the City of Woodburn's Transit System to comply with the rules set forth by the Federal Transit Administration (FTA), and Oregon Department of Transportation's Rail and Public Transit Division (RPTD), to qualify for the associated grant funding and provide the Woodburn community with safe and cost effective transportation.

The Woodburn Transit System will establish an inventory of its transit vehicle assets included in the program, and a schedule and process for periodically updating the inventory.

A narrative of maintenance responsibilities will be established together with management Supervision, drivers, mechanics and other maintenance staff to assure that all stake holders are dedicated to provide quality service for the community. A preventive maintenance plan with the following components will be established:

1. Preventive maintenance servicing schedule for each program vehicle in the fleet.
2. A process for managing and monitoring vehicle warranties and service agreements.
3. A vehicle daily servicing plan is combined with the pre & post-trip inspections.
4. Driver's daily pre-trip inspections and post-trip inspections reports.
5. Mechanic's mileage & time based service and inspections.
6. Procedure for follow-up repairs arising from pre-trip and post-trip inspections.
7. Documentation regarding any vehicle being pulled from service until required repairs are made.
8. An annual vehicle safety inspection by an ASA certified mechanic. (This inspection includes all safety components and all ADA-related equipment).
9. New driver vehicle orientation, including proper and safe use of the vehicle and installed equipment including safety and emergency procedures.
10. A consumables re-stocking procedure assigning responsibility and date intervals for restocking fuel, oil, parts, and supplies and items eligible as operating expenses, in ODOT PTD grant programs which fund operating expenses
11. A vehicle repair policy for unplanned mechanical breakdowns, whether repairs are performed in-house or are contracted out
12. Vehicle storage procedures that ensure safety and security for vehicles while not in use.
13. Woodburn's vehicle management information system (VMIS) documents vehicle inspections, maintenance and repair activities. The system tracks dates, services performed, parts used, costs incurred, and when the next service/inspection is due (miles and/or date).

(1) INDIVIDUAL VEHICLE PREVENTIVE MAINTENANCE SCHEDULE AND RECORDS

A preventive maintenance schedule has been prepared for every grant-funded vehicle Woodburn has been awarded. The vehicle preventive maintenance schedules are based on manufacturer's recommendations for each specific vehicle.

Vehicle Condition Definitions: PTD has established vehicle condition definitions that comply with FTA guidelines, and are used by Woodburn Transit for assessing and documenting the status of the vehicles in the fleet. The condition definitions are as follows;

VEHICLE CONDITION DEFINITIONS

New
Vehicle has fewer than 2,500 miles, delivered over road from factory, or fewer than 250 miles, delivered by truck/rail. In new condition. Should appear on no more than 2 quarterly reports.

Excellent
Vehicle has low mileage in relation to age and no visible or evident mechanical or cosmetic flaws.

Good
Vehicle has average mileage in relation to age and only minor mechanical or cosmetic flaws.

Fair
Vehicle has high mileage in relation to age and/or noticeable mechanical or cosmetic flaws. Repairs are beginning to exceed normal maintenance schedules.

Poor
Vehicle has high mileage in relation to age and major mechanical or cosmetic flaws. Non-maintenance repairs are happening frequently and are becoming more costly. Major repairs such as engine or transmission overhaul are needed to keep the vehicle in service.

Out of Service
Vehicle is unreliable or is completely inoperable. Vehicle has been pulled from service due to mechanical or body/chassis flaws which create unsafe operating conditions. Vehicle is not ADA compliant**.**

Records Retention Requirement: Individual vehicle records, including; procurement, maintenance and repair records will be retained for three years beyond disposal of the vehicle.

Scheduled Service Intervals: The preventive maintenance schedule includes service triggers for maintenance to be performed. These are based on miles elapsed that are expressed by the various vehicle manufacturers. Certain lubrication products used by Woodburn's fleet maintenance provider extend the manufactures suggested service

Intervals but do not change the fact that they are based on multiples of elapsed mileage and lab analysis done on the spent lubricants at the time of the service interval. This minimizes the frequency of preventive maintenance servicing, and allows the maintenance staff time to perform other required service.

All service intervals meet or exceed manufacturers' recommendations. The scheduled service addresses every component included in the manufacturer's warranty requirements schedule, including all safety equipment and ADA-accessibility equipment, including wheelchair lifts. Some Service Intervals are superseded taking into consideration seasonal and environmental factors.

Wheelchair Lift Maintenance: Preventive maintenance for powered lifts are scheduled based on time-intervals rather than on lift cycles due to the relatively low use rates. Cycle counters are installed on all Woodburn vehicle lifts and are checked during routine PM schedule. During the PM inspection, the wheelchair lift is cycled to observe operational and safety features. Any warn parts will be noted and replaced at that time.

Vehicle Maintenance Schedule Chart: A tracking chart will be maintained in each of the vehicle files documenting both the maintenance service schedule and the next service due for each vehicle component. This chart will be maintained for as long as the vehicle is used to provide public transportation. The Vehicle Maintenance Schedule Chart includes:

1. Vehicle manufacturer, year, make, model, size, and type;
2. Vehicle chassis VIN number, license plate number, and a Woodburn asset and vehicle number;
3. A checklist of major vehicle components requiring scheduled maintenance or service—component list must include ADA equipment;
4. Annual safety inspections—either as a separate line item or identified in a line item with an interval that meets the requirement of annual inspection (the safety components inspected should be identified in the checklist);
5. Scheduled maintenance activities to be performed, identified by either date (time period), odometer reading (elapsed mileage), or number of lift cycles;
6. Dates the scheduled maintenance or service was actually completed, including any repairs made, depending on software used;
7. Vehicle odometer mileage at time of each maintenance or service;
8. Warranty maintenance service performed, whether noted as part of the regular scheduled maintenance, or performed separately;
9. Name, initials or unique employee identifier (e.g., ID Badge number) of person who performed the maintenance, if agency has in-house maintenance shop;
10. Initial of agency staff member responsible for vehicle maintenance (per Vehicle Maintenance Plan), if service is contracted to another facility;
11. For contracted work, vendor invoices and associated documents in the vehicle file confirming that work was done on date noted in chart.

Vehicle Preventive Maintenance Records: Vehicle maintenance records, including the Vehicle Maintenance Chart described above, is maintained for each vehicle, to show whether or not maintenance has in fact been performed according to vehicle manufacturers' established preventive maintenance schedule. The maintenance records will also show that recommended repairs have been made on a timely basis. Vehicle maintenance and repair documentation is an FTA requirement for all federally funded assets. All vehicle maintenance

records will be made available when requested by PTD staff or its representatives. Vehicle maintenance records for each vehicle are kept in separate files, and include:

Individual files for each program vehicle will include:

1. A Vehicle Maintenance Schedule for each vehicle
2. Documentation of annual safety inspections, including ADA components, performed by a certified technician with manufacturer- training for the vehicle and for specialized, on-board ADA components;
3. Completed daily pre-trip and post-trip driver checklists documenting that all safety features are functioning.
4. The driver's pre-trip checklist must include deploying any wheelchair lift equipment and interlock features. The post-trip checklist must include indications of service or repairs required, action taken to do the work, and whether or not the vehicle must be taken out of service until repair or service is done, based on agency maintenance policies and safe operation standards;
5. Chart of periodic maintenance performed according to maintenance schedule (see below);
6. Copies of all parts or services invoices, or internal repair orders, documenting that the maintenance and repairs were performed.

VEHICLE REPAIRS AS PART OF PREVENTIVE MAINTENANCE

Vehicle repairs include planned major parts replacements (one instance per vehicle per biennium may be reimbursed in a Capital Preventive Maintenance Grant)

Repairs arising out of pre-trip, post-trip, or mileage/time-based inspections (including annual safety inspections) and wear and tear repairs or replacements (e.g., nicks and minor windshield chips, cracked light covers, individual seat tears, tires, planned brake jobs, lift repairs, bus washing and detailing, etc.) Although defined as maintenance repairs, warranty/recall servicing, warranty/recall parts replacement, and repairs resulting from accidents, are not eligible expenses in PTD capitalized preventive maintenance grants.

Any warranty work not covered that must be paid for by Woodburn should be reimbursed as an operating expense, not in the capitalized preventive maintenance grant.

Warranty work will be performed in a timely manner, and Woodburn will access the manufacturer's warranty via the vendor if assistance is needed to determine what is covered.

Accident repairs will be covered by insurance. Any deductibles or charges resulting from an accident that Woodburn must pay are also considered operating expenses that cannot be reimbursed from a capital preventive maintenance grant.

A Vehicle Repair Work Order form to record the repair activities will include:

1. The start and end date of repairs
2. The reason for the repair (for example, bus wouldn't start, check engine light came on, inspection finding, or accident)
3. What repairs were made
4. Labor hours
5. Parts used

6. Who did the work

A Work Order will be used whenever a contracted repair facility or the City's "Garage" performs repair services. Woodburn Transit will require work orders or invoices from the company performing the maintenance or repair that, at a minimum:

1. State the issue
2. Parts installed
3. Separate labor charges

Once the work is completed, the repairs will be documented on the Vehicle Maintenance Chart. The Work Order will be kept in the individual vehicle maintenance file, where it becomes part of the historical record for that vehicle. These documents are also provided either as required reimbursement documents, or as the basis for completing the vehicle Preventive Maintenance Reimbursement Request attachment form (the Excel spreadsheet for use in lieu of providing copies of vendor receipts).

VEHICLE CLEANING

Transit vehicles are regularly cleaned inside and out. Woodburn Transit's preventive maintenance plan includes vehicle cleaning weekly or as needed. Washing includes periodic washing or steam-cleaning the vehicle engine and undercarriage, and application of a protective coating to the painted surfaces, if recommended, and as specified by the manufacturer. An interior and exterior cleaning schedule was developed, which specifies cleaning activities to be performed at specified intervals. The cleaning standards include the activities noted below.

Bus Clean-up – Daily

- Squeegee window exteriors, dry off mirrors
- Clean spots off windows, interior
- Clean driver area (dash, consoles, seat, fare box, windshield)
- Sweep or mop floors
- Replace trash bag

Bus Clean-up – Weekly or as Needed

- Same as daily, plus:
- Clean all interior windows
- Vacuum seats, wipe down stanchions & railings
- Clean seats with disinfectant (fabric or vinyl cleaner)

Bus Clean-up – Service Interval (4-6 weeks)

- Same as daily and weekly plus:
- Clean all interior bulkhead and ceiling surfaces
- Scrub floors
- Apply dressing to dash, console and driver area (such as a product that cleans, shines and protects surfaces)
- Clean water spots off mirrors
- Apply exterior protectant (per manufacturers' specifications)

VEHICLE STORAGE AND SAFETY

1. ***A secured vehicle parking area***. Woodburn Transit vehicles are stored within a gated and locked fenced area at the Maintenance and Transit Facilities

2. ***Security surveillance***. Woodburn Transit vehicles utilize a security camera monitoring system 24 Hrs per day.

3. ***Safety procedures***. Woodburn Transit has a no exception brake setting and transmission-in-park requirement of drivers. The Parking area is set up with white lined spaces and bumper blocks. The Busses are backed in to the space to maximize space and to be ready for forward driving and avoid operating vehicles in reverse. Backing up is used for storage to minimize backing into unknown circumstances.

4. ***Key Control***. Keys are removed from all vehicles and vehicles are locked at shift-end. The keys are returned to the Transit Office where they are kept in a lock box.

5. ***Suspicious Package Checks***. The FTA, in conjunction with the Office of Homeland Security, strongly encourage transit providers to adopt safety guidelines related to bomb threats and suspicious circumstances. Agencies should have a procedure for employees to appropriately and safely respond to the discovery of a suspicious package or device, which may include incidents at a vehicle storage facility.

PART II: VEHICLE FLEET MANAGEMENT - BEST PRACTICES

Woodburn Transit has utilized the following sources to facilitate The Vehicle Fleet Management - Best Practices Program. FTA, Community Transportation Association of America (CTAA), Small Urban & Rural Transit Center (SURTC), and other state transit agencies. It utilizes CarteGraph Maintenance Management Program to track Vehicle Maintenance and calculate vehicle efficiency. CarteGraph is the heart of Woodburn Transit's - Vehicle Information Management Systems (VMIS); in combination with paper checklists, forms, written procedures, and supervisory oversight responsibilities. Woodburn is developing best management practices to provide a value based program. The 3 primary components of our VMIS: 1) vehicle data-gathering; 2) vehicle data tracking and analysis; and 3) management oversight and maintenance decision-making support. Effective use of VMIS information by Woodburn Transit management will allow for informed decision making regarding vehicles and maintenance functions, which will in turn improve overall efficiency. The table below provides an overview of the data elements, outcomes, and functions in each of these areas.

VEHICLE DATA GATHERING ELEMENTS VEHICLE DATA TRACKING AND ANALYSIS OUTCOMES MANAGEMENT OVERSIGHT AND MAINTENANCE DECISION SUPPORT

- Vehicle PM schedule
- Daily/monthly vehicle mileage log
- Daily/monthly vehicle in-service hours log
- Vehicle maintenance file
- Vehicle maintenance chart
- Pre-trip inspection reports
- Post-trip inspection reports

- ☐ Mileage or time-based inspection reports
- ☐ Repair work orders
- ☐ Accident reports
- ☐ Parts inventory/use report
- ☐ Annual and monthly maintenance cost per vehicle
- ☐ Annual and monthly average maintenance cost per vehicle type/category
- ☐ "Fully loaded" maintenance labor cost per hour
- ☐ Maintenance cost per vehicle mile, by vehicle
- ☐ Average maintenance cost per vehicle in-service hour
- ☐ Effectiveness of PM program in reducing breakdowns
- ☐ Adjusting interval schedule for PM (increase or decrease)
- ☐ Adequacy and appropriate skills mix of vehicle maintenance staffing
- ☐ Trends in consumable usage for budget adjustment (parts, fuel, oil, tires)
- ☐ Effectiveness of vehicle repair program (time between incidents; re-repair rate)
- ☐ Loss control evaluation and prevention (pilferage)
- ☐ Average productivity of mechanics and maintenance
- ☐ Consumables purchase records (fuel/oil/fluids/tires/etc.)
- ☐ Agency vehicle maintenance budget
- ☐ Agency vehicle maintenance actual costs by month
- ☐ Maintenance payroll and labor cost allocation records
- ☐ Maintenance vendor invoices
- ☐ Staff training costs/invoices
- ☐ Vehicle and equipment purchase orders
- ☐ Shop equipment purchases and maintenance records
- ☐ Contract invoices and reports (if maintenance is contracted out) vehicle type/category
- ☐ Parts inventory trend analysis
- ☐ Parts usage by month/staff-person/ vehicle
- ☐ Fuel use per vehicle/mile
- ☐ Average repair costs per vehicle/per vehicle type/category
- ☐ Comparative maintenance costs and trends by vehicle year
- ☐ Average vehicle down-time for maintenance and repairs
- ☐ Maintenance shop productivity (vehicles maintained per month, vehicle repairs per month, etc.)
- ☐ Determine need for additional (or less) maintenance staff
- ☐ Risk management: accident rates by vehicle and/or driver
- ☐ **Comparative maintenance data to support vehicle purchase decisions (best make/model; most appropriate vehicle categories; etc.)**
- ☐ Fuel efficiency of present fleet
- ☐ Useful life threshold to replace vehicles (high maintenance costs)
- ☐ Review of driver and maintenance staff training needs

* Source: ODOT Public Transit Division, 2010

VEHICLE FLEET REVIEW

Using VMIS data, as well as other ridership information, route information, passenger surveys, and driver and maintenance staff input, Woodburn will periodically review their existing vehicle fleet. Among the questions to consider are:

1. Is the fleet size adequate for the current agency mission? Does the agency need more vehicles, or possibly fewer vehicles?

2. Is the agency using the appropriate type/category of vehicle for its present fixed route and/or demand response activities? Is the present fleet sized properly for ridership levels, route lengths/traffic, and vehicle wear-and-tear?

3. Is vehicle downtime for service within acceptable limits, and not causing service disruptions? Should spare/back-up vehicle capacity be expanded? (see below)

SPARE VEHICLE / BACK-UP CAPACITY

In order to maintain scheduled routes and services without disruption when regularly assigned vehicles are down for maintenance servicing or repair, agencies need to maintain an appropriate number of back-up/spare vehicles. One published rule-of-thumb suggests that 85% of an agency's total fleet should be available for active revenue service (passengers on board), with 15% assigned as back-up vehicles for maintenance service and accident downtime.

More specific guidelines have been published for assisting agencies to determine the appropriate ratio of back-up vehicles for their fleet. Agencies should note these are general guidelines, not hard-and-fast rules. Some other factors the agency should consider in determining appropriate back-up vehicle capacity include geography, type of terrain traveled, road conditions, harsh weather conditions, length of routes, and condition of the current fleet.

SIZE OF AGENCY'S REGULAR SCHEDULED FLEET	MINIMUM NO. OF BACKUP VEHICLES REQUIRED
1 – 7 vehicles	1
8 – 13 vehicles	2
14 – 20 vehicles	3
21 – 29 vehicles	4
30 – 39 vehicles	5

VEHICLE MAINTENANCE EMPLOYEE TRAINING

Maintaining vehicles in good working condition requires well-trained and well-supervised maintenance staff. Maintenance training for vehicle mechanics and vehicle service technicians should include, at a minimum:

1. Shop and overall facility familiarization, including training on all equipment for which they have responsibility
2. Facility safety training including hazard identification, location of fire and life safety equipment, shop power

emergency disconnect location, safety exits, and emergency incident procedures;
3. Vehicle maintenance program scope and objectives training;
4. Transit agency's policy training, including safety and maintenance policies;
5. Applicable vehicle maintenance standards and regulations training, and instruction on how they are enforced;
6. Training on forms and procedures used in the agency's Vehicle Management Information System, including all inspection checklists;
7. Instruction on the safe operation and maintenance of all bus on-board safety equipment, and ADA equipment;
8. Specialized certification training as may be required by state, federal, or municipal regulations, and/or as a condition of employment (example ASE Certification) Maintenance training attempts to cover all vehicles and equipment operated by the transit agency. Training manuals, maintenance manuals, and all updates/revisions will be provided. The locations will be in the Transit Office or at the Fleet Shop location, for each type of vehicle and equipment being used by Woodburn Transit and repair technicians.
9. All vehicle manufacturers or component companies that manufacture the engine, transmission, or heating and air conditioning that offer specialized maintenance training will be utilized by the repair technicians.
10. All drivers will be given a complete familiarization of the vehicle, including engine compartment, driver controls and passenger safety devices. Drivers will be trained to recognize unusual noises and to communicate basic mechanical problems to the repair technician.
11. Ongoing training will be provided to repair technicians to ensure that their skills are kept up-to-date. All training will be documented, and the effectiveness of the training program evaluated periodically. Supervisory training for shop supervisors is equally important, and should include not only technical training and updates, but also, at minimum, training in basic and advanced supervision; employee communication and effective listening; and problem-resolution skills.

IN-HOUSE VERSUS CONTRACTED VEHICLE MAINTENANCE

PTD will accept both in-house and contracted preventive maintenance programs that meet state and federal requirements. The same eligibility for capital reimbursements in grant programs apply to in-house and contracted or vendor-performed maintenance. The grant recipient agency also has the same responsibility to monitor and manage its vehicle maintenance program, whether the maintenance is performed at the agency's facilities, is out-sourced to a single contractor, or is performed by local vendors.

Vehicle maintenance is one of the most significant expenses for the Transit Division. Woodburn Transit Division conducted a thorough evaluation of vehicle maintenance alternatives in 2013 and determined that it would be more economical to outsource vehicle maintenance to a commercial provider. Factors that were evaluated, included:

1. Significantly expanding, or considering a significant expansion of transportation services or vehicle fleet.
2. Experiencing significant and/or sustained cost increases in your maintenance function which are out-pacing growth in the agency's financial resources.
3. Experiencing significant and/or sustained quality-control problems with vehicle maintenance, resulting in regular route delays, vehicle breakdowns, and/or service cancellations;
4. Regularly having difficulty recruiting and retaining qualified mechanics, due to pay differentials or geographic location;
5. Agency financial resources and available maintenance budget;
6. Size and condition of the vehicle fleet;

7. Cost and availability of vehicle maintenance facilities and equipment;
8. Ability to hire, train, pay, and retain qualified mechanics and maintenance staff;
9. Ability to effectively supervise an in-house vehicle maintenance operation;
10. Proximity and ability of qualified vehicle maintenance facilities/vendors to service the fleet in a timely and cost-effective manner

An agency's VMIS can provide valuable data to perform an analysis of maintenance costs and lternatives. General guidelines have also been published indicating the average number of vehicles that one full-time mechanic can keep maintained, by category of vehicle:

VEHICLE DESCRIPTION	ODOT – PTD VEHICLE CATEGORY	NO. OF VEHICLES MAINTAINED BY ONE FULL-TIME MECHANIC
Passenger Sedan	E5, E6, E7	20 - 30
Van or Modified Van	E1, E2, E3, E4	15-30
Light-to-Medium-Duty Bus Or Chassis Cutaway	C, D	5 - 20
Larger Transit Buses	A, B	3 - 10

* Source: Management Toolkit for Small Urban and Rural Transit Operators, TCRP Report No. 54, U.S. Transportation
Research Board, Washington DC

If considering contracting for maintenance service, grant recipients must follow their agencies established procurement policies and procedures, which may include seeking competitive bids or proposals. A written contract should be carefully negotiated to clearly define a schedule of charges for specific maintenance activities and should be reviewed by ODOT PTD staff prior to awarding if PTD grants fund the activity. The contract and/or bid should include a preventive maintenance schedule to be followed; vehicle turnaround timelines; quality control standards; and a process to mutually resolve problems or issues.

RESOURCES

Federal Publications

Code of Federal Regulations (CFR) 49

• Part 37, Transportation Services for Individuals with Disabilities (ADA) 49CFR37
• Part 38, ADA Accessibility Specifications for Transportation Vehicles 49CFR38
• Part 393, Parts and Accessories Necessary for Safe Operation 49CFR393
• Part 396, Inspection, Repair, and Maintenance 49CFR396
• Part 571, Federal Motor Vehicle Safety Standards (FMVSS) 49CFR571

Other Useful National Organization Publications

• Federal Transit Agency – Bus Safety and Security Program – Resource Library FTABusSafety

• Community Transportation Association of America (CTAA) – ADA Resources CTAA-ADA

State Publications

- ODOT – PTD State Management Plan SMP
- OARS Sections 732-005-0000 through 732-030-0035 OARS732
- Oregon Administrative Rules regarding Procurement (OAR Division 55) OARDiv55
- ODOT Department of Motor Vehicles Vehicle Code DMVCode

FORMS & DOCUMENTS

Can be found on the PTD website under *Reporting and Forms*:

The **STF Quarterly Report** is a new, simple form that is designed to report just the distribution and uses of Special Transportation Fund Formula and Special Transportation Operating funds. The STF Agencies will be responsible for completing and submitting this report to PTD.

Report Schedule

The quarterly schedule for reporting was adopted by Public Transit Division because quarterly reporting is perceived to be less intrusive for grantees (four reports per year instead of twelve) and because vehicle usage and certain other grants are required by FTA to be monitored at least every 90 days. Reports are required to be submitted on a quarterly basis, unless the grant agreement establishes another schedule. Reports are due at the Public Transit Division 45 days after the end of each quarter:

November 15, for July-September;

February 15, for October-December;

May 15, for January-March; and

August 15, for April-June.

Reports are required throughout the life of the grant agreement and in some cases, a longer period. See the following general guidelines for reporting periods:

For operating projects, including purchased services, reports are required throughout the fiscal period of the grant agreement even if the funds are spent prior to the end of the grant period.

For preventive maintenance, mobility management and planning projects, reports are required throughout the project period until the funds are depleted and all deliverables (as defined by the grant agreement) are submitted.

For a capital item, reports are required throughout the project period until the item is purchased and further throughout the "useful life" of the item. Useful life is defined by the State Management Plan, and is established for each item at the time the item is entered into Public Transit Division's asset register. Vehicles and facilities will be reported every quarter while in active use, even if past the useful life.

Preventive Maintenance Plan

2019-2021

Vehicle #: ____ Equipment #: _____ Asset #: _____ VIN #: _____ License #: _____ Year: ____
Make: _____ Model: _____ Mileage: _____
PM: _____ Last PM: _____ Next PM Due On: _____ Mechanic: _____ Date: _____

Instructions: Write Initial in Appropriate Boxes Below

TASKS TO BE PERFORMED	**Inspected Okay**	**Repaired & Adjusted**	**Greased & Lubed**	**Comments & Parts List**
A. Engine				
1. Hoses and Clamps				
2. Mounting Brackets				
3. Engine Cooling Fan				
4. Drive Belts				
5. Drive Pulleys				
6. Engine Exhaust Manifold Bolts				
7. Engine Idle Speed				
8. Front Engine Mounts and Support Brackets				
9. Rear Engine Mounts				
10. Start Cables				
11. Starting Motor				
12. Fuel Lines				
13. Fuel Tank				
B. Lubrication				
1. Change Oil				
2. Oil Filter				
3. Change Oil Filter				
4. Change Fuel Filter – Primary				
5. Change Fuel Filter – Water Separator				
6. Change Air Cleaner				
7. Power Steering Fluid Level				
8. Power Steering Reservoir Filter				
9. Transmission Level				
10. Change Transmission Fluid				
11. Change Transmission Filters				
12. Check for Fluid Leaks				
13. Air Conditioning Compressor				
14. Battery Terminals				

15. Engine Crankcase Breather
16. Front Wheel Bearing
17. Propeller Shaft
18. Suspension
19. Rear Axle Differential x 2
20. Real Wheel Bearings
21. Steering Column U-Joints
22. Steering Drag Link
23. Steering Gear Box
24. Steering Kin Pins
25. Steering Tie Rod Ends
26. Door Mechanism and Drive Assembly

27. Steering Column Gear Box
28. Wheel Chair Lift

C. Cooling Systems

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Air Recirculation Baffles and Seals				
2. Coolant				
3. Drain and Flush				
4. Hoses and Pipes				
5. Coolant Filter				
6. Radiator				
7. Clean Radiator Core				
8. Surge Tank				
9. Pressure				

D. Transmission

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Lines and Fittings				
2. Shift Linkage				
3. Transmission Fluid Cooler				

E. Exhaust System

1. Exhaust
2. Hangers
3. Mounting Brackets
4. Muffler
5. Tailpipe

F. Wheels and Tires

1. Wheel Mounting Studs
2. Wheel Stud Nuts

G. Brakes

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Brake Assemblies and Linings				
2. Brake Adjustment				
H. Drive Shaft				
1. Driver Shaft				
2. U-Joints				
I. Rear Axle and Suspension				
1. Axle Shaft Flange				
2. Axle and Suspension Mounting				
3. Rear Axle Flange Nuts				
4. Rear Shock Absorbers				
5. Stabilizer Bar Link Assembly				
6. U-Bolt				
J. Front Axle and Suspension				
1. Axle Assembly				
2. Front Shock Absorbers				
3. Front Suspension				
K. Chassis Electrical				
1. Battery				
2. Battery Cables				
3. Battery Mounting				
L. Heating and Air Conditioning				
1. Heater Controls - Front				
2. Defroster Switch				
3. Heater and Air Conditioner Controls Rear				
4. Air Conditioning System - General				
5. Refrigerant Pressure Switches				
6. Water Circulation Pump and Motor				
7. Air Circulation System				
8. Condenser				
9. Condenser Fan Drive Motors				
10. Evaporator Fins				
11. Evaporator Blower Mower				

12. Heater
13. Refrigerant Valves
14. Filter – Inside Air
15. Louver – Inside Air
16. Evaporator Coil
17. Heater Core
18. Heater Lines
19. Refrigerant System
20. Air Conditioning Compressor - Assembly

21. Air Conditioning Compressor Clutch Assembly Armature

M. Coach Interior

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Driver's Seat				
2. Driver's Seat Belt				
3. Driver's Window				
4. Entrance and Exit Door Step Threads				
5. Fire Extinguisher				
6. First Aid Kit				
7. Flare Kit				
8. Floor Covering				
9. Front Destination Sign				
10. Glass				
11. Interior				
12. Interior Cleanliness				
13. Luggage Rack				
14. Message Display Sign				
15. Mirrors				
16. Passenger Seats				
17. Rattles and Squeaks				
18. Roof Escape Hatch				
19. Side Windows				
20. Steering Column				
21. Sun Visor				
22. Windshield Washer Reservoir				

N. Coach Exterior

WOODBURN Transit System

Preventive Maintenance Plan

2019-2021

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Body Cleanliness				
2. Bumpers				
3. Closure Doors				
4. Paint				
5. Reflectors				
6. Rub Rails				
7. Skirt Panels				
8. Tires				
9. Walk Around Inspection				
10. Windshield Wipers				
11. Wheels				
12. Wheel Chair Lift				
13. First Aid Kit Sticker				
14. Fire Extinguisher Sticker				
15. Vehicle Number				

O. Body

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List
1. Bumper Mounting Bolts and Brackets				
2. Compartment Access Doors				
3. Door Emergency Release				
4. Door Engine and Base Plate				
5. Door Opening and Closing Speed				
6. Door Panel Alignment				
7. Door Seals				
8. Exit Door Lower Pins				
9. Fenders and Mud Flaps				
10. Grab Rails and Stanchions				
11. Interior Trim				

P. Operating Controls

1. Accelerator and Brake Interlock
2. Air Conditioning Control System
3. Back-Up Alarm Horn
4. Brakes
5. Clearance, Marker and I.D.
6. Curb Lights

7. Defroster and Front Heater Blowers
8. Directional Lights
9. Door Exterior – Door Switch
10. Door Master Switch
11. Door Dump Valve
12. Doors and Controls
13. Exit Door Brake Interlock
14. Exit Door Sensitive Edges
15. Front Heater
16. Hazard Warning Lights
17. Headlights
18. Horn
19. Interior Lights
20. Power Steering
21. Read Heater
22. Rear Ventilation
23. Stepwell Lights
24. Steering
25. Telltale Dash Lamps

TASKS TO BE PERFORMED	Inspected Okay	Repaired & Adjusted	Greased & Lubed	Comments & Parts List

WOODBURN Transit System

Preventive Maintenance Plan

2019-2021

	Vehicle #	PM Maintenance Schedule									
Mechanic	0	(MANUFAC) Engine	*								
		Daily	7,500 Miles	15,000 Miles	30,000 Miles	45,000 Miles	60,000	75,000	90,000	105,000
Transit	0	Or at Fueling	3 Months	6 Months	1 Year	1.5 Years	2 Years	2.5	3 Years	4 Years
Vehicle Description	0	Check	Replace / Inspect	Replace / Inspect	Replace / Inspect	Replace / Inspect	Replace / Inspect	Replace / Inspect	Replace / Inspect	Replace / Inspect
Model Year	0	Oil Level	Replace	Replace	Replace	Replace	Replace	Replace	Replace	Replace
Chassis	0	Coolant Levels	Replace Engine Oil w/ Synthetic	Cabin Air Filter	AirFilter Element	Cabin Air Filter	AirFilter Element	Cabin Air Filter	AirFilter Element	Cabin Air Filter
Chassis VIN#	0	Tires	Replace Oil Filter	Engine Oil Analysis	Cabin Air Filter	Engine Oil Analysis	Cabin Air Filter	Engine Oil Analysis	Cabin Air Filter	Coolant
Body	0	Vehicle Inspection	Replace Differential Fluid	Change Oil	Engine Oil Analysis	Change Oil	Engine Oil Analysis	Change Oil	Engine Oil Analysis	Engine Oil Analysis
Body VIN#	0			Oil Filter	Change Oil	Oil Filter	Change Oil	A/T Fluid / Filter	Change Oil	Change Oil
Engine	0				Oil Filter		A/T Fluid / Filter	Fuel Filter	A/T Fluid / Filter	Differential Oil
Transmission	0						Fuel Filter	Oil Filter	Fuel Filter	
Lift	0						Oil Filter		Oil Filter	
In Service Date	01/00/00		Rotate Tires	Rotate Tires	Rotate Tires	Rotate Tires	Rotate Tires	Rotate Tires	Rotate Tires	Rotate Tires
Vehicle ID Number	0		Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention	Lube - Steering & Suspention
Fuel Type	0		Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
GVW	0		Brakes & Traction Control	AirFilter Element	Brakes & Traction Control	AirFilter Element	Brakes & Traction Control	AirFilter Element	Brakes & Traction Control	AirFilter Element
Capacity	0			Brakes & Traction Control		Brakes & Traction Control	Drive Belt	Brakes & Traction Control	Lube - Steering & Suspention	Brakes & Traction Control
Model	0									
Licence Plate	0		Coolant	Coolant	Coolant	Coolant	Coolant	Coolant	Coolant	Coolant
Engine Oil Type			Cooling System	Cooling System	Cooling System	Cooling System	Cooling System	Cooling System	Cooling System	Cooling System
Oil Filter #			Lube - Doors	Lube - Doors	Lube - Doors	Lube - Doors	Lube - Doors	Lube - Doors	Lube - Doors	Lube - Doors
Fuel Filter #			A/T Fluid Analysis	Exaust System	Exaust System	Exaust System	Exaust System	Exaust System	Exaust System	Exaust System
Transmission Filter #			Inspect - Restraint Systems	A/T Fluid Analysis	A/T Fluid Analysis	A/T Fluid Analysis	A/T Fluid Analysis	A/T Fluid Analysis	A/T Fluid Analysis	A/T Fluid Analysis
Transmission Fluid Type			Fuel Supply Line	Fuel Supply Line	Fuel Supply Line	Fuel Supply Line	Fuel Supply Line	Fuel Supply Line	Fuel Supply Line	Fuel Supply Line
Air Cleaner #			Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems	Inspect - Restraint Systems
			Inspect - Suspension	Inspect - Suspension	Inspect - Suspension	Inspect - Suspension	Inspect - Suspension	Inspect - Suspension	Inspect - Suspension	Inspect - Suspension
			Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage	Inspect - Throtle Cable/Linkage
			Vehicle Inspection	Vehicle Inspection	Vehicle Inspection	Vehicle Inspection	Vehicle Inspection	Vehicle Inspection	Vehicle Inspection	Vehicle Inspection
			Inspect Washer Fluid	Inspect Wiper Blades	Inspect Washer Fluid	Inspect Washer Fluid	Inspect Washer Fluid	Inspect Washer Fluid	Inspect Washer Fluid	Inspect Washer Fluid
			Inspect Wiper Blades		Inspect Wiper Blades	Inspect Wiper Blades	Inspect Wiper Blades	Inspect Wiper Blades	Inspect Wiper Blades	Inspect Wiper Blades

Service Record

Date	Miles Interval	Actual Miles	Maintenance Preformed	Preformed By	Comments

Radio

Model S/N