MEMORANDUM OF UNDERSTANDING BETWEEN MESA COUNTY AND THE CITY OF GRAND JUNCTION FOR GRAND VALLEY TRANSIT BUS REPAIR AND MAINTENANCE SERVICES

I. Purpose/Objective

The purpose of this Memorandum of Understanding (MOU) is to allow the City of Grand Junction (City) to provide repair and maintenance services for Grand Valley Transit buses which are owned by Mesa County (County) and designates the City as a Contractor for Grand Valley Transit (GVT) fleet maintenance. The City currently maintains appropriate facilities and sufficient personnel to perform the necessary repair and maintenance of buses and CNG fueling system and agrees to extend this service to the County under the terms and conditions specified in this MOU.

II. Scope of Work

A. Responsibilities of the City shall be as follows:

1. **City Maintenance Responsibilities:** City shall be responsible for routine maintenance and repair of the buses, CNG fueling system and related equipment and installation of ITS system, if needed. City will not be responsible for maintenance items covered by the Transdev Amendment 5 as found in exhibit G. The City will conduct annual vehicle assessments per the latest condition assessment guide provided by CDOT in October/November each year. The City will comply with the Federal Transit Administration (FTA) clauses included in Exhibit A.

2. **City Repair Responsibilities:** Modifications and repairs shall be scheduled by the City's Fleet Supervisor or its chosen service provider. The City shall dedicate three (3) technicians during normal operating hours to perform repairs and maintenance exclusively for GVT. The City will direct charge the County for one of the dedicated full-time mechanics. Additionally, repairs and modifications performed by other mechanics will be charged at the hourly shop rate established herein, in addition to any other applicable charges authorized in this MOU. The City will Schedule all preventive maintenance in advance to ensure compliance with the Preventative Maintenance schedule as required by the Federal Transit Administration (FTA) and as reflected in Exhibit B, the Transit Asset Management Plan, which includes the Grand Valley Transit Maintenance Policies and Procedures and the City of Grand Junction CNG Fuel Station Maintenance Plan as Appendices C & D. The City shall strive to perform Preventative Maintenance on-time (no more than 10% late), and should have sufficient mechanics available to ensure there are enough buses available to meet scheduled fleet demand. Overtime or modified work-times may be requested if needed. Overtime but should not be used frequently.

3. **Work performed by Outside Service Providers:** The City will provide notice to the County of work being performed by other service providers and provide a weekly update of status.

4. **Maintenance and Repair Limitations:** The City agrees to attempt to complete all maintenance and repair requests within the time the County requests or has scheduled with the City. The County is aware that there may be times when the City cannot meet the desired timeline. The City will make every attempt to maintain or repair all buses as scheduled.

5. **Equipment covered:** The equipment the City agrees to maintain for the County is set forth in the chart outlined in Exhibit C attached hereto as well as the CNG fueling system. The City Fleet Supervisor and the County Fleet Supervisor are authorized to amend the covered equipment as necessary, so long as both parties agree to the changes and attach to this MOU an updated copy of the equipment covered.

6. **Hours of Work:** The City's Fleet Service's regular working hours are from 7:00a.m. to 4:30p.m., Monday through Friday, excluding holidays observed by the City. Additional hours (overtime) or modified hours may be requested by Mesa County RTPO if service is impacted due to a shortage of buses due to preventative or unscheduled maintenance.

7. **Documentation and Safety Concerns:** The City shall supply to the County all records of work performed on a monthly basis. The City will supply the County with read-only access to electronic maintenance records. If the County does not authorize additional repairs that the City recommends, the City shall state so on the repair documentation. Items discovered that are safety concerns shall be documented (as above) and notification provided to the County. If the level of safety concern meets the criteria as determined by the City and the County, the City may make a recommendation directly to the County's Fleet Supervisor and the City will seek direction to proceed with the recommended repair(s) or maintenance. The City makes no representation that it will discover any safety issue or defect, actual or potential.

8. **Pick-up and Delivery of buses**: This may be a joint effort between the City and the County. The County is the party ultimately responsible for pick-up and delivery. The County remains responsible for any costs associated with pick-up and delivery.

9. **Drug and Alcohol Program:** The City will establish and maintain

a drug and alcohol program that will be in compliance with the Federal Motor Carrier Safety Administration (FMCSA) requirements and regulations. The FMCSA of the DOT has published 49 CFR 382 that mandates urine drug testing and breath alcohol testing for safety-sensitive positions and prohibits performance of safety-sensitive functions when there is a positive test result. DOT has also published 49 CFR Part 40, as amended, which sets standards for the collection and testing of urine and breath specimens. In addition, DOT published 49 CFR Part 29, "The Drug-Free Workplace Act of 1988," which requires the establishment of drug-free work place policies and the reporting of certain drug-related offences to the FMCSA.

10. **Site Improvements:** The City shall facilitate any improvements and/or repairs needed for the storage and maintenance of the GVT bus site and CNG fueling system.

11. **Insurance:** Contractor shall provide the insurance bonds and indemnities required in the attached Exhibit F, insurance provisions, incorporated herein by this reference. Any subcontractors shall provide the same insurance bonds and indemnity required of Contractor.

12. **Procurement:** The City shall follow and provide to the County the City of Grand Junction Procurement Policy. As part of its oversight, the County shall review the procurement policy and review all individual purchases over $15,000.

B. Responsibilities of Mesa County shall be as follows:

1. **Notification of Repair and/or Maintenance:** The County agrees to notify the City via the City's designated email address, joec@gjcity.org, or as instructed by the City Fleet Supervisor, when a GVT bus is in need of repair and/or maintenance. The City agrees that it is their intent to maintain the buses to the required standards for the inspection and maintenance and hereby agrees to participate in the County's preventative maintenance program as outlined in attached Exhibit B. If the County determines the buses are not being maintained to this standard, the County will notify the City Fleet Supervisor in writing.

2. **Authorized Representative:** The County agrees to provide the name and telephone number of a County authorized representative who can, in a timely manner, provide any necessary direction to the City to approve additional repairs, if the City determines such repairs are recommended and required.

3. **Response to Safety Concerns:** If the County notifies the City the

level of safety concern meets the criteria as determined by the County, the City Fleet Supervisor is responsible for a timely response to the County's recommendation.

4. **Pick-up and Delivery of Buses**: The County and the City shall coordinate all pick-up and delivery of the buses with the County as the party ultimately responsible for the pick-up and delivery. The County is responsible for any costs associated with pick-up and delivery.

5. **Federal Regulations:** The County is responsible for coordinating with the City on matters related to compliance with federal regulations. This currently includes:
   - Transit Asset Management (TAM) (Exhibit B)
   - Public Transportation Agency Safety Plan (PTASP) (Exhibit E)
   - FTA Clauses (Exhibit A)

6. **Contractor Oversight Responsibilities:** The FTA has described the City as a fleet maintenance contractor for the County. As such, the County is responsible for ensuring compliance with federal regulations described in Section II.5 above. A checklist, found in Exhibit D will be used by the County to ensure compliance through weekly fleet meetings, quarterly fleet meetings, electronic document review and an annual site visit. The City agrees to support the County by providing information and attending meetings. If the City fails to follow federal regulations, the County will notify the City in writing and work with the City to come into compliance. If the City is unwilling to do so, this MOU may be void and fleet maintenance may need to be moved to a different contractor.

III. Payment (or Funding/Costs/etc.)

A. Service and repair charges for the GVT buses will be invoiced through the cost of the full-time employee and on an hourly basis rounded to the nearest 15 minutes. The 2021 annual rate for the full-time employees is $82,208 ($39.52/hr) and the shop rate for service is $54.64 per hour, which is inclusive of documentation and reporting of all maintenance work and service work. The 2022 annual rate for the full-time employee is $84,674 ($40.71/hr) and the shop rate for service is $56.34 per hour, which is inclusive of documentation and reporting of all maintenance work and service work. The City Fleet Supervisor should inform County staff of the increase in shop rate during the annual budget season. In addition, the County agrees to cover all costs for all services and parts provided by the City and any costs associated with fluids. The City will provide the County with an invoice by the 12th of each month for the charges incurred the month prior.

B. Expenses outlined herein shall be paid by the City in the manner set forth below:

1. Costs of any parts will be directly billed and paid for by the City: markup for parts will be 30% which covers the facility as well as the CNG fueling system expenses. City Fleet must comply with their approved purchasing policy and procedures manual, which reflect applicable state and local laws and conform to applicable Federal law and standards identified in 2CFR Part 200. Procurement of parts and materials will be reviewed as part of the oversight checklist.
2. Service that the City does not provide but that the City authorizes another entity to provide will be directly billed and paid for by the City.
3. All labor services provided by the City and cost of parts will be billed and paid by the City; there will be a $5.00 administrative charge per repair ticket.
4. Fluids used and replaced will be billed at normal rates paid by the City as well as fluid accountability requirements and any required disposal charges incurred by the City.
5. Pick-up and delivery charges will be billed to the County as part of the repair order at billed shop rate.

IV. Amendments/Term Extensions

Either party to this MOU may request an amendment or term extension. Any amendment shall be negotiated and agreed to by both parties prior to implementation, except labor costs which can be increased by the City as provided in this MOU. Certain updates are expressly authorized to be made by the City and the County Fleet Supervisors under this MOU and, when so authorized, must be made in writing and attached hereto.

Any other amendments to this MOU shall be made in writing and shall be presented to each party's government authority for approval prior to implementation.

V. Indemnification

The City of Grand Junction and Mesa County each agree to defend, indemnify and hold the other, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits, including reasonable attorney fees, to the extent caused by each entity's respective negligence in performance of its responsibilities under this MOU.

VI. Warranty

The City of Grand Junction gives no express or implied warranty for the services provided under this MOU.

VII. Duration of MOU

This MOU shall be effective until December 31, 2022 unless otherwise

terminated or extended in the manner described under the pertinent sections of this MOU.

VIII. Termination of MOU

Should either party chose to terminate this MOU, the party desiring to terminate the MOU must provide one year advance written notice to the other party, unless otherwise set forth in this MOU.

IX. Joint Board/No Separate Legal entity Created/Property

No joint board and no separate legal entity are created under this MOU. Each party shall maintain ownership of its own property.

X. Entire MOU

This MOU along with the Exhibits incorporated by reference sets forth all terms and a condition agreed upon by the County and the City, and supersedes any and all MOUs oral or otherwise with respect to the subject matter addressed herein.

XI. Dispute Resolution

In the event of a dispute between the parties arising by reason of this MOU, or any obligation hereunder, the dispute shall first be referred to a representative by parties to have oversight over the administration of this MOU. Said representatives shall meet within fourteen (14) calendar days of either party's request for a meeting and the parties shall make a good faith effort to attempt to achieve a resolution of the dispute. In the event that the parties are unable to resolve the dispute under the procedure set forth, then the parties hereby agree that the matter shall be referred to mediation. The parties shall mutually agree upon a mediator to assist them in resolving their differences. Any expenses incidental to mediation shall be borne equally by the parties.

XII. Effective Date

This MOU shall take effect on the date of the last authorizing signature affixed hereto.

Mesa County

DocuSigned by:
Peter Baier
A4DF9382B3CB4EF...

Peter Baier, County Administrator

Date: 11/17/2021 | 10:32 MST

City of Grand Junction

DocuSigned by:
Greg Caton
2F1EE1D53738492...

Greg Caton, City Manager

Date: 11/16/2021 | 14:50 MST

EXHIBIT A
Federal Transit Administration Clauses

FEDERAL TRANSIT ADMINISTRATION (FTA) CLAUSES

APPROPRIATION AND THE AVAILABILITY FUNDING: The Contractor acknowledges and understands that this contract is funded in whole or in part by the Federal Transit Administration (FTA) and administered by the County. Both the County and the Contractor are Parties to this Contract. In accordance with the Colorado Constitution, Article X, Section 20, and the County Charter, performance of the County's obligations under this Contract is expressly subject to appropriation of funds by the FTA and/or the County's Board of County Commissioners for this contract and the availability of those appropriated funds for expenditure. Further, in the event that funds are not appropriated in whole or in part sufficient for performance of the County's obligations under this Contract, or appropriated funds may not be expended due to the County, Constitutional or the FTA spending limitations, then the County may terminate this Agreement without compensation to the Contractor. Performances of the Contractor's obligations under this contract are expressly subject to appropriation of funds by the County and/or the FTA and the availability of those funds for the payment of obligations incurred under this contract. Further, in the event that County and/or FTA funds are not appropriated in whole or in part sufficient for performance of the Contractor's obligations under this Contract, or appropriated funds may not be expended due to legal limitations on non-availability, then the County may terminate this Contract without compensation to the Contractor.

NO FEDERAL GOVERNMENT OBLIGATION TO THIRD PARTIES

The County and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the Recipient, Contractor or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.

The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by the FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. chapter 53, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5323(l) on the Contractor, to the extent the Federal Government deems appropriate.

The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

ACCESS TO RECORDS AND REPORTS

a. Record Retention. The Contractor will retain, and will require its subcontractors of all tiers to retain, complete and readily accessible records related in whole or in part to the contract, including, but not limited to, data, documents, reports, statistics, sub-agreements, leases, subcontracts, arrangements, other third party agreements of any type, and supporting materials related to those records.

b. Retention Period. The Contractor agrees to comply with the record retention requirements in accordance with 2 C.F.R. § 200.333. The Contractor shall maintain all books, records, accounts and reports required under this Contract for a period of at not less than three (3) years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case records shall be maintained until the disposition of all such litigation, appeals, claims or exceptions related thereto.

c. Access to Records. The Contractor agrees to provide sufficient access to FTA and its contractors to inspect and audit records and information related to performance of this contract as reasonably may be required.

d. Access to the Sites of Performance. The Contractor agrees to permit FTA and its contractors access to the sites of performance under this contract as reasonably may be required.

FEDERAL CHANGES

Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

CIVIL RIGHTS LAWS AND REGULATIONS

The County is an Equal Opportunity Employer. As such, the County agrees to comply with all applicable Federal civil rights laws and implementing regulations. Apart from inconsistent requirements imposed by Federal laws or regulations, the County agrees to comply with the requirements of 49 U.S.C. § 5323(h) (3) by not using any Federal assistance awarded by FTA to support procurements using exclusionary or discriminatory specifications.

Under this Agreement, the Contractor shall at all times comply with the following requirements and shall include these requirements in each subcontract entered into as part thereof.

1. **Nondiscrimination**. In accordance with Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, disability, or age. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

2. **Race, Color, Religion, National Origin, Sex.** In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e *et seq*., and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. chapter 60, and Executive Order No. 11246, "Equal Employment Opportunity in Federal Employment," September 24, 1965, 42 U.S.C. § 2000e note, as amended by any later Executive Order that amends or supersedes it, referenced in 42 U.S.C. § 2000e note. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, or sex (including sexual orientation and gender identity). Such action shall include, but not be limited to, the following: employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

3. **Age.** In accordance with the Age Discrimination in Employment Act, 29 U.S.C. §§ 621-634, U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. part 1625, the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6101 *et seq*., U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. part 90, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

4. **Disabilities**. In accordance with section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, the Americans with Disabilities Act of 1990, as amended, 42 U.S.C. § 12101 *et seq*., the Architectural Barriers Act of 1968, as amended, 42 U.S.C. § 4151 *et seq*., and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against individuals on the basis of disability. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F, as amended, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply

with any Mesa County requests which would cause Mesa County to be in violation of the FTA terms and conditions.

ENERGY CONSERVATION REQUIREMENTS

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act. These requirements extend to all third party contractors and their contracts at every tier and subrecipients and their subcontracts at every tier.

TERMINATION PROVISIONS

a. **Termination for Convenience (General Provision)** The County may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the County to be paid the Contractor. If the Contractor has any property in its possession belonging to the County, the Contractor will account for the same, and dispose of it in the manner the County directs.

b. **Termination for Default [Breach or Cause] (General Provision)** If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the County may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by the County that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the County, after setting up a new delivery of performance schedule, may allow the Contractor to continue work, or treat the termination as a Termination for Convenience.

c. **Opportunity to Cure (General Provision)** The County in its sole discretion may, in the case of a termination for breach or default, allow the Contractor 10 calendar days in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

If Contractor fails to remedy to the County's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within ten (10) calendar days after receipt by Contractor of written notice from the County setting forth the nature of said breach or default, the County shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude the County from also pursuing all available remedies against Contractor and its sureties for said breach or default.

d. **Waiver of Remedies for any Breach** In the event that the County elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by the County shall not limit the County's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

e. **Termination for Convenience (Professional or Transit Service Contracts)** The County, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the County shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

f. **Termination for Default (Supplies and Service)** If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the County may terminate this contract for default. The County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County.

g. **Termination for Default (Transportation Services)** If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the County may terminate this contract for default. The County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Contractor has possession of the County's goods, the Contractor shall, upon direction of the County, protect and preserve the goods until surrendered to the County or its agent. The Contractor and the County shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County.

h. ~~**Termination for Default (Construction)** If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, the County may terminate this contract for default. The County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the County may take over the work and compete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant~~

~~on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the County resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the County in completing the work.~~

~~The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if:~~

~~1. The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the County, acts of another Contractor in the performance of a contract with the County, epidemics, quarantine restrictions, strikes, freight embargoes; and~~

~~2. The contractor, within ten (10) calendar days from the beginning of any delay, notifies the County in writing of the causes of delay. If in the judgment of the County, the delay is excusable, the time for completing the work shall be extended. The judgment of the County shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.~~

~~If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the County.~~

~~i. **Termination for Convenience or Default (Architect and Engineering)** The County may terminate this contract in whole or in part, for the County's convenience or because of the failure of the Contractor to fulfill the contract obligations. The County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.~~

~~If the termination is for the convenience of the County, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.~~

~~If the termination is for failure of the Contractor to fulfill the contract obligations, the County may complete the work by contact or otherwise and the Contractor shall be liable for any additional cost incurred by the County.~~

~~If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County.~~

j. **Termination for Convenience of Default (Cost-Type Contracts)** The County may terminate this contract, or any portion of it, by serving a notice or termination on the Contractor. The notice

shall state whether the termination is for convenience of the County or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from the County), or property supplied to the Contractor by the County. If the termination is for default, the County may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the County and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of the County the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, the County determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, the County after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

DEBARMENT AND SUSPENSION

The Contractor shall comply and facilitate compliance with U.S. DOT regulations, "Nonprocurement Suspension and Debarment," 2 C.F.R. part 1200, which adopts and supplements the U.S. Office of Management and Budget (U.S. OMB) "Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," 2 C.F.R. part 180. These provisions apply to each contract at any tier of $25,000 or more, and to each contract at any tier for a federally required audit (irrespective of the contract amount), and to each contract at any tier that must be approved by an FTA official irrespective of the contract amount. As such, the Contractor shall verify that its principals, affiliates, and subcontractors are eligible to participate in this federally funded contract and are not presently declared by any Federal department or agency to be:

a) Debarred from participation in any federally assisted Award;
b) Suspended from participation in any federally assisted Award;
c) Proposed for debarment from participation in any federally assisted Award;
d) Declared ineligible to participate in any federally assisted Award;
e) Voluntarily excluded from participation in any federally assisted Award; or
f) Disqualified from participation in ay federally assisted Award.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:
The certification in this clause is a material representation of fact relied upon by the County. If it is later determined by the County that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. part 180, subpart C, as supplemented by 2 C.F.R. part 1200, while this offer is valid and throughout the period of any contract that may

arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

VIOLATION AND BREACH OF CONTRACT

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of the County. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the County. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the County shall be binding upon the Contractor and the Contractor shall abide be the decision.

Performance During Dispute - Unless otherwise directed by the County, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the County and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the County is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the County or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach there under, except as may be specifically agreed in writing.

LOBBYING RESTRICTIONS

The lobbying requirements apply to all contracts and subcontracts of $100,000 or more at any tier under a Federal grant. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this agreement, the payor must complete and submit the Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal

contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____ Signature of Contractor's Authorized Official

_____ Name and Title of Contractor's Authorized Official

_____ Date

CLEAN AIR REQUIREMENTS

The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended (42 U.S.C. 7401–7671q).

1) It will not use any violating facilities;

2) It will report the use of facilities placed on or likely to be placed on the U.S. EPA "List of Violating Facilities;"

3) It will report violations of use of prohibited facilities to FTA; and

4) It will comply with the inspection and other requirements of the Clean Air Act, as amended, (42 U.S.C. §§ 7401 – 7671)

5) The Contractor also agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FTA

CLEAN WATER REQUIREMENTS

The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251–1387).

1) It will not use any violating facilities;

2) It will report the use of facilities placed on or likely to be placed on the U.S. EPA "List of Violating Facilities;"

3) It will report violations of use of prohibited facilities to FTA; and

4) It will comply with the inspection and other requirements of the Federal Water Pollution Control Act as amended, (33 U.S.C. §§ 1251-1387).
5) The Contractor also agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FTA.

FLY AMERICA REQUIREMENTS
(Involving foreign transport or travel by air)
a) *Definitions.* As used in this clause:
"**International air transportation**" means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.
"United States" means the 50 States, the District of Columbia, and outlying areas.
"**U.S.-flag air carrier**" means an air carrier holding a certificate under 49 U.S.C. Chapter 411.

b) When Federal funds are used to fund travel, Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118) (Fly America Act) requires contractors, recipients, and others use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.

c) If available, the Contractor, in performing work under this contract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.

d) In the event that the Contractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Contractor shall include a statement on vouchers involving such transportation essentially as follows:

> **Statement of Unavailability of U.S.-Flag Air Carriers**
> International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons. See FAR § 47.403. *[State reasons]:*
>
> _____
>
> _____
>
> (End of statement)

e) The Contractor shall include the substance of this clause, including this paragraph (e), in each subcontract or purchase under this contract that may involve international air transportation.

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT
For all contracts in excess of $100,000 that involve the employment of mechanics or laborers, the Contractor shall comply with the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 3701-3708), as supplemented by the DOL regulations at 29 C.F.R. part 5. Under 40 U.S.C. § 3702 of the Act, the Contractor shall compute the wages of every mechanic and laborer, including watchmen and guards, on the basis of a standard work week of 40 hours. Work in excess of the

standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or to contracts for transportation or transmission of intelligence.

In the event of any violation of the clause set forth herein, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, the Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of this clause in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by this clause.

The FTA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in this section.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this agreement.

CONTRACT WORK HOURS AND SAFETY STANDARDS FOR AWARDS NOT INVOLVING CONSTRUCTION

The Contractor shall comply with all federal laws, regulations, and requirements providing wage and hour protections for non-construction employees, in accordance with 40 U.S.C. § 3702, Contract Work Hours and Safety Standards Act, and other relevant parts of that Act, 40 U.S.C. § 3701 *et seq*., and U.S. DOL regulations, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction (also Labor Standards Provisions Applicable to Non-construction Contracts Subject to the Contract Work Hours and Safety Standards Act)," 29 C.F.R. part 5.

The Contractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three (3) years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid.

Such records maintained under this paragraph shall be made available by the Contractor for inspection, copying, or transcription by authorized representatives of the FTA and the Department of Labor, and the Contractor will permit such representatives to interview employees during working hours on the job.

The contractor shall require the inclusion of the language of this clause within subcontracts of all tiers.

DISADVANTAGED BUSINESS ENTERPRISES

1. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.* The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. Mesa County's overall goal for DBE participation is 1%. A separate contract goal has not been established for this procurement.

2. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 C.F.R. part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the County deems appropriate, which may include, but is not limited to:
   (1) Withholding monthly progress payments;
   (2) Assessing sanctions;
   (3) Liquidated damages; and/or
   (4) Disqualifying the contractor from future bidding as non-responsible. 49 C.F.R. § 26.13(b).

3. The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

4. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from Mesa County. In addition, the contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed.

5. The contractor must promptly notify the County, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of Mesa County.

   For this solicitation, the County has *not* established a race- or gender- *conscious* DBE participation goal. The County extends to each individual, firm, vendor, supplier, contractor, and subcontractor an equal economic opportunity to compete for business. The County uses

race- and gender-*neutral* measures to facilitate participation by DBEs. The County *encourages* each Offeror to voluntarily subcontract with DBEs to perform part of the work—a Commercially Useful Function—that Offeror might otherwise perform with its own forces. **This RFP *requires* outreach efforts to DBEs as outlined below.**

Efforts will be made to help facilitate and guide this compliance; your questions must be sent to the Mesa County Purchasing Representative prior to the Questions Deadline identified in the RFP Tentative Schedule. Your question(s) will be answered in the addendum Posting of Questions and Answers.

A. APPLICABLE FEDERAL REGULATIONS. This Contract is subject to DBE requirements issued by USDOT in 49 CFR Part 26. Despite the lack of a race- and gender-conscious DBE participation goal for this Contract, the County must track and report DBE participation that occurs as a result of any subcontract, procurement, joint venture (JV), or other arrangement involving a DBE. For this reason, the Successful Offeror shall provide all relevant information to enable the required reporting.

B. COUNTING DBE PARTICIPATION. The County will count DBE participation as authorized by federal regulations. A summary of these regulations can be found at https://www.codot.gov/business/civilrights/smallbusiness/dbe/certification.

C. DBE CERTIFICATION. *Only* firms (1) certified by CDOT and listed in the Colorado Unified Certification Program Directory found at http://www.coloradodbe.org/, and (2) contracted to perform a Commercially Useful Function on scopes of work for which they are certified, may be considered to determine DBE participation resulting from race/gender neutral measures on this Contract. This DBE determination affects the County's tracking and reporting obligations to USDOT.

D. REQUIRED OUTREACH EFFORTS: The County has implemented outreach requirements for this Contract. Specifically, each Offeror shall: (1) identify DBE participation opportunities, including Commercially Useful Functions; (2) actively solicit proposals from DBEs; (3) evaluate DBE proposals; and (4) communicate selection decisions to DBEs, including each rejection of a proposal. If a Offeror fails to conduct these Outreach Efforts or fails to submit the required documentation of Offeror's Outreach Efforts, the County may determine that the Offeror's submittal is nonresponsive. A determination of nonresponsiveness disqualifies Offeror from further consideration for the Contract award.

E. SUBMITTAL REQUIREMENTS: Outreach-Efforts documentation due with initial qualifications-based submittal.

Attachment A. Each Offeror shall complete and submit Attachment A documenting its diligent, good-faith Outreach Efforts. Attachment A must be submitted with the initial qualifications-based submittal. Each Offeror shall list in Attachment A all DBEs contacted by Offeror in preparing its submittal. Each Offeror shall also provide the following minimum information to document its Outreach Efforts. The DBE Liaison Officer will consider this information to determine whether Offeror has demonstrated the required Outreach Efforts:

1) Each business's full legal name and contact information;
2) Scope of work solicited (brief description, percentage of contract value);
3) Solicitation method (personal contact, telephone, fax, e-mail, other);
4) Selection process; and
5) Communication of selection outcome to each participant.*

* Offeror shall provide supporting documentation that shows Offeror has communicated its final selection decisions and outcomes to all DBEs, including those not chosen to participate in this Contract.

Each Offeror shall complete Attachment A in accordance with the following instructions.

1) Each Offeror shall actively contact DBEs for each scope of work or business opportunity selected for Outreach Efforts (Columns A and B).
2) Offeror's contacts with DBEs should occur well before the deadline for the initial qualifications-based submittal to afford the firms contacted a reasonable opportunity to prepare a proposal and participate in the Contract.
3) Offeror shall ask each firm to indicate the number of its employees (Column A).
4) For each DBE's annual gross receipts, Offeror shall ask the firm to indicate the gross-receipts bracket into which it fits (e.g., less than $500,000; $500,000 – $1 million; $1 – 2 million; $2 – 5 million; etc.) rather than requesting an exact figure from the firm (Column A).
5) If Offeror does not select a DBE to participate in the Contract, Offeror shall explain the reason why (Column D).
6) Offeror shall notify each DBE contacted whether or not Offeror selected the firm. Offeror shall notify all firms not selected, and Offeror shall state when (date) and how (method) the selection outcome was communicated to each firm (Column E).

Supporting Documentation. Each Offeror shall complete and submit supporting documentation of its Outreach Efforts related to Attachment A.

a. Offeror shall submit with Attachment A—on the due date for Attachment A—all supporting documentation of Offeror's contacts with DBEs for each scope of work or business opportunity selected for Outreach Efforts.

b. This documentation must include (1) descriptions of scopes of work and business opportunities identified for DBE participation, and (2) a copy of the actual solicitation sent to interested DBEs. The solicitation may be in the form of a letter, attachment to an e-mail, advertisements in newspapers and trade papers, or written communications with chambers of commerce.

c. Offeror shall submit documentation that establishes how Offeror communicated its selection decisions and outcomes to each DBE not selected for this Contract. This documentation may be in the form of a letter, e-mail, or telephone log. The documentation must show the name of the person contacted and the date.

d. For all of the above documentation, if Offeror uses a blast e-mail or fax format, the documentation submitted must include a copy of the e-mail or fax, and Offeror must disclose all e-mail addresses and fax numbers to which the solicitation or outcome notification was sent and the date and time of transmission. For telephone contacts, Offeror shall document the date and time of the call and the names of the respective persons representing Offeror and the DBE.

F. Documentation due within seven days after final negotiations:
Within seven days after final negotiations with the County, the Offeror selected for negotiations shall complete and submit forms showing Negotiations with DBEs and DBE Utilization Commitment. Offeror must show diligent, good-faith Outreach Efforts and provide information regarding its DBE selection decisions and outcomes for all negotiations with DBEs.

If the Successful Offeror fails to timely submit a completed copy of forms showing Negotiations with DBEs and DBE Utilization Commitment, or fails to provide the required supporting documentation, the County Agency may determine that Offeror's proposal is nonresponsive. A determination of nonresponsiveness disqualifies Offeror from further consideration for the Contract award.

3. Failure To Meet Outreach Requirements. The DBE Liaison Officer will determine, in writing, whether Offeror has satisfied all outreach requirements. If the DBE Liaison Officer determines that Offeror has failed to satisfy the outreach requirements, then the DBE Liaison Officer may determine that the submittal is nonresponsive. A determination of nonresponsiveness disqualifies Offeror from further consideration for the Contract award. The County Agency shall send written notice to Offeror stating the basis for DBE Liaison Officer's decision.

4. Administrative Reconsideration. If the DBE Liaison Officer determines that Offeror did not properly complete Attachment A or Offeror failed to demonstrate sufficient Outreach Efforts or failed to submit required documentation, then the County will permit Offeror to request for reconsideration on this determination. In its request for reconsideration, Offeror may clarify its submittal. But Offeror may not submit or refer to new or revised documents or information. The County will only reconsider the original submittal as clarified in the request for reconsideration.

If Offeror requests reconsideration of the DBE Liaison Officer's determination of nonresponsiveness based on insufficient Outreach Efforts or insufficient documentation, then Offeror must provide written notice to the County within three business days of the County's notice of disqualification to Offeror. The request for reconsideration should be e-mailed to the Procurement Officer and the DBE Liaison Officer and also mailed to:

Mesa County RTPO
ATTN: DBE Liaison Officer
Dept. 5093, PO Box 20,000
Grand Junction, CO 81502-5001

G. POST-AWARD COMPLIANCE REQUIREMENTS

1. Subcontracting Commitment. Promptly after Contract award, the Successful Offeror shall submit to the County a list of all subcontractors and copies of all executed contracts, purchase orders, subleases, JV agreements, and other arrangements formalizing agreements between the Successful Offeror and any DBE.

The Successful Offeror shall not terminate any DBE Subcontracts, and the Successful Offeror shall not alter the scope of work or reduce the Subcontract amount, without the DBE Liaison Officer's prior written approval. Any request to alter a DBE Subcontract must be submitted in writing to the DBE Liaison Officer before any change is made. If the Successful Offeror fails to do so, the County may declare Offeror in breach of contract.

2. Relief From Proposed DBE Utilization. After Contract award, the County will not grant relief from the proposed DBE utilization except in extraordinary circumstances. The Successful Offeror's request to modify participation must be in writing to the DBE Liaison Officer. The DBE Liaison Officer has final discretion and authority to determine if the request should be granted.

Offeror's written request must set forth the amount of relief sought, evidence that demonstrates why relief is necessary, and any additional relevant information that the DBE Liaison Officer should consider. The Successful Offeror shall include with the request all documentation of Offeror's attempts to subcontract with the DBE and any other action taken to locate and solicit a replacement DBE.

If an approved DBE allows its DBE certification to expire, or the certification is revoked during the course of the Subcontract, the County will consider all work performed by the DBE under the original contract to count as DBE participation. No increased scope of work negotiated after expiration or revocation of the DBE's certification may be counted. Likewise, any work performed under a Contract extension granted by the County may not be counted as DBE participation.

3. DBE Substitutions. If the DBE was approved by the County, but the firm subsequently loses its DBE status before execution of a contract, the DBE Liaison Officer will consider whether or not the Successful Offeror has exercised diligent and good-faith efforts to find another DBE as a replacement. The Successful Offeror shall notify the DBE Liaison Officer in writing of the necessity to substitute a DBE and provide specific reason(s) for the substitution or replacement. Actual substitution or replacement of a DBE may not occur before the DBE Liaison Officer's written approval has been obtained.

4. Prompt Payment Of Subcontractors. Within seven days of the Successful Offeror's receipt of a County progress payment that includes amounts for the Offeror's Subcontractors, suppliers, or subconsultants, the Offeror shall pay the Subcontractors, suppliers, and subconsultants the respective amounts allowed for satisfactory performance of their work.

If the County reduces the Successful Offeror's retention, the Offeror shall correspondingly reduce the retentions of Subcontractors and suppliers that have performed satisfactory work.

Under the prompt-payment provisions of 49 CFR Part 26, the Successful Offeror must ensure prompt and full payment of retentions to Subcontractors and suppliers when their work is complete, the County has accepted the work, and the County has paid the Successful Offeror for the work. The Successful Offeror shall pay each Subcontractor's and supplier's retention no later than 30 days after the County pays Offeror.

If the Successful Offeror diverts any payment received for a DBE's work performed on the Contract or fails to reasonably account for the application or use of the payment, the County may declare the Successful Offeror in breach of contract. If the Successful Offeror fails to make payments under these provisions, the County may take any one or more of the following actions:

1. Declare the Successful Offeror in breach of contract;
2. Withhold future payments, including retention, until proper payment has been made to all Subcontractors and suppliers;
3. Reject the Successful Offeror's future bids on County contracts for a period not to exceed one year from the substantial-completion date of this Contract; and/or
4. Terminate the Contract.

Nothing in this section prevents the Successful Offeror from enforcing its Subcontract with a Subcontractor or supplier for defective work, late performance, or other claims arising under the Subcontract.

H. RECORDS & REPORTING REQUIREMENTS

During performance of the Contract, the Successful Offeror shall keep all records necessary to document DBE participation. The Successful Offeror shall provide the records to the County within 72 hours of the County's request and at final completion of the Contract. The County will prescribe the form, manner, and content of reports. The required records include:

1. A complete listing of all Subcontractors and suppliers on the project;
2. Each Subcontractor's and supplier's scope of work performed;
3. The dollar value of all subcontracting work, services, and procurement;
4. Copies of all executed Subcontracts, purchase orders, and invoices; and
5. Copies of all payment documentation.

This information will document DBE participation that occurred during each payment-request period throughout the Contract's duration. Copies of all DBEs' payment requests and invoices must be submitted for each report period.

PROMPT PAYMENT TO SUBCONTRACTORS

1. The Contractor is required to pay all Subcontractors for all work that the Subcontractor has satisfactorily completed, no later than five (5) business days after the Contractor has received payment from Mesa County.
2. In addition, all Retainage amounts must be paid by the Contractor to the Subcontractor no later than fourteen (14) business days after the Subcontractor has, in the opinion of the Contractor, satisfactorily completed its portion of the Work.

3. A delay in or postponement of payment to the Subcontractor requires good cause and prior written approval Mesa County.
4. The Contractor is required to include, in each subcontract, a clause requiring the use of appropriate arbitration mechanisms to resolve all payment disputes.
5. Mesa County will not pay the Contractor for work performed unless and until the Contractor ensures that the Subcontractors have been promptly paid for the work they have performed under all previous payment requests, as evidenced by the filing with Mesa County of lien waivers, canceled checks (if requested), and the Contractor's sworn statement that it has complied with the prompt payment requirements. Prime Contractors must submit a prompt payment affidavit, (form to be provided by Mesa County) which identifies each subcontractor (both DBE and non-DBE) and the date and amount of the last payment to such subcontractor, with every payment request filed with Mesa County, except for the first payment request, on every contract with Mesa County. (See below for *Prompt Payment Affidavit*).
6. Failure to comply with these prompt payment requirements is a breach of the Contract, which may lead to any remedies permitted under law, including, but not limited to, Contractor debarment.

Reporting Requirements During the Term of the Contract

1. The bidder shall, within five (5) business days of contract award, or prior to any work being performed, execute formal subcontracts or purchase orders with the DBE firms included in the bid. These written agreements shall be made available to Mesa County upon request. All contracts between the bidder and its subcontractors must contain a prompt payment clause.
2. During the term of annual contracts, the bidder shall submit regular "Status Reports of DBE Subcontract Payments" in a form acceptable to Mesa County. The frequency with which these reports are to be submitted will be determined by Mesa County, but in no event will reports be required less frequently than quarterly. **In the absence of written notice from Mesa County, the bidder's first "Status Report of DBE Subcontract Payments" will be due ninety (90) days after the date of contract award, with additional reports due quarterly thereafter.**
3. In the case of a one-time procurement with either a single or multiple deliveries, a "Status Report of DBE Subcontract Payments," in a form acceptable to Mesa County, indicating final DBE payments shall be submitted directly to Mesa County. The information must be submitted prior to or at the same time as the bidder's final invoice to Mesa County. **Failure to follow these directions may delay final payment.**
4. The address for Mesa County's DBE Program, is: Mesa County Regional Transportation Planning Office (RTPO), Attn: DBELO, PO Box 20,000, Dept 5093, Grand Junction, CO 81502-5001.

PROMPT PAYMENT AFFIDAVIT

Contractor will place a check in the appropriate box below that applies to this payment request.
Re: Payment Request No. _____
I, _____ (Name), the _____ (Title - e.g., President, Vice President, etc.) of _____ ("Company"), do state the following with regard to payments made under Contract No. _____ ("Contract"):

1. *____Subcontractors, at the first tier, both DBE and non-DBE, who completed work and were listed for payment on the prior Payment Request No. _____, were paid no later than five (5) business days after Company received payment from Mesa County.*
2. *____Copies of invoices and cancelled checks for subcontractors at the first tier who were paid under the prior payment request have been delivered or mailed to Mesa County RTPO. In addition, Company has attached to the current Payment Request all lien waivers for prior subcontractor payments and any other documentation required by Mesa County. (Failure to attach all required documentation to the Payment Request or forward cancelled checks and invoices to Mesa County RTPO may cause the Payment Request to be rejected Mesa County.)*
3. *____All retainage amounts withheld from any subcontractor who satisfactorily completed its portion of the contract work, including punch list items, were paid to the subcontractor(s) no later than fourteen (14) business days after it satisfactorily completed its work, whether or not Mesa County has paid said retainage amounts to Company. Attach a copy of the cancelled check evidencing payment of each retainage amount.*
4. *____There was no delay in or postponement of any payment owed to a subcontractor, whether periodic payment or retainage amount, except for good cause and after receipt of prior written approval from Mesa County RTPO.*

Attach a copy of the written approval from the Mesa County RTPO.

_____
Company Name

_____
Signature

_____
Print Name

Date: _____

Subscribed and sworn to before me this _____day of _____ 20__.

_____
Notary Public

RECYCLED PRODUCTS

Recovered Materials: The Contractor agrees to provide a preference for those products and services that conserve natural resources, protect the environment, and are energy efficient by complying with and facilitating compliance with Section 6002 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6962, and U.S. Environmental Protection Agency (U.S. EPA), "Comprehensive Procurement Guideline for Products Containing Recovered Materials," 40 C.F.R. part 247.

ADA ACCESSIBILITY

Facilities to be used in public transportation service must comply with 42 U.S.C. Sections 12101 *et seq.*; DOT regulations, —Transportation Services for Individuals with Disabilities (ADA),‖ 49 CFR Part 37; and Joint ATBCB DOT regulations, —Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles, 36 CFR Part 1192 and 49 CFR Part 38. Notably, DOT incorporated by reference into Appendix A of its regulations at 49 CFR Part 37 the ATBCB's —Americans with Disabilities Act Accessibility Guidelines (ADAAG), revised July 2004, which include accessibility guidelines for buildings and facilities. DOT also added specific provisions to Appendix A of 49 CFR Part 37 modifying the ADAAG, with the result that buildings and facilities must comply with both the ADAAG and the DOT amendments.

PRIVACY ACT 5 U.S.C. 552

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

1. **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

3. **Withholding for unpaid wages and liquidated damages** - The (write in the name of the grantee) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

4. **Subcontracts** - The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

~~DRUG AND ALCOHOL TESTING~~ Not Applicable since under 200,000 in population per 49 CFR Part 655

~~The Contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 C.F.R. part 655, produce any documentation necessary to establish its compliance with part 655, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of Colorado, or the County, to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 C.F.R. part 655 and review the testing process.~~

~~The Contractor agrees further to certify annually its compliance with parts 655 before March 1 and to submit the Management Information System (MIS) reports before March 1 to the Mesa County Regional Transportation Planning Office. To certify compliance the Contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.~~

~~The Contractor agrees further to submit for review and approval within 60 days of contract award a copy of its Policy Statement developed to implement its drug and alcohol testing program. In addition, the Contractor agrees to the County's review of the selection of the certified laboratory, substance abuse professional, or Medical Review Officer, or the use of a consortium.~~

EXHIBIT B
Grand Valley Transit-Transit Asset Management Plan

Grand Valley Transit

Asset Management Plan

Prepared for:
Mesa County
Regional Transportation Planning Office

December 2019

Updated Appendix October 2021

DN19-0631

FEHR PEERS

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Appendix

Introduction

Passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012 (and carried forward in the Fixing America's Surface Transportation Act (FAST Act) passed in 2015), established the requirement for local transit agencies to develop a Transit Asset Management Plan and manage all assets as part of an overall system. This document serves as the transit asset management (TAM) plan for Grand Valley Transit (GVT) in order to meet the requirements of the Federal Transit Authority (FTA) established as part of the MAP 21 legislation (and carried forward in the FAST Act). The Accountable Executive for the plan is the Director of the Mesa County Regional Transportation Planning Office (RTPO).

FTA Guidance

FTA published guidance in 2016 on what a TAM Plan should cover (see FTA Report No. 0098, and FTA Report No. 0092, which is intended specifically for small providers). For Tier II transit agencies, such as GVT, there are four basic requirements that the TAM Plan must comply with as outlined below and which are covered in this document:

1. An inventory of assets
2. A condition assessment of inventoried assets
3. Description of a decision support tool
4. A prioritized list of investments

FTA Guidance on TAM Plans

"Each TAM Plan should:

- Outline how people, processes, and tools come together to address asset management policy and goals
- Provide accountability and visibility for furthering understanding of leveraging asset management practices
- Support planning, budgeting, and communications to internal and external stakeholders"

The support tool is an analytical process or tool that assists in capital asset investment prioritization and/or estimates capital needs over time. TAM plans are required to be updated at least once every four years.

Grand Valley Transit

Grand Valley Transit (GVT) serves the small urbanized area of Mesa County, Colorado including the communities of Grand Junction, Fruita, and Palisade. GVT is operated under the Mesa County RTPO. The transit service is operated by a contractor with facilities and bus maintenance provided by Mesa County and the City of Grand Junction.

Asset Inventory

The transit assets maintained by Mesa County can be organized into two categories: vehicles (buses and support vehicles) and facilities and equipment. The majority of the 29 buses in the fleet are cutaway buses, including five of medium length (25 – 26 feet) and 16 large cutaways (31 – 33 feet). The remaining eight buses in the fleet are low-floor transit buses, including six of medium length (30 – 35 feet) and two large buses (40 feet). Sixteen of the 29 revenue buses are used for fixed-route service, 10 are used for paratransit service and three are contingency buses that are only used during unscheduled maintenance of regular in-service vehicles.

The facilities include office space, maintenance facilities, and transfer facilities. Table 1 provides a summary of these assets. A complete vehicle inventory can be found in Appendix A and more details about the facilities and equipment can be found in Appendix B.

Table 1 GVT Asset Inventory

Asset Type	Inventory	Detailed Documentation
Vehicles	29 Buses: • 21 Cutaway buses (25'-33') • 8 Low-floor transit bus (30'-40') 4 Other Vehicles: • 1 Sedan • 1 Pickup truck • 2 Vans	Appendix A
Facilities	• Downtown transfer facility & office space • Clifton transfer facility • West transfer facility • Maintenance facility • CNG Fuel Station (jointly operated with City of Grand Junction)	Appendix B
Shelters & Benches *(note: most not owned or maintained by GVT)*	• 160 Benches (8 owned by Mesa County) • 51 Shelters (8 owned by Mesa County)	Appendix F

Mesa County also maintains an inventory of bus stop benches and shelters. This inventory is provided in Appendix F. While these shelters and benches support GVT, most are owned and maintained by a private contractor. The contractor is responsible for all maintenance. The shelters owned by Mesa County are identified in the Property and Equipment List of the Building Maintenance Plan in Appendix B.

CNG Fueling Station

All but two of GVT's 29 actively used buses are now powered by compressed natural gas (CNG). GVT was directed in 2010 by the Grand Valley Regional Transportation Committee (GVRTC) to replace the fleet with CNG vehicles. Data shows that conversion to CNG has resulted in a fuel cost savings of over $18,000 per year. GVT shares the CNG fueling facility with the City of Grand Junction and has a maintenance plan for 20 fueling posts for GVT vehicles as well as one fast fill station. For more details on the CNG facility maintenance plan, see Appendix D.

Condition Assessment

The condition of transit vehicles, facilities, and equipment maintained by Mesa County is summarized in Table 2. It should be noted that when the three contingency buses are excluded from the total, only 3% of the regularly used bus fleet is in marginal condition, with 97% of the regularly used fleet in fair condition or better.

Table 2 GVT Asset Condition Assessment

Asset Type	Condition Assessment	Condition of Assets	Detailed Documentation
Vehicles	• Age & mileage-based analysis • Average annual maintenance cost	Buses: • Excellent -24% • Good – 35% • Fair – 31% • Marginal – 10% • Poor – 0% Non-revenue vehicles: • Fair -100%	Appendix A
Facilities & Equipment	• Age-based condition assessment; or • Routine replacement	• 99% of items on property and equipment list are in good or excellent condition • 97% of major components* are in good condition	Appendix B

** Eleven major components are assessed at each of GVT's four facilities, see Appendix B. These include the roof, shell (exterior structure, walls, etc.), interior, elevators, vehicle lift, plumbing, HVAC, fire protection, electrical, equipment (lifts, washing systems, etc.), and two parts of the site (sidewalks, parking lot, and grounds as well as signage and fencing).*

The condition of vehicles is based on the CDOT condition assessment criteria as shown in the Table 3 and detailed in Appendix E (which is based on FTA guidance). Vehicles are classified into one of five condition types: excellent, good, fair, marginal, and poor. The replacement schedule is based on the age, mileage, and average annual maintenance cost per vehicle. Detailed information on the age, condition, and anticipated replacement year of each vehicle is provided in Appendix A.

Table 3 FTA Transit Economic Requirements Model (TERM) Scale for Vehicles & Facilities

Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, and may still be under warranty if applicable.
4	Good	Good condition, but no longer new; may have some slightly defective or deteriorated component(s), but is overall functional.
3	Fair	Moderately deteriorated or defective components but has not exceeded its useful life.
2	Marginal	Defective or deteriorated component(s) in need of replacement; has exceeded useful life.
1	Poor	Critically damaged component(s) or in need of immediate repair; well past useful life.

The condition of facilities and equipment is also assessed using the FTA Transit Economic Requirements Model (TERM) scale for facilities and equipment, see Table 3, and the replacement schedule is based primarily on age. Detailed information on the age, condition, and replacement year of transit facilities and equipment owned and maintained by Mesa County or City of Grand Junction can be found in Appendix B.

Decision Support Tools

Supporting documentation of some of the decision support tools are summarized in detail in Appendices B (GVT's Building Maintenance Plan), Appendix C (GVT's Vehicle Maintenance Plan), and Appendix D, (The CNG Fueling Facility Maintenance Plan), which include policies and procedures related to preventative maintenance, unscheduled maintenance, quality control, and performance measures. It is the objective of the vehicle maintenance program to assure safe, reliable, and clean vehicles for operation in the GVT fixed-route and paratransit service. The goal of Mesa County is to have maintenance performed in the most efficient and cost effective manner possible, utilizing preventative maintenance in lieu of unscheduled maintenance, thereby minimizing the number of preventable mechanical failures which would result in a disruption of GVT fixed route and paratransit service.

Preventative Maintenance Program

GVT buses are maintained by both Mesa County Fleet Management Department and the City of Grand Junction Fleet Management Department. All preventative maintenance intervals have been established based on work-experience by fleet maintenance or by manufacturer's recommendations to optimize the life of the vehicle and its components. All intervals fall within manufacturer recommended levels.

The preventative maintenance program for vehicles, as detailed in Appendix C, identifies mileage intervals when a specific set of inspections are to take place over the life of the

vehicle. The preventative maintenance mileage intervals and inspection items are different for the cutaway buses and low-floor buses. Scheduled maintenance procedures are also identified for the fareboxes and accessibility features on the buses, including: lifts and ramps, securement devices, destination signs, security cameras, and communication equipment.

The repair and maintenance procedures for buildings and equipment are detailed in Appendix B and D. This includes following the schedule in the manufacturer's recommendations and conducting routine inspections following the schedule detailed in Appendix B and D.

Unscheduled Maintenance

Unscheduled maintenance is any work necessary due to premature failure, and items that are impractical or impossible to include on a preventative maintenance schedule. Vehicle operators complete a daily vehicle inspection (DVI) sheets during pre- and post-trip inspection. The DVI has inspection items that, when marked as unsatisfactory, requires it to be brought to the Road Supervisor's attention immediately and indicates items that place a vehicle out of service until repair is completed. When this occurs, the Road Supervisor will notify and submit the DVI to Fleet Management, who will schedule the repair as soon as possible. For a complete summary of the policies and procedures for unscheduled maintenance to ensure buses operate safely and reliably, see Appendix C.

As noted in Appendix B, Facilities staff perform regular inspections of buildings and equipment and note deficiencies to enter into the budgeting and scheduling process.

Quality Control

Quality control is accomplished through original equipment manufacturer requirements, report data, and Fleet and Facilities Management input. GVT mechanics and facilities maintenance workers follow the procedures outlined in the respective Maintenance Plans to ensure quality control during all maintenance and repair. See Appendix C for more details.

Performance Measures & Targets

Mesa County uses the following performance standards for maintenance of facilities and equipment:

- 100% of facilities (including all associated equipment with each facility) will have an average condition rating of 3.0 or higher on the FTA Transit Economic Requirements Model (TERM) scale (see Table 3). Currently, five of GVT's five facilities (100%) are meeting this standard.

Mesa County uses the performance standards detailed in Table 4 for maintenance of fleet vehicles.

Table 4 Performance Standards and Targets for GVT Fleet

Performance Measure	Target	Current Performance	
		Revenue Fleet	Non-Rev. Fleet
Percent of fleet in at least good or fair condition	65%	90% (96% excluding contingency buses)	100%
Percent of vehicles that have not yet reached their useful life benchmark (ULB)	80% - Rev. vehicles 50% - Non-revenue vehicles Vehicles will be considered for replacement after reaching their ULB	Total: 86% (97% excluding contingency buses) Paratransit: 100% Other buses: 79% (93% excluding contingency buses)	25%

Analytical Tools

The following analytical tools were used to estimate GVT capital needs over time in order to maintain assets in a state of good repair and inform investment prioritization.

- Facilities and Equipment – The replacement year for facilities and equipment is detailed by individual item in the table at the end of Appendix B. The replacement year for each item is based on their useful life was used to estimate the cost of replacing facilities and equipment over the next five years.
- Fleet Replacement – The estimated year of replacement for revenue vehicles was calculated using the useful life benchmark (ULB) established by FTA. There are two measures used to determine the ULB (as shown in Table 5): miles and years in service. The estimated year of replacement for GVT vehicles was determined based on whichever was predicted to come first (the mileage or year benchmark).

  Table 5 FTA-Defined Useful Life Benchmark for Buses

Vehicle	FTA-Defined Useful Life
35'-40' heavy duty low-floor bus	12 years or 500,000 miles
30' heavy duty low-floor bus	10 years or 350,000 miles
30' medium duty cutaway bus	7 years or 200,000 miles
25'-35' light duty cutaway bus	5 years or 150,000 miles

  Appendix A shows the ULB by years in service for each vehicle in the fleet. The estimate of when each vehicle would hit the mileage benchmark was based on historic vehicle miles traveled (VMT) by vehicle type. Currently, cutaway buses average about 45,000 miles per year and are expected to reach their ULB for mileage about two years prior to the in-service year benchmark. On the other hand, the GVT low-floor bus fleet

is averaging about 38,000 miles per year and on average is expected to reach their ULB for mileage about a year on average after the in-service year benchmark.

The estimated year of replacement of non-revenue vehicles is after eight years, based on FTA guidance for automobiles.

- Fleet Maintenance Costs – The annual cost of maintaining the fleet was also estimated, as shown in Table 6, based on historic data. Cost estimates were separated by cutaway and low-floor buses due to the differences in the vehicle types. Maintenance costs grow by year as the vehicle ages and were not estimated beyond year seven for cutaway buses or year 12 for low-floor buses, as that each respective bus type would hit its ULB. It should be noted that the cutaway buses are currently averaging about 45,000 mile per year. At that rate, most buses will hit their ULB after five years in service (not seven). Additionally, most of the GVT low-floor bus fleet are 30 – 32 feet in length, meaning they will hit their ULB after 10 years in service.

Table 6 Average Annual Maintenance Cost of GVT Fleet

Years In Service	Cutaway Bus	Low-Floor Bus
1	$5,000	$11,000
2	$12,000	$13,000
3	$20,000	$16,000
4	$27,000	$19,000
5	$34,000	$23,000
6	$42,000*	$27,000
7	$49,000*	$33,000
8	N/A	$39,000
9	N/A	$47,000*
10	N/A	$56,000*
11	N/A	$68,000*
12	N/A	$81,000*

Note: All costs in 2019 dollars
*.*These costs are projections based on the previous year's trend line. There are currently no regularly used buses in the GVT fleet of this age from which to estimate annual maintenance costs. These numbers should be updated when actual maintenance costs for GVT buses of this age become available.*

Investment Prioritization

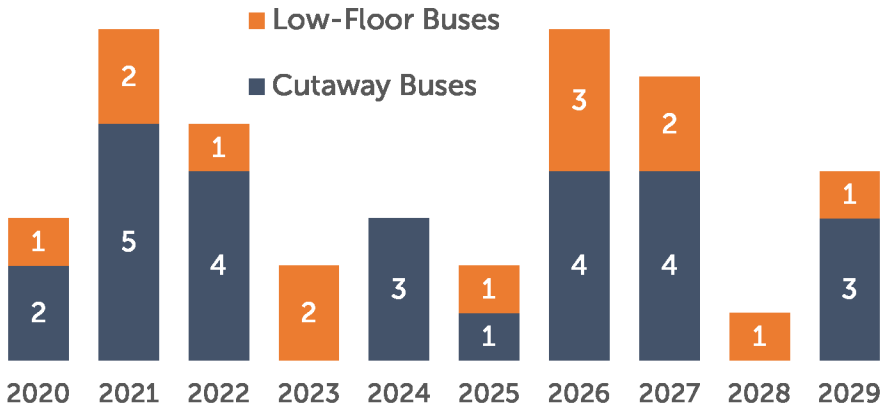
The Mesa County RTPO is responsible for prioritizing capital investment of the fleet and facilities.

Revenue Fleet Replacement

Vehicles are scheduled for replacement using a cost analysis that considers useful life of the vehicle, actual mileage, condition, and repair costs. The cost analysis considers the projected cost over the remaining expected life of the asset including maintenance, repair, rebuild, and operating cost. A discount rate based on the consumer price index is used. If a lower cost option is identified, the asset may be replaced as appropriate based on the life-cycle cost analysis.

Using the analytical tools described in the previous section, a bus fleet replacement schedule was estimated to maintain GVT revenue fleet over the next 10 years (excluding contingency buses). The replacement schedule is illustrated in Figure 1. The year of replacement is based on the estimate for when each bus in the fleet would reach its useful life benchmark (ULB). The ULB was measured for each bus in the fleet using the average vehicle miles traveled (VMT) per year as compared to the FTA benchmark or the designated ULB year (see Appendix A), whichever comes first. This chart shows that over the next three years GVT may need to replace over half the revenue bus fleet, including the entire fleet of cutaway buses. Based on the existing use, most cutaway buses in the fleet will reach their 200,000 mile ULB after about five years (and not seven). GVT is in the process of gradually replacing many if the non-paratransit cutaway buses with low-floor transit buses. Therefore the bus replacement schedule shown in Figure 1 assumes 50% of the non-paratransit cutaway bus fleet would be replaced with low-floor buses as they reach their ULB.

Figure 1 GVT Estimated Revenue Bus Fleet Replacement Schedule



Note: Assumes 50% of the non-paratransit fleet of cutaway buses would be replaced by low-floor buses as they reach their ULB.

It should be noted that the data in Figure 1 is a conservative estimate of bus replacement needs. Actual bus condition will be evaluated as described above on an individual bases. Depending on the condition, assessment of annual maintenance costs, and funding availability for replacement buses it is possible some buses could remain in active service several years beyond their scheduled replacement date based on grant funding availability.

Table 7 shows a more detailed prioritized replacement schedule and associated costs through year 2024. Prioritization is based on when the bus is expected to reach its useful life benchmark. The cost is based on replacing the cost of the existing bus type and assume a 5% increase in cost per year due to inflation and other factors. Cost also assume 50% of the non-paratransit cutaway bus fleet would be replaced with low-floor buses as they reach their ULB. At that rate, four cutaway buses would be replaced with low-floor transit buses over the next five years. The majority of buses that will need to be replaced in the next five years are cutaway buses that have an average shorter lifespan than low-floor buses. In total, the estimated cost for bus replacement to maintain the existing fleet over the next five years plus replace four cutaway buses with low-floor buses is about $5.5 million (including inflation).

Table 7 GVT Revenue Bus Fleet Replacement Cost Estimate through Year 2024

Priority	Bus #	Use	Description	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
1	81	Fixed-route	2015 Ford Entourage	$150,000	-	-	-	-
2	82	Fixed-route	2015 Ford Entourage	**$490,000**	-	-	-	-
3	83	Fixed-route	2015 Ford Entourage	$150,000	-	-	-	-
4	85	Fixed-route	2015 Ford Entourage	-	**$510,000**	-	-	-
5	80	Fixed-route	2015 Ford Entourage	-	$160,000	-	-	-
6	87	Fixed-route	2016 Ford Entourage	-	**$510,000**	-	-	-
7	86	Fixed-route	2016 Ford Entourage	-	$160,000	-	-	-
8	95	Paratransit	2017 Ford Entourage	-	$160,000	-	-	-
9	91	Paratransit	2017 Ford Entourage	-	$160,000	-	-	-
10	92	Paratransit	2017 Ford Entourage	-	$160,000	-	-	-
11	93	Paratransit	2017 Ford Entourage	-	-	$170,000	-	-
12	94	Paratransit	2017 Ford Entourage	-	-	$170,000	-	-
13	90	Paratransit	2017 Ford Entourage	-	-	$170,000	-	-
14	89	Paratransit	2017 Ford Entourage	-	-	$170,000	-	-
15	88	Fixed-route	2017 Ford Entourage	-	-	**$540,000**	-	-
16	109	Fixed-route	2012 El Dorado Axess	-	-	-	$570,000	-
17	108	Fixed-route	2012 El Dorado Axess	-	-	-	$570,000	-
18	97	Paratransit	2018 Ford Goshen	-	-	-	-	$190,000
19	96	Paratransit	2018 Ford Goshen	-	-	-	-	$190,000
20	98	Paratransit	2018 Ford Goshen	-	-	-	-	$190,000
			Total by Year	**$790,000**	**$1,820,000**	**$1,220,000**	**$1,140,000**	**$570,000**

Note: All costs assume 5% cost increase per year; excludes contingency vehicles. ***Bolded amounts represent cutaway buses that would be replaced with low-floor buses.***

Revenue Fleet Maintenance Cost

In addition to replacement cost, average annual maintenance cost for scheduled and unscheduled maintenance of the fleet over the next five years was also estimated based on historic data (see Table 6). These cost estimates are shown by year in Table 8 and assume that vehicles would be replaced as they reach their ULB following the schedule in Table 7. With these assumptions, the average annual maintenance cost of the revenue fleet (excluding contingency vehicles and accounting for inflation) is about $600,000 per year over the next five years, but varies from about $550,000 to $650,000 depending on the year and average age and makeup of the fleet.

Table 8 GVT Revenue Bus Fleet Maintenance Cost Estimate through Year 2024

Bus #	Type	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
80	Cutaway	$35,000	$5,000	$13,000	$22,000	$30,000
81	Cutaway	$5,000	$12,000	$21,000	$29,000	$38,000
82	Cutaway (to be replaced with low-floor)	$11,000	$14,000	$17,000	$21,000	$25,000
83	Cutaway	$5,000	$12,000	$21,000	$29,000	$38,000
85	Cutaway (to be replaced with low-floor)	$35,000	$11,000	$14,000	$17,000	$21,000
86	Cutaway	$35,000	$5,000	$13,000	$22,000	$30,000
87	Cutaway (to be replaced with low-floor)	$35,000	$11,000	$14,000	$17,000	$21,000
88	Cutaway (to be replaced with low-floor)	$28,000	$35,000	$12,000	$14,000	$18,000
89	Cutaway - Paratransit	$28,000	$35,000	$5,000	$13,000	$22,000
90	Cutaway - Paratransit	$28,000	$35,000	$5,000	$13,000	$22,000
91	Cutaway - Paratransit	$35,000	$5,000	$13,000	$22,000	$30,000
92	Cutaway - Paratransit	$35,000	$5,000	$13,000	$22,000	$30,000
93	Cutaway - Paratransit	$28,000	$35,000	$5,000	$13,000	$22,000
94	Cutaway - Paratransit	$28,000	$35,000	$5,000	$13,000	$22,000
95	Cutaway - Paratransit	$35,000	$5,000	$13,000	$22,000	$30,000
96	Cutaway - Paratransit	$12,000	$21,000	$29,000	$37,000	$6,000
97	Cutaway - Paratransit	$12,000	$21,000	$29,000	$37,000	$6,000
98	Cutaway - Paratransit	$12,000	$21,000	$29,000	$37,000	$6,000
108	Low-floor Bus	$40,000	$49,000	$59,000	$12,000	$14,000
109	Low-floor Bus	$40,000	$41,000	$41,000	$12,000	$14,000
110	Low-floor Bus	$28,000	$34,000	$41,000	$42,000	$43,000
111	Low-floor Bus	$28,000	$34,000	$41,000	$42,000	$43,000
112	Low-floor Bus	$16,000	$20,000	$24,000	$29,000	$36,000
113	Low-floor Bus	$19,000	$24,000	$29,000	$36,000	$43,000
114	Low-floor Bus	$19,000	$24,000	$29,000	$36,000	$43,000
115	Low-floor Bus	$11,000	$14,000	$17,000	$21,000	$25,000
	Total by Year	**$630,000**	**$550,000**	**$540,000**	**$610,000**	**$650,000**

Note: Assumes 2% annual inflation; excludes contingency vehicles.

Non-Revenue Fleet

GVT maintains a small fleet of non-revenue support vehicles. This includes a sedan, pickup truck, and two vans. Based on a useful life benchmark of 8 years for automobiles, the cost and

schedule of replacing the non-revenue fleet over the next five years was estimated as shown in Table 9. The cost of an individual vehicle is based on an estimate of market value for a new vehicle of similar make and model in 2019 dollars. Currently, non-revenue vehicles are replaced with existing used vehicles that are in better condition as they become available from other departments within Mesa County. New non-revenue vehicles are not purchased as no funding has been identified to do this.

Table 9 GVT Non-Revenue Fleet Replacement Cost Estimate through 2024

Priority	Vehicle #	Use	Description	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
1	1011	Non-Revenue	1997 Ford Van	$40,000	-	-	-	-
2	7003	Non-Revenue	1998 Ford Taurus	$30,000	-	-	-	-
3	6000	Non-Revenue	1999 Ford Ranger	$28,000	-	-	-	-
4	5025	Non-Revenue	2013 Dodge Caravan	-	$30,000	-	-	-
			Total by Year	**$98,000**	**$30,000**	**$0**	**$0**	**$0**

Note: Assumes 2% annual inflation.

Facilities & Equipment

Appendix B includes a summary table of the GVT property and equipment list, including the value of each item and its scheduled replacement year, which is based on the useful life. Based on this data a cost per year (assuming 2% annual inflation) was estimated for facilities and equipment that will need to be replaced through year 2024. These cost estimates are shown in Table 10. Details on the individual items included in this cost estimate are provided in Appendix B.

Table 10 Estimated Building and Equipment Replacement Cost through Year 2024

Year	Cost of Replacing Items
2020	$146,000
2021	$75,000
2022	$54,000
2023	$95,000
2024	$73,000
5-Year Total	**$443,000**

Note: Assumes 2% annual inflation.

Total Five-Year Replacement & Maintenance Cost Estimate

Given the estimated timeline and cost of fleet replacement, equipment and facilities replacement, as well as the average annual maintenance cost of the revenue fleet (based on the age, makeup, and replacement schedule as shown in Table 8), the total cost for replacing and maintaining all GVT assets over the next five years was estimated and is shown in Table 11. It should be noted that these costs do not include routine maintenance of facilities and equipment.

Table 11 GVT Estimated Replacement & Maintenance Cost of All Assets through Year 2024

Asset	2020 Cost	2021 Cost	2022 Cost	2023 Cost	2024 Cost
Revenue Vehicle Replacement	$790,000	$1,820,000	$1,220,000	$1,140,000	$570,000
Revenue Vehicle Maintenance	$630,000	$550,000	$540,000	$610,000	$650,000
Non-Revenue Vehicle Replacement	$98,000	$30,000	$0	$0	$0
Facilities & Equipment Replacement	$146,000	$75,000	$54,000	$95,000	$73,000
Total by Year	**$1,660,000**	**$2,480,000**	**$1,810,000**	**$1,850,000**	**$1,290,000**

Note: Assumes 5% annual inflation for revenue vehicle replacement and 2% annual inflation for all other costs; excludes equipment and facility maintenance costs.

Over the next five years the average annual cost of replacing all GVT assets that reach their ULB plus maintaining the fleet of revenue buses is about $1.8 million per year (accounting for inflation) with some variation from year to year as shown in Table 11.

Appendix A – Vehicle Inventory

Fixed Route and Paratransit Vehicles-Active

Vehicle Number	Usage	Description	Model	Condition	Fuel	Seating Capacity	Total Capacity	Value	VIN Number	Length	Federal Percentage	Grant Number	Date in Service	Replacement Year
70	Contingency/AAA	2010 Ford	Aerotech	3.3 Good	GA	14	25	$80,002	1FDFE45S19DA90595	25 feet	80%	CO-04-0025	02/11/10	2017
72	Contingency	2010 Ford	Aerotech	3.1 Good	GA	14	25	$80,002	1FDFE45S59DA90597	25 feet	80%	CO-04-0025	02/19/10	2017
81	Fixed Route	2015 Ford	Entourage	2.6 Fair	CNG	25	40	$146,305	1FDGF5GY9FEC42167	33 feet	74%	CO-03-0210	08/06/15	2022
82	Fixed Route	2015 Ford	Entourage	3.0 Good	CNG	25	40	$146,305	1FDGF5GY7FEB16406	33 feet	0%	14-HTR-67819	08/06/15	2022
83	Fixed Route	2015 Ford	Entourage	2.7 Fair	CNG	25	40	$146,305	1FDGF5GY0FEC42168	33 feet	74%	CO-03-0210	08/06/15	2022
84	Contingency	2015 Ford	Entourage	2.9 Fair	CNG	25	40	$146,305	1FDGF5GY1FEC42163	33 feet	74%	CO-03-0210	08/07/15	2022
85	Fixed Route	2015 Ford	Entourage	2.4 Fair	CNG	25	40	$146,305	1FDGF5GY9FEB16407	33 feet	0%	14-HTR-67819	08/14/15	2022
86	Fixed Route	2016 Ford	Entourage	3.0 Good	CNG	25	40	$150,000	1FDGF5GY0GEA61217	33 feet	80%	15-HTR-ZL-00201	05/28/16	2023
87	Fixed Route	2016 Ford	Entourage	2.6 Fair	CNG	25	40	$150,000	1FDGF5GY4GEA61219	33 feet	80%	15-HTR-ZL-00201	05/28/16	2023
88	Fixed Route	2017 Ford	Entourage	3.2 Good	CNG	22	37	$149,340	1FDGF5GY3GEB88589	31 feet	62%	15-HTR-ZL-00169 & 171	03/08/17	2024
89	Para Transit	2017 Ford	Entourage	3 Good	CNG	22	37	$149,140	1FDGF5GY4GEB88570	31 feet	50%	15-HTR-ZL-00200 & 202	03/13/17	2024
90	Para Transit	2017 Ford	Entourage	2.3 Fair	CNG	22	37	$149,140	1FDGF5GY3GEB64700	31 feet	0%	15-HTR-ZL-00170	03/17/17	2024
91	Para Transit	2017 Ford	Entourage	2.9 Fair	CNG	22	37	$148,940	1FDGF5GY3GEB88592	31 feet	62%	16-HTR-ZL-00046	03/22/17	2024
92	Para Transit	2017 Ford	Entourage	3 Good	CNG	22	37	$148,640	1FDGF5GYXGEB88573	31 feet	62%	16-HTR-ZL-00046	03/27/17	2024
93	Para Transit	2017 Ford	Entourage	3.2 Good	CNG	22	37	$148,540	1FDGF5GY0GEB88582	31 feet	0%	16-HTR-ZL-00059	04/04/17	2024
94	Para Transit	2017 Ford	Entourage	3 Good	CNG	22	37	$148,440	1FDGF5GY3GEB88575	31 feet	0%	16-HTR-ZL-00059	03/29/17	2024
95	Para Transit	2017 Ford	Entourage	2.4 Fair	CNG	22	37	$148,340	1FDGF5GY1GEB88574	31 feet	0%	16-HTR-ZL-00059	03/31/17	2024
96	Para Transit	2018 Ford	Goshen	2.5 Fair	CNG	12	18	$125,292.77	1FDFE4FS0JDC18537	26 feet	63%	17-HTR-ZL-00045	12/19/18	2025
97	Para Transit	2018 Ford	Goshen	3.0 Good	CNG	12	18	$125,292.77	1FDFE4FS2JDC18538	26 feet	63%	17-HTR-ZL-00045	01/18/19	2026
98	Para Transit	2018 Ford	Goshen	4 Excellent	CNG	12	18	$125,292.77	1FDFE4FS4JDC18539	26 feet	63%	CO-2017-036	01/29/19	2026
108	Fixed Route	2012 ElDorado	Axess	3.2 Good	CNG	35	56	$457,265	1N9APALG0CC084015	40 feet	80%	10-HTD-03687 & 09758	11/08/11	2023
109	Fixed Route	2012 ElDorado	Axess	3 Good	CNG	35	56	$457,265	1N9APALG2CC084016	40 feet	80%	10-HTD-03687 & 09758	11/08/11	2023
110	Fixed Route	2013 ElDorado	EZ Rider	2.8 Fair	CNG	27	42	$404,039	1N9MNALG6EC084087	32 feet	80%	CO-04-0111	01/23/14	2026
111	Fixed Route	2013 ElDorado	EZ Rider	3 Good	CNG	27	42	$404,039	1N9MNALG4EC084086	32 feet	80%	CO-04-0111	01/16/14	2026
112	Fixed Route	2018 Gillig	G31E	3 Good	CNG	26	54	$460,035	15GGE3112J3093363	30 feet	80%	17-HTR-ZL-00047	06/01/18	2028
113	Fixed Route	2018 Gillig	G31E	4.1 Excellent	CNG	26	54	$462,144	15GGE3114J3093364	30 feet	80%	17-HTR-ZL-00237	05/31/18	2028
114	Fixed Route	2018 Gillig	G31E	4 Excellent	CNG	26	54	$463,981	15GGE3116J3093365	30 feet	71%	CO-2017-036	05/31/18	2028
115	Fixed Route	2019 Gillig	G31E	4 Excellent	CNG	26	54	$490,000	15GGE3111K3093520	30 feet	80%	CO-2019-007	12/06/19	2029
116	Fixed Route	2021 Gillig	G31E		CNG	26	54	$504,365	15GGE3116M3094018	30 feet	80%	21-HTR-ZL-03291		2031
Buses on Order														
1199	Paratransit	2021 Ford	Startrans Senator II		CNG			$124,386		26	80%	21-HTR-ZL-03292		
1101	Paratransit	2021 Ford	Startrans Senator II		CNG			$124,386		26	80%			
1102	Paratransit	2021 Ford	Startrans Senator II		CNG			$124,386		26	80%			
Pending Orders														
117	Fixed Route	lowfloor												
118	Fixed Route	lowfloor												
1103	Paratransit	26' cutaway												
1104	Paratransit	26' cutaway												
1105	Paratransit	26' cutaway												

Other Equipment

N/A	Both	4 Mobile Jack Stands	N/A	Fair	N/A	N/A	N/A	$ 24,950	50" X 82"	N/A	50%	CO-90-X151	04/25/05	2010
N/A	Both	Tech 2-diagnostic scanner	N/A	Good	N/A	N/A	N/A	$2,987.50	N/A	N/A	50%	CO-90-X169	09/11/08	
N/A	Both	4 Post Lifts-333 West Ave Building I	Patriot IL 18-4-2B	Good	N/A	N/A	N/A	$ 28,900		N/A	50%	CO-90-X208	12/01/14	
6000	Utility	1999 Ford	Ranger	Fair	GA	N/A	N/A			N/A	0%	Local		
1011	Supervisor	1997 Ford	Van	Fair	GA	N/A	N/A	$ 10,331	2FMDA51U7WBA36624	N/A	0%	Local	08/24/15	
5025	Supervisor	2013 Caravan	Van	Fair	GA	N/A	N/A							

Appendix B – Building Maintenance Plan

MESA COUNTY

Building Maintenance Plan

Grand Valley Transit

Building Maintenance Plan for Grand Valley Transit Operations Facility, Grand Valley Transit Maintenance Facility, Grand Valley Transit Clifton Transfer station and Grand Valley Transit West Transfer Facility.

Updated: October 8, 2019

Grand Valley Transit Maintenance Plan

This following Building Maintenance Plan (BMP) is specified for Grand Valley Transit (GVT) and is designed to be utilized as a tool. Facilities staff and service vendors are expected to contribute to the ongoing growth and accuracy of this living document to ensure its success.

This document, along with the equipment service manuals are key instruments in maintaining conditions at GVT buildings.

FACILITIES POLICIES AND PROCEDURES

MISSION STATEMENT: ***Facilities – We provide, develop and preserve Mesa County's physical assets to promote pride in our community.***

INTRODUCTION: Facilities is dedicated to maintaining and managing the physical assets of Mesa County and to serving the public and all Departments and Divisions of Mesa County government. These policies and procedures are to inform Mesa County staff of Facilities primary objectives, the services provided and to assist the various County Departments in requesting and obtaining services. Corrective work is initiated by using the on-line work order web request system. Each department has a contact person authorized to input work requests. Detailed records are maintained within the Computerized Maintenance Management System (CMMS) for historical reference and the scheduling of all preventive and corrective maintenance performed on County real property and equipment. CMMS database is backed-up and stored for a minimum of five years.

PREVENTIVE MAINTENANCE: The major objective of Facilities mission is preventive maintenance (PM) of the County's physical assets. A major component of this work entails scheduled preventive maintenance on all building and equipment. PM work orders for inspections, repair/maintenance are internally generated on specified schedules, e.g. weekly, monthly, quarterly, annually, etc. via our Computerized Maintenance Management System. The PM management is a dynamic and on-going endeavor.

THE CORRECTIVE WORK ORDER: Departments/Divisions are responsible for designating a representative authorized to use the CMMS web request system to input work requests for their building and/or department. Work requests should be as specific as possible so Facilities clearly understands the nature of the work request. It is important that you anticipate forthcoming needs to eliminate crisis requests and provide enough lead-time for Facilities to schedule your request in the Department's work flow. Emergency work such as overflowing water, burning odors, etc. should be called in immediately using the Department's main number: 244-3230. We ask that routine work be entered into the web request system, rather than verbally requesting work when you see a maintenance technician, this way your request is **not** lost or forgotten.

Work priorities for Facilities fall into the following categories:

Priority 1:	Health, safety and welfare problems;
Priority 2:	Preventive maintenance items;
Priority 3:	Accommodations for new FTE's;
Priority 4:	Disruption of daily work, e.g. power problems;
Priority 5:	Matters that increase productivity;
Priority 6:	Matters of convenience.

In the event that a work request is found to involve more than routine work, it may be classified as a project. A project means new construction or remodeling, extensive use of subcontractors, extensive coordination among Divisions/Departments, and contractors, multi-phased work processes, specialty tools, or one that requires formal bidding for services and materials in conformance with published Mesa County Purchasing Policies. In that event, the requestor will be contacted directly by Facilities personnel to discuss the request and a mutually agreed upon course of action, schedule, etc.

Grand Valley Transit Maintenance Plan

SUMMARY OF SERVICES

SECTION	SERVICE PROVIDED
1.01	Cabling
1.02	Carpet Cleaning and Replacement
1.03	Communications
1.04	Computer Services
1.05	Construction Services
1.06	Custodial Services
1.07	Electrical Rooms and Telephone Rooms
1.08	Emergency Services
1.09	Environmental Services
1.10	Furniture
1.11	Grounds Administration
1.12	Moving Services
1.13	Painting
1.14	Parks Administration
1.15	Projects
1.16	Real Estate Leases
1.17	Repair and Maintenance
1.18	Security
1.19	Signs
1.20	Snow Removal
1.21	Surplus Property
1.22	Window Washing
1.23	Warranty Program
1.24	Computerized Maintenance Management Software
1.25	Elevators
1.26	Risk Management
1.27	Mission Critical Systems
1.28	Organization Chart

1.01 CABLING: It is the policy of Facilities to provide electrical, communication, and data cabling services in Mesa County Facilities in cooperation with the Information Technology Department. Upon receipt of a request, Facilities will coordinate with I.T, as necessary to perform minor cabling with in- house personnel in conformance with applicable building codes. If the work is extensive or cannot be performed in-house in a reasonable time, Facilities will retain a third-party contractor to perform the requested work. All electrical connections will be done by qualified, licensed contractors in conformance with applicable building codes.

1.02 CARPET CLEANING AND REPLACEMENT: It is the policy of Facilities to maintain all carpets in a clean and well-kept manner and to replace carpets past their useful life. Facilities will schedule routine carpet cleaning in all buildings, respond to specific cleaning requests and schedule annual carpet replacement on an as-needed basis. All carpet cleaning and replacement will be performed by outside third-party contractors whose services will be obtained in conformance with published Mesa County purchasing procedures. Facilities requests that all County personnel notify Facilities, via the web request system, of any tripping hazards, worn, dirty or damaged carpet areas as soon as they are detected.

1.03 COMMUNICATIONS: It is the policy of Facilities to provide support to Mesa County I.T. in providing communications services. All work order requests for these services will be coordinated with I.T. as the lead Department.

1.04 COMPUTER SERVICES: Although Facilities does not directly provide computer services, it is the policy of Facilities to provide support to I.T. as needed for maintenance of the County computer network units, and for cabling, furniture, and other services necessary to support implementation of Mesa County's Automation Plan. Any request to move computers or related equipment must be approved by I.T. and Facilities Divisions.

1.05 CONSTRUCTION SERVICES: It is the policy of Facilities to provide construction services to meet the dynamic space needs of Mesa County Divisions and Departments within the bounds of the Mesa County Strategic Facilities Plan.

All requests for new construction and remodeling will be evaluated by Facilities as to their consistency with the strategic and tactical plans; their effect on overall operating costs; Departmental operating efficiency; and enhancement of public service. Facilities will also prepare detailed construction cost and time estimates either in-house or with the assistance of outside professionals. Facilities will provide the requestor with the cost estimates, time frame and recommendations. Cost estimates will include all anticipated construction, communications, land, environmental, operating, regulatory costs, etc. It is the responsibility of the requesting Department to prepare whatever budget requests are necessary, and to present their request to the Administration and Mesa County Commissioners.

All outside contractors or material suppliers will be procured in conformance with published Mesa County bidding, contracting and purchasing procedures, and all electrical, plumbing, mechanical and structural work will be performed by qualified licensed contractors in accordance with applicable local, state and federal code regulations.

1.06 CUSTODIAL SERVICES: It is the policy of Facilities to maintain all Mesa County buildings in a clean and presentable condition by:

1) Contracting with qualified third-party, bonded contractors in conformance with published Mesa County bidding and contracting procedures;

2) Designating a Facilities contract administrator to supervise all custodial contractors and cleaning operations. Please call 244-3230 for custodial problems, or send an e-mail to fp-janitorial@mesacounty.us;

3) Performing, in conjunction with the Mesa County Sheriff's Office, a security check on all contractor personnel working in Mesa County Facilities;

1.07 ELECTRICAL ROOMS AND TELEPHONE ROOMS: It is the policy of Facilities to maintain electrical and telephone rooms in a clean and safe manner. These areas are not to be used as storage closets, any party using electrical or telephone rooms for storage will be requested to remove all articles stored in these Facilities. Fire code dictates the safe, clean and clear maintenance of electrical and telephone rooms.

1.08 EMERGENCY SERVICES: It is the policy of Facilities to respond to any emergency situation upon notification of each event. These would include, but not be limited to: Fire, water breaks, power outages, etc. Emergency service may be obtained by calling the Facilities main number (244-3230) 8:00-5:00 p.m. or Facilities on-call technician (623-3226).

1.09 ENVIRONMENTAL SERVICES: It is the policy of Facilities to conduct all work in an environmentally sound manner and to ensure, to the extent practicable, that all Mesa County subcontractors and vendors do the same. Facilities will also provide, via third-party contractors, or state and federal agencies, environmental audits and air quality surveys, or underground storage tank removal services on an as-needed basis. Facilities requires all Facilities vendors and subcontractors to provide "material safety data sheets" on all products, e.g. cleaning materials, used in Mesa County Facilities.

1.10 FURNITURE: It is the policy of Facilities to standardize Mesa County furniture systems and acquisition procedures to maximize office productivity, comfort, safety, ergonomic functionality and furniture system flexibility by:

1) Working in concert with the Mesa County Purchasing and Risk to evaluate available furniture systems and present acquisition procedures;

2) Developing work place standards as a part of the Mesa County Strategic Facilities Plan;

3) Assisting departments in analyzing their specific furniture needs;

4) Repairing broken furniture, as practical or possible;

1.11 GROUNDS ADMINISTRATION: It is the policy of Facilities to maintain all Mesa County-owned grounds in a clean, safe and aesthetically pleasing condition:

Facilities requests that all employees notify Facilities, via a work request, of any hazardous or unkempt conditions which may exist on Mesa County owned property by calling 244-3230.

1.12 MOVING SERVICES: It is the policy of Facilities to assist all Mesa County Divisions and Departments with moving physical assets such as furniture, surplus property, files, etc. in the following fashion:

1) Upon receipt of the work request, Facilities personnel will usually meet with the requesting party to determine the size, complexity and schedule for the move:
2) If the move involves a single item such as a desk, Facilities will usually handle the move internally as a part of the normal work flow;
3) If the move involves several pieces of furniture, cabling, new electrical, phone moves, etc., Facilities will coordinate the move with other affected divisions, e.g. I.T. and outside contractors;
4) Facilities will typically use a third-party moving contractor for multiple-item moves, heavy or specialty items, or if the move must be performed on a tight schedule.

1.13 PAININTG: It is the policy of Facilities to perform routine painting of all Mesa County Facilities by using both in-house personnel as time allows and qualified, licensed third-party contractors.
Painting priorities are:

1) All public areas;
2) All restrooms and other high traffic employee areas;
3) All exterior areas that are showing sufficient wear that non-painting will exacerbate deterioration;
4) All offices showing significant deterioration, vacancy, being remodeled, re-carpeted or otherwise being remodeled.

Facilities will select and use consistent colors for all areas.

1.14 PARKS ADMINISTRATION: It is the policy of Facilities and Parks to maintain active parks in a safe, clean and aesthetically pleasing manner by:

1) Contracting with a licensed, bonded landscape contractor for necessary services in

conformance with published Mesa County bidding and contracting procedures;

2) Designating a Facilities contract administrator to supervise all parks contractors and park operations. Please call 244-3230 for parks-related problems;

3) Together with the homeowners association or area park patrons, designate an area resident to monitor the park condition and report to Facilities any deficiencies or hazardous conditions;

4) Using the CMMS, provide preventive maintenance on existing pump houses, playground equipment and transfer stations in safe, usable and aesthetically pleasing condition;

1.15 PROJECTS: It is the policy of Facilities to analyze all work order requests to determine if the request may be handled as routine work or be designated as a project. Projects may be defined by one or a combination of the following tasks:

1) Any task other than routine maintenance requiring multiple-days to complete;

2) Any task requiring third-party consulting or other professional services;

3) Any task which alters the envelope of existing County Facilities;

4) Any tasks requiring the hiring of a third-party contractor, i.e. electrician, plumber, etc.

7) Any task requiring a significant dollar amount which requires formal bidding or contracting in conformance with published Mesa County purchasing procedures, or Mesa County Commissioner approval at public hearing;

8) Any task requiring significant interdepartmental or interdivisional coordination.

All work order requests for construction services will be evaluated by Facilities personnel and if the determination is made that the work order falls into the project category, a cost estimate for the work will be prepared. If the job has already been budgeted, it will be scheduled and work will be performed. If it is not budgeted and it has been determined that Facilities staff are able to schedule the project within the annual time constraints, the requesting party will be responsible for preparing, submitting and presenting the appropriate budget request.

All outside contractors or material suppliers will be procured in conformance with published Mesa County bidding; contracting and purchasing procedures and all electrical, plumbing, mechanical and structural work will be performed by qualified licensed contractors in accordance with applicable local, state and federal code regulations.

1.16 LEASES: It is the policy of Facilities to both lease property to third parties and lease property from third parties where such leases are in the best interest of Mesa County and the public. All leases will be presented to the Mesa County Commissioners and Administration for approval at public hearing. The County shall receive written concurrence from the Federal Transit Administration (FTA) prior to leasing any FTA-funded assets to others. Assets may include buildings and equipment (Appendix A).
Specifically:

1) Standard form leases approved by the Mesa County Attorney will be used by Facilities in leasing Mesa County property to third parties;

2) Leases for property, where Mesa County is the lessor, will be drafted by Facilities in conjunction with the Mesa County Attorney's office;

3) Performing all work in conformance with applicable local, state and federal codes, regulations and laws;

4) Ensuring that preventive maintenance remains the priority within the Division

1.17 REPAIR AND MAINTENANCE: It is the policy of Facilities to perform necessary preventive maintenance on all County Facilities in conformance with manufacturer's recommendations and sound preventive maintenance practices so that all equipment and Facilities may safely and efficiently reach or exceed their design life. Facilities will use automation, third-party contractors, maintenance agreements, in-house expertise, professional third-party assistance, and assistance from other governmental entities to ensure that the stated policy is met. Generally, preventive maintenance falls into two categories: mechanical equipment and building structure and finishes. The stated policy will be met specifically by:

1) Creating equipment and building records within the CMMS System for each piece of mechanical equipment, and each building system, linking items to a scheduled preventive maintenance task, and performing each task as scheduled. Records are updated as equipment changes and reviewed annually;

2) Conducting building inspections and noting building deficiencies for entry into the budgeting and scheduling processes;

3) Performing all work in conformance with applicable local, state and federal codes, regulations and laws;

4) Ensuring that preventive maintenance remains the priority within the Division, Facilities Manager reviews preventive work orders quarterly. Preventive Maintenance program is reviewed with all staff annually. New PM's are added as equipment is replaced.

5) Soliciting the assistance of all employees in finding and reporting hazards and areas of deterioration within all of our Facilities.

1.18 SECURITY: It is the policy of Facilities, in conjunction with the Mesa County Sheriff's Office (MCSO), to provide security services, to the extent practicable, within the limits of the existing Facilities, specifically, Facilities will:

1) Provide electronic access control, intercommunication devices, electronic strike, etc. in those areas where such devices will enhance security by limiting access to authorized personnel only;

2) Provide access to Mesa County employees and other facility patrons. All access systems will be provided by Facilities, via a third-party electronic controls vendor, and utilize monitoring systems to the extent required;

3) With the assistance of MCSO perform security checks on all third-party contractors and vendors performing work in areas containing sensitive materials and/or in instances where work is performed after hours or on weekends;

4) Provide area and security lighting as needed;

1.19 SIGNS: It is the policy of Facilities to provide signage services to all Mesa County Departments/Divisions. Sign types include, but are not limited to, employee office plaques, directional signage, safety signage, and specialty signage, e.g. elections. Facilities will endeavor to maintain sign uniformity to the extent practicable through the use of consistent materials, type-size and style and location. Facilities will not allow the use of sticky-backed tape or other adhesives that damage existing surfaces. Facilities will procure and hang signs upon receipt of work order request.

1.20 SNOW REMOVAL: It is the policy of Facilities to provide snow removal services at Mesa County Facilities to provide safe ingress and egress from each building for the general public and for Mesa County employees. Specifically, Facilities will:

1) Begin snow removal service at 6:30 a.m. each working day and endeavor to have all walks, ramps, stairs, entries, etc. cleared by 7:30 a.m. the same day. Snow removal for Grand Valley Transit (GVT) sites begins as early as 4:00 AM;

2) Apply snow melting compounds in amounts sufficient to ensure proper ice clearing, but with care so as to not damage concrete, vegetation, or building floor coverings. This OPERATION WILL OCCUR BOTH MORNINGS AND EVENINGS;

3) Contract with qualified third-party contractors to clear snow from parking lots. Facilities will endeavor to have parking lot snow removed before the start of the working day after the snow has accumulated;

4) Continue snow clearing operations throughout the day on especially heavy snowfalls;

Facilities encourage each employee to look for and report areas of ice/snow accumulation to Facilities as soon as it is identified.

1.21 SURPLUS PROPERTY: Facilities in conformance with policies established by the Finance Department and Purchasing Department Policies and Procedures, coordinates the storage, disposal, or sale of fixed assets. Any item of property purchased with FTA grant money over $5,000 in cost requires permission from the FTA prior to disposal. These FTA funded items must be at the end of their useful life or the County must repay the Federal Government based on the remaining value using straight line depreciation (Appendix A).

1.22 WINDOW WASHING: It is the policy of Facilities to keep all exterior windows and screens clean and operable. Facilities will:

1) Incorporate all interior windows and both interior and exterior store-front entry glass into its custodial contracts as stipulated in the specific agreements;
2) Contract with a bonded, qualified third-party vendor for all exterior window and screen cleaning not included in the custodial contract.

Facilities encourage the web request contact personnel to report non-operational windows as soon as they are identified.

1.23 WARRANTY PROGRAM: When Facilities receives the certificate of occupancy, a separate file is set up to record and store any and all warranty work performed on the equipment during the warranty period. It is Facilities goal to maximize the use of the warranty on each piece of equipment as stated by the manufacture. Facilities requests warranty repairs directly from the installer and supplier. Once the work has been completed a copy of the work order is filed in the Warranty Folder for the equipment. Warranty request are also tracked through the CMMS software

system.

1.24 COMPUTERIZED MAINTENANCE MANAGEMENT SOFTWARE (CMMS): Facilities utilizes the CMMS to manage the maintenance operations in a more effective manner. The software enables Facilities to manage work order scheduling, work order labor, Preventive Maintenance and track costs associated with each repair. Various reports are available to Facilities and Management that include but are not limited to the following; repairs for an asset, labor cost for repairs and types of repairs. The software is located on the Mesa County Intranet and backed up routinely by the Mesa County Information Technology Department.

1.25 ELEVATORS: Facilities utilizes a third party vendor to maintain, inspect and test the elevators based on the ASME CODE A17.1a. Elevators are inspected annually for state certification. Facilities has service agreements in place with two elevator companies to routinely check elevators for operation and integrity. See Appendix B

1.26 RISK MANAGEMENT

Insurance

- Administer the County's self-insurance retention and policies for workers compensation, liability, and property insurance.
- Review policies annually prior to renewal.
- Prepare Requests for Proposals every 4 or 5 years to go out for insurance bids.

Contracts

- Review contracts and Requests for Proposals (RFPs) to ensure sufficient insurance is requested in contracts then provided on Certificates of Insurance (COIs), thereby protecting the County's interests. Contact Risk Management at (970) 244-1868 if you have any questions.
- Minimum Insurance Requirements are as follows: Commercial General Liability, occurrence form, with minimum limits of $1 million combined single limit, per occurrence for bodily injury, personal injury, and property damage; Comprehensive Automobile Liability insurance with minimum limits for bodily injury and property damage of not less than $1 million combined single limit per accident. Additional insurance requirements may be specified depending on the nature and scope of the services to be provided to include: additional Commercial General Liability and Automobile Liability limits, Excess Liability/Umbrella Liability Insurance, Errors and Omissions Liability, Professional Liability, Builders Risk Insurance, and Bid Bonds and/or Performance Bonds.

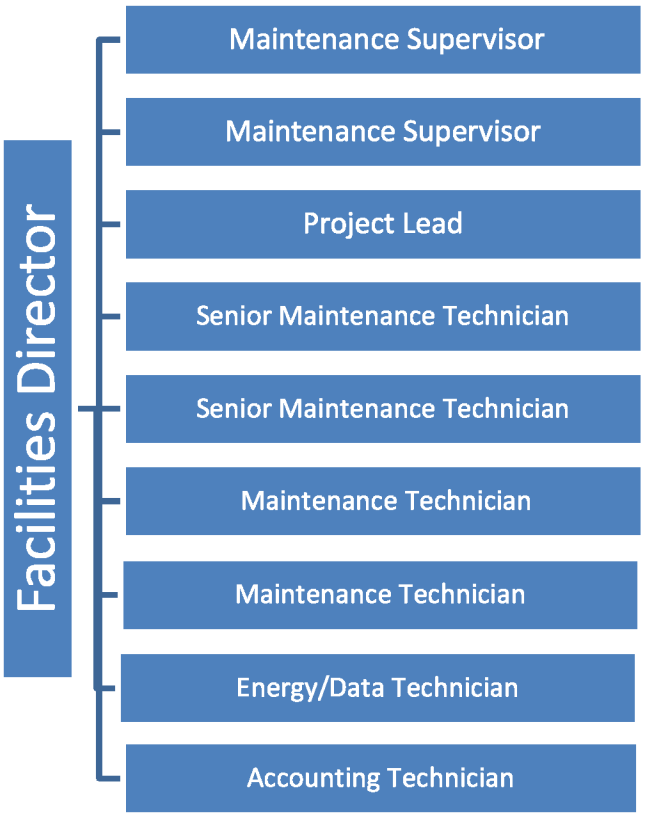
Loss Control

- Prepare and analyze data which identifies areas of County operations and exposure where we can take steps to avoid, decrease frequency, or reduce the severity of accidental losses.

1.27 MISSION CRITICAL SYSTEM: Facilities has prioritized mission critical systems based on what systems need to be in operation to provide service.

Priority 1: Electrical systems
Priority 2: Heating Ventilation and Air Conditioning
Priority 3: Communications and networking systems
Priority 4: Preventive Maintenance

1.28 ORGANIZATION CHART



Grand Valley Transit Maintenance Plan

Preventive Maintenance Schedules

RTU (Roof Top Unit)

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Replace filter	X		X		
Check drain pans, condensate piping			X	X	X
Inspect evaporator coils				X	X
Inspect damper hinges, verify all linkage moves freely			X	X	X
Check supply fan bearings			X	X	X
Check shaft for wear		X		X	X
Lubricate bearings and linkage		X		X	X
Check and adjust belts		X	X	X	X
Check gaskets around doors		X	X	X	X
Inspect control panel			X	X	X
Inspect electrical connections		X	X	X	X

Exhaust Fan

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Inspect electrical connections		X			
Inspect motor and belt		X			
Clean housing and fan, check operation		X		X	X

Circulation Pumps

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Inspect electrical connects		X		X	X
Inspect motor and coupler		X		X	X
Inspect mounting bolts and pad		X		X	X
Inspect bearings and shaft		X		X	X
Verify operation				X	X

Security Cameras

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Verify picture quality		X	X		
Verify camera angle and view		X			
Verify recording quality		X			

Clean camera lenses and covers	X		X		

Access Control

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Verify operation of all doors		X			
Verify software and current updates		X			

Boilers

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Check burner operation		X		X	X
Check gauges		X	X	X	X
Check for leaks		X	X		
Check fresh air louvers		X		X	X
Check piping into and out of boiler		X	X	X	X
Clean boiler and area around boiler		X		X	X
Verify high fire and low fire		X		X	X

VAV (Variable Air Volume)

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Inspect and clean coils		X		X	X
Inspect valve for leaks and operation		X	X	X	X
Inspect electrical connects		X		X	X
Inspect piping		X		X	X
Verify operation		X			X

Overhead Doors

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Check proper operation		X	X		
Inspect door gaskets		X	X		X

Adjust linkage, drive chain or belt		X			
Verify safety bars		X	X		

Hot Water Heater

Task	Every 3 Months	Every 6 Months	Every Return Visit	Season Cooling	Season Heating
Check burner operation		X		X	X
Check gauges		X	X	X	X
Check for leaks		X	X		
Check fresh air louvers		X		X	X
Check piping into and out of tank		X	X	X	X
Clean tank and area around tank		X		X	X
Test relief valve		X		X	X
Check water temperature		X		X	X

			RTPO/GVT Downtown 525 S. 6th Street	GVT Maintenance Facility 971 Coffman Rd	Clifton Transfer Station 3235 I-70B	GVT West 612 24 1/2 Road	
			Inspection Date 9/8/2019	Inspection Date 9/8/2019	Inspection Date 9/8/2019	Inspection Date 9/8/2019	
Component Number	**Component**	**Task**	**Rating**	**Rating**	**Rating**	**Rating**	**Inspected By**
1	Roof	Inspect rubber membrane, roof tiles, gravel, flashing, hardware and painted or coated surfaces.	Good	Good	Good	Good	Greg Linza with Facilities
2	Shell (e.g., exterior structure, walls)	Inspect downspouts, doors, and windows. Inspect walls, foundations, columns and pillars. Inspect paint, coatings, siding, concrete or masonry.	Good	Good	Good	Good	Greg Linza with Facilities
3	Interior	Inspect lighting, electrical conduit and boxes, plumbing, signage, doors and windows. Inspect walls, floors, ceiling stairs, and foundations. Inspect flooring, drywall, ceiling tiles, paint and other coatings.	Good	Good	Good	Good	Greg Linza with Facilities
4	Conveyance (e.g., elevators, escalators,	Check elevator operation. Ensure the elevator doors open and close freely. Check to ensure emergency phone works, cab lights work and buttons work.	Good Elevator inspection completed in 2015,2016,2017,2018, 2019	N/A	N/A	N/A	Greg Linza with Facilities
	Wheelchair lifts	Inspect the interior of any escalators. Look at the condition of the floors, glass and ceiling. Check the condition of the paint and look for signs of deterioration. Inspect escalators, lifts and other conveyance assets. Check equipment operation.	N/A	N/A	N/A	N/A	Greg Linza with Facilities
5	Plumbing	Inspect any pipes for damage or leaks including any drainage.	Good	Good	Good	Good	Greg Linza with Facilities
6	HVAC	Inspect coils, housing, drains, and wiring. Evaluate overall performance of the system.	Good	Good	Good	Good	Greg Linza with Facilities
7	Fire Protection	Evaluate fire alarms, and overall protection system.	Good Fire system inspection completed in October 2014, 2015, 2016, 2017 and 2018. scheduled to be inspected again in October 2019	Good Fire system inspection completed in October 2014, 2015, 2016, 2017 and 2018. scheduled to be inspected again in October 2019	N/A	Good Fire system inspected in October of 2016, 2017, 2018 and scheduled to be completed in late October 2019	Greg Linza with Facilities

			RTPO/GVT Downtown 525 S. 6th Steet	GVT Maintenance Facility 971 Coffman Rd	Clifton Transfer Station 3235 I-70B	GVT West 612 24 1/2 Road	
			Inspection Date 9/8/2019	Inspection Date 9/8/2019	Inspection Date 9/8/2019	Inspection Date 9/8/2019	
Component Number	**Component**	**Task**	**Rating**	**Rating**	**Rating**	**Rating**	**Inspected By**
8	Electrical	Inspect electrical assets including conduit, boxes, solar panels and mountings for any damage wire chaffing or loose or corroded connections. Evaluate overall performance of the system.	Good	Good	Good	Good	Greg Linza with Facilities
9	Equipment (e.g., lifts, washing systems)	Inspect major pieces of equipment permanent to the facility, such as lifts, fueling systems, and bus washing systems.	Good Replaced the camera security system in February 2019	Good New Hotsy brand power washer installed in May 2019	N/A	N/A	Greg Linza with Facilities
10	Site (e.g., sidewalks, parking lot, grounds)	Inspect paved areas outside the facility. Look for cracking or settling of the concrete or asphalt. Look for signs of drainage problems such as flooded areas, eroded soil and water damage to the asphalt and clogged storm drain inlets. Inspect the curbing and ramps for cracking, settling, holes, uneven surfaces and trip hazards. Pay special attention to the wheelchair ramp areas.	Fair Completed, parking lot crack fill, sealcoat and re-stripe in 2016. Completed parking lot crack fill in 2018. Continued concrete crack repair annually	Good	Good	Good Completed parking lot crack fill in 2018. Completed bus island re-stripping in 2019. Continued crack repair annually.	Greg Linza with Facilities
		Inspect lighting, signage, fencing and gates. Look for corrosion, structural integrity and condition of paint. Visually inspect the irrigation system, if installed. Look for signs of leaks, such as sagging areas in grass and/or pooling water. Look for dead spots in the grass which would indicate lack of water possibly caused by a mechanical failure. Inspect the passenger huts and benches for corrosion, paint condition, glass condition and damage.	Good	Good	Good	Good	Greg Linza with Facilities

RTPO/GVT Property & Equipment List
Appendix A

Title	Equipment ID	Use	Location 525 S. 6th Street	Manufacture & Model	Condition	Grant Number	Value	Funding Source	Federal Percentage	Acquistion Date	Useful Life	Replacement Year
RTPO/GVT	Building & Island	Operations & Transfer Facility	525 S. 6th Street	N/A	Good	CDOT SB-1	$ 2,793,677	NFPA	0%	2008	50	2058
RTPO/GVT	Boiler 1	Hot Water	Mechanical Room	P-K Thermific N1000-M	Good	CDOT SB-1	$ 13,000	NFPA	0%	2008	20	2028
RTPO/GVT	Boiler 2	Hot Water	Mechanical Room	P-K Thermific N1000-M	Good	CDOT SB-1	$ 13,000	NFPA	0%	2008	20	2028
RTPO/GVT	Pump CP-1	Boiler Circulation	Mechanical Room	Taco #1635	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump CP-2	Boiler Circulation	Mechanical Room	Taco #1635	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump CP-3	Heating Water	Mechanical Room	Taco #KV3009	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump CP-4	Heating Water	Mechanical Room	Taco #KV3009	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump CP-5	Snowmelt	Mechanical Room	Taco #1615	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump CP-6	Domestic Water Recirculation	Mechanical Room	Taco #009-BF5	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	Pump SP-1	Service Pit	Mechanical Room	Stancor #SE40	Good	CDOT SB-1	$ 1,200	NFPA	0%	2008	10	2018
RTPO/GVT	RTU 1	Air Handler	Roof	Trane SLHFF20	Good	CDOT SB-1	$ 52,000	NFPA	0%	2008	20-25	2030
RTPO/GVT	EUH 1	Electric Unit Heater	Mechanical Room	Trane UHXA03	Good	CDOT SB-1	$ 4,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 1	Space Reheat	Dispatch Office	Trane VCWF 08	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 2	Space Reheat	Admin	Trane VCWF 12	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 3	Space Reheat	Conf. Rm 116	Trane VCWF 06	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 4	Space Reheat	Office 118 West	Trane VCWF 06	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 5	Space Reheat	Office 118 South	Trane VCWF 10	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 6	Space Reheat	Office 118 North	Trane VCWF 10	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 7	Space Reheat	Conf. Rm 205	Trane VCWF 12	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 8	Space Reheat	Conf. Rm 209	Trane VCWF 10	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 9	Space Reheat	Office 212 South	Trane VCWF 10	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 10	Space Reheat	Office 212 West	Trane VCWF 08	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	VAV 11	Space Reheat	Office 212 North	Trane VCWF 10	Good	CDOT SB-1	$ 2,500	NFPA	0%	2008	15	2023
RTPO/GVT	Carpet	Furnishings	Throughout	N/A	Good	CDOT SB-1	$ 56,000	NFPA	0%	2008	15	2023
RTPO/GVT	Paint	Furnishings	Throughout	N/A	Good	CDOT SB-1	$ 37,000	NFPA	0%	2008	Routine	N/A
RTPO/GVT	Elevator	Elevator	Passenger Elevator	Otis Elevator	Good	CDOT SB-1	$ 75,000	NFPA	0%	2008	35	2043
RTPO/GVT	Roof	Roof	Roof	White TPO	Good	CDOT SB-1	$ 57,453	NFPA	0%	2008	25	2033
RTPO/GVT	Lighting	Electrical	Throughout	N/A	Good	CDOT SB-1	$ 44,000	NFPA	0%	2008	Routine	N/A
RTPO/GVT	Bathroom Fixtures	Plumbing	Throughout	N/A	Good	CDOT SB-1	$ 4,000	NFPA	0%	2008	Routine	N/A

RTPO/GVT	CCTV	Video Surveillance	Throughout	Hanwah, Samsung, Louroe Electronics, Trendnet, Milestone	Excellent	CDOT FASTER	$ 37,310	NFPA	0%	2019	5	2024
Title	**Equipment ID**	**Use**	**Location 971 Coffman Rd #B.**	**Manufacture & Model**	**Condition**	**Grant Number**	**Value**	**Funding Source**	**Federal Percentage**	**Acquistion Date**	**Useful Life**	**Replacement Year**
RTPO/GVT	Building	Maintenance Facility	970 Coffman Rd #B	N/A	Good	CO-96-X005	$ 1,294,126	OF	100	2010	20	2060
RTPO/GVT	Pressure Steamer	Washer	Storage Room	HydroTek HN30008E3R	Good	CO-96-X005	$ 8,000	OF	100%	2010	10	2020
RTPO/GVT	Roof	Roof	Roof	Metal	Good	CO-96-X005	$ 72,720	OF	100%	2010	30	2040
RTPO/GVT	EUH 1	Electric Unit Heater	Storage Room	TPI P3PUH07CA1	Good	CO-96-X005	$ 1,500	OF	100%	2010	15	2025
RTPO/GVT	Fan 1	Exhaust Fan	Storage Room	FanTec FR250	Good	CO-96-X005	$ 500	OF	100%	2010	10	2020
RTPO/GVT	UH 1	Gas Unit Heater	Service Bay	Trane GAND025	Good	CO-96-X005	$ 5,200	OF	100%	2010	15-20	2028
RTPO/GVT	UH 2	Gas Unit Heater	Service Bay	Trane GAND040	Good	CO-96-X005	$ 5,200	OF	100%	2010	15-20	2028
RTPO/GVT	RTU 1	Air Handler	Break Rm, Parts, Storage	Trane YSC048	Good	CO-96-X005	$ 15,000	OF	100%	2010	20-25	2030
RTPO/GVT	MAU 1	Make-up Air Unit	Service Bay	Trane DFOA218FN	Good	CO-96-X005	$ 50,000	OF	100%	2010	15-20	2028
RTPO/GVT	Bathroom Fixtures	Plumbing	Throughout	N/A	Good	CO-96-X005	$ 1,500	OF	100%	2010	Routine	N/A
RTPO/GVT	Lighting	Electrical	Throughout	N/A	Good	CO-96-X005	$ 22,000	OF	100%	2010	Routine	N/A
RTPO/GVT	Jack Stands 1	Jack Stands	Service Bay		Fair	CO-90-X151	$ 24,950	OF	50%	4/25/2005	5	2010
RTPO/GVT	Lift 1	4-Post Lift	Service Bay	Forward CR50	Good	CO-96-X005	$ 37,998	OF	80%	6/13/2012	10	2022
Title	**Equipment ID**	**Use**	**Location 549 1/2 32 Road**	**Manufacture & Model**	**Condition**	**Grant Number**	**Value**	**Funding Source**	**Federal Percentage**	**Acquistion Date**	**Useful Life**	**Replacement Year**
RTPO/GVT	Shelters-Clifton	Passenger Amenities	549 1/2 32 Road		Good	CO-03-0194	$ 17,000	OF	80%	2006	20	2026
RTPO/GVT	Kiosk	Passenger Amenities	549 1/2 32 Road		Good	CO-03-0194	$ 8,500	OF	80%	2006	20	2026
RTPO/GVT	Site Improvements	Transfer Facility	549 1/2 32 Road		Good	CO-03-0194	$ 136,500	OF	80%	2006	20	2026
RTPO/GVT	Building	Public Restroom	549 1/2 32 Road	N/A	Good	CO-90-X174	$ 39,060	UA	80%	2010	50	2060
RTPO/GVT	Roof	Roof	Roof	Metal	Good	CO-90-X174	$ 3,000	UA	80%	2010	30	2040
RTPO/GVT	HW 1	Hot Water Heater	Mechanical Room	GE GE10P06SAG	Good	CO-90-X174	$ 13,000	UA	80%	2010	12	2022
RTPO/GVT	UH 1	Electric Unit Heater	Mechanical Room	Pic A Watt King	Good	CO-90-X174	$ 500	UA	80%	2010	10	2020
RTPO/GVT	Bathroom Fixtures	Plumbing	Various	N/A	Good	CO-90-X174	$ 1,500	UA	80%	2010	Routine	N/A
Title	**Equipment ID**	**Use**	**Location 612 24 1/2 Road**	**Manufacture & Model**	**Condition**	**Grant Number**	**Value**	**Funding Source**	**Federal Percentage**	**Acquistion Date**	**Useful Life**	**Replacement Year**
RTPO/GVT	Land	Transfer Facility	612 24 1/2 Road	N//A	Improved	CO-04-0095 & CO-90-0195	$ 950,351	OF	80%	8/9/2011	N/A	N/A
RTPO/GVT	Building	Transfer Facility	612 24 1/2 Road	N/A	Good	CO-04-0109, FASTER, CO-04-0110	$ 2,337,088	OF, NFPA	52%	2015	50	2065
RTPO/GVT	Roof	Transfer Facility	612 24 1/2 Road	TPO	Good	CO-04-0109 & FASTER	$ 20,000	OF, NFPA	52%	2014	25	2039
RTPO/GVT	Fence	Transfer Facility	612 24 1/2 Road	Montage	Good	CO-04-0110	$ 23,776	OF	50%	2014	20	2034

RTPO/GVT	RTU 1	Air Handler	612 24 1/2 Road	American Standard YHC092F3RMA	Good	CO-04-0109, FASTER, CO-04-0110	$ 15,000	OF, NFPA	52%	2015	20-25	2035
RTPO/GVT	HW 1	Hot Water Heater	612 24 1/2 Road	Navien 240A	Good	CO-04-0109, FASTER, CO-04-0110	$ 13,000	OF, NFPA	52%	2015	15	2030
RTPO/GVT	Bathroom Fixtures	Plumbing	Throughout	N/A	Good	CO-04-0109, FASTER, CO-04-0110	$ 3,000	OF, NFPA	52%	2015	Routine	N/A
RTPO/GVT	Lighting	Electrical	Throughout	N/A	Good	CO-04-0109, FASTER, CO-04-0110	$ 23,000	OF, NFPA	52%	2015	Routine	N/A
RTPO/GVT	CCTV	Video Surveillance	612 24 1/2 Road	3XLOGIC	Good	N/A	$ 19,930	NFPA	0%	2015	5	2020
RTPO/GVT	Card Access	Access Control	612 24 1/2 Road	RS2 Technologies	Good	N/A	$ 9,870	NFPA	0%	2015	Routine	N/A
Title	**Equipment ID**	**Use**	**Location**	**Manufacture & Model**	**Condition**	**Grant Number**	**Value**	**Funding Source**	**Federal Percentage**	**Acquistion Date**	**Useful Life**	**Replacement Year**
RTPO/GVT	Lift	4-Post Lift	333 West Ave Service Bay	Patriot IL 18-4-2B	**Fair**	CO-90-X208	$ 28,900	UA	50%	12/1/2014	10	2024
RTPO/GVT	Electrial Switchgear	Fueling	333 West Avenue	Siemens-NEM-SB3 Switchboard	Good	CO-2017-019 & DOLA	$ 51,820	OF, NFPA, NFPE	32%	2017	10	2027
RTPO/GVT	Communication Panel & Card Reader	Fueling		Fuel Master(card reader), standard communication panel	Good		$ 12,171			2017	routine	
RTPO/GVT	Process Connections-Equipment	Parts		misc valves (see as-built drawings)	Good		$ 8,201			2017	10	2027
RTPO/GVT	Process Heating, Cooling and Drying Equipment	Fueling		NG-SV-10-3-DDP (dryer)	Good		$ 22,676			2017	15	2032
RTPO/GVT	CNG Compressors	Fueling		Ariel JGQ/2(compressor), CNG 2200-4Q-C5(skid)	Good		$ 258,875			2017	10	2027
RTPO/GVT	Auxillary Gas Equipment	Auxillary equipment and upgrade to 33' hoses		48" sphere-448IDS ASME CNG (Storage Sphere), Kraus SAM 3CGG-P62CX11SXX01DP1100 (dispenser), JN4C-4CN (coalescing filter), 3C-2D-1TF-1S-1/2" (buffer panel)	Good		$ 155,692			2017	10-20	2027-2037
RTPO/GVT	Upgrade Programmable PLC and pressure tranducer	Fueling		CEC Priority Panel, ASCO Numatics Seccies 44_ pressure transmitter, VAA B Angle Relief Valves, Kepner Check Valves, Mecer Valve Co-Spring Operated Valves, Wika Block and Bleed Valves, Explisionproof Meter Housings,	Good		$ 19,367			2017	10	2027
Non-equipment Expenses in Contract												
RTPO/GVT	General Conditions- Project Management and Engineering, Freight, Bonding	Fueling					$ 117,340			2017		
RTPO/GVT	Concrete- Site Work	Fueling					$ 41,438			2017	30	2047
RTPO/GVT	Electrical- Labor	Fueling					$ 66,655			2017		
RTPO/GVT	Earthwork	Fueling					$ 31,801			2017		
RTPO/GVT	Process Connections- Labor	Fueling					$ 56,318			2017		
RTPO/GVT	Removable Bollards	Fueling					$ 1,279			2017		

RTPO/GVT	Hardwire FuelMaster to IT Panel	Fueling					$ 826			2017		
Title	**Equipment ID**	**Use**	**Location**	**Manufacture & Model**	**Condition**	**Grant Number**	**Value**	**Funding Source**	**Federal Percentage**	**Acquistion Date**	**Useful Life**	**Replacement Year**
RTPO/GVT	Bus Pullout 1	Fixed Route	2650 North Ave	N/A	Good	CO-04-0079, CO-90-X186	$ 14,761	OF	72%	2011	30	2041
RTPO/GVT	Bus Pullout 2	Fixed Route	2825 North Ave	N/A	Good	CO-04-0079, CO-90-X186	$ 14,761	OF	72%	2011	30	2041
RTPO/GVT	Bus Pullout 3	Fixed Route	2853 North Ave	N/A	Good	CO-04-0079, CO-90-X186	$ 14,761	OF	72%	2011	30	2041
RTPO/GVT	Bus Pullout 4	Fixed Route	2870 North Ave	N/A	Good	CO-04-0079, CO-90-X186	$ 14,761	OF	72%	2011	30	2041
RTPO/GVT	Bus Pullout 5	Fixed Route	550 Patterson Road	N/A	Good	CO-04-0079, CO-90-X186	$ 15,112	OF	77%	2011	30	2041
RTPO/GVT	Bus Pullout 6	Fixed Route	2898 F Road	N/A	Good	CO-04-0079, CO-90-X186	$ 15,112	OF	77%	2011	30	2041
RTPO/GVT	Bus Pullout 7	Fixed Route	2901 F Road	N/A	Good	CO-04-0079, CO-90-X186	$ 15,112	OF	77%	2011	30	2041
RTPO/GVT	Bus Pullout 8	Fixed Route	676 Horizon Drive	N/A	Good	CO-04-0079, CO-90-X186	$ 15,112	OF	77%	2011	30	2041
RTPO/GVT	Bus Pullout 9, 10, 11	Fixed Route	12th St. & Teller Ave., GJ 2892 North Ave., GJ Hwy 6&50 & 18 Rd, Fruita	N/A	Good	FASTER	$ 333,056	NFPA	0%	2014	30	2044
RTPO/GVT	Access Road	Fixed Route	F 1/8 Rd @ 24 1/2 Rd, GJ	N/A	Good	FASTER		NFPA	0%	2014	30	2044
RTPO/GVT	Shelters 1	Passenger Amenities	Rodeo Rd, Palisade 901 23rd St, GJ City Market, Fruita	Tolar	Good	CO-37-X006	$ 47,622	OF	50%	1999	20	2019
RTPO/GVT	Shelter 2 & Equipment	Passenger Amenities	2897 North Ave, GJ 510 29 1/2 Rd, GJ 125 N. Spruce St., GJ	Tolar	Good	CO-90-X108	$ 58,476	UA	80%	1999	20	2019
RTPO/GVT	Shelters 3	Passenger Amenities	32 1/2 & D Rd, Clifton 32 Rd. & D 1/2 Rd, Clifton	Tolar	Good	CO-90-X114	$ 17,362	UA	80%	2001	20	2021
RTPO/GVT	Shelters 4	Passenger Amenities	12th St. & Orchard Ave, GJ	Tolar	Good	CO-90-X125	$ 54,382	UA	80%	2001	20	2021

Appendix B
Elevator PM's

Brake Maintenance	Maintained main hoist machine's brake and associated equipment.	
	Checked brake operation for proper operation.	
	Checked components for cleanliness, lubrication, wear and damage.	
	Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on observation.	
	ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.13.1	
	Brake Maintenance – Clean & Inspect	Cleaned brake assembly.
		Examined and lubricated the brake linkage pivot points and hardware as needed.
		Examined and adjusted the brake switch operation as needed.
		Checked operation of unit to verify proper operation before returning unit to public service.
	Brake Performance Test	Tested brake operation by a method that confirmed braking capacity as required by code noted below or as required by the local authority having jurisdiction (AHJ).
		Test may have been completed with test weights, torque measurements, or stopping compliance.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on results of test.
		Supplemental documentation was provided (if required) by the local AHJ.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.6.1& 8.6.4.6.2
	Car Door & Operator Maintenance	Completed maintenance on car door panels, car door operator and associated linkage.
		Checked components for cleanliness, lubrication, wear and damage.
		Observed equipment to determine specific adjustments, renewals, cleaning and lubrication to be completed.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.13.1
	Car Door & Operator Maintenance – Clean and Lubricate	Removed excessive dirt, dust and lubricants from door panel, vane, and linkage.
		Cleaned and lubricated car door operator, drive chain and pivot points as needed.
		Cleaned car door protection device and related cables.
		Adjusted or replaced car door gibs as needed.
	Car Door Performance Test	Tested the operation of car doors.
		Verified proper grounding with electrical meter.
		Tested and confirmed door operation to be within acceptable speed and torque levels.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on results of test.
		Supplemental documentation was provided (if required) by the local AHJ.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.13.2, Category 1 Periodic Test 8.6.5.14.3g & 8.6.4.19.8
	Cartop Maintenance – Clean – Traction Elevator	Removed excessive dirt, dust and debris from cartop and cartop equipment.
		Checked cab vents and exhaust fan plenums and cleared any obstructions.
		Removed unnecessary material from car top.
		Secured loose or missing covers.
	Cartop Maintenance – Equipment – Traction Elevator	Adjusted or renewed top-of-car switches, control devices and reader box guides (if applicable) as necessary.
		Adjusted cartop safety linkage as needed.
		Maintained and adjusted ropes and shackle hardware as needed.
		Checked emergency exit panel and top-of-car work light and outlet for proper operation.
		Replaced worn or damaged components.
		Verified proper grounding with electrical meter.
	Cartop Maintenance – Traction Elevator	Checked car top devices including sheaves, roller guides, safety linkage, control boxes, and switches for proper operation.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on observation.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.3 & 8.6.4.9 & 8.6.4.14
	Counterweight & Compensation Rope/Chain Maintenance	Maintained counterweight and rope compensation and associated equipment.
		Checked counterweight frames, guides, sheaves, and compensation ropes, chains, guides, and fastenings.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on observation.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.1

	Counterweight Maintenance	Checked counterweight frames, hardware and related equipment for damage.
		Adjusted counterweight roller guides for proper tension and rail clearance.
		Replaced worn guide components as needed.
		Lubricated counterweight safety linkage pivot points as needed.
	Emergency Communications Test	Tested In-car communication devices, including telephone, intercom, and alarm bells to ensure proper operation as required by code noted below or by the local authority having jurisdiction (AH
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on results of test.
		Supplemental documentation was provided (if required) by the local AHJ.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.15
	Hoist Rope Maintenance	Maintained hoist ropes and associated equipment.
		Checked hoist ropes, shackles, drive sheaves, and associated hardware for cleanliness and proper lubrication, adjustment, excessive wear, or damage.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on observation.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.1& 8.6.4.11 & 8.6.5.10
	Hoist Rope Maintenance – Inspect & Lubricate	Examined hoist ropes and drive sheave or sheave liners for damage or wear.
		Checked hoist ropes for wire breaks and rouge.
		Cleaned hoist rope lubricator and lubricated hoist ropes.
	HW Door Lock Safety Test	Checked every hoistway door gibs and vision panels
		Tested and confirmed door locks to verify an open lock would prevent movement as required by code noted below or as required by the local authority having jurisdiction (AHJ).
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on results of test.
		Supplemental documentation was provided (if required) by the local AHJ.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.13.1a,d,e,f,g,h,j,k
	Pit Maintenance – Clean Equipment – Traction Elevator	Cleaned traction elevator's pit floor and pit equipment of excessive dirt, dust, and debris.
		Removed dirt and dust from bottom floor hall sill, if accessible.
		Removed debris and unnecessary material from the pit.
		Informed customer of water, excessive debris, or unsafe conditions that exceed normal expectations.
	Pit Maintenance – Inspect Equipment – Traction Elevator	Checked buffer assembly for leaks.
		Examined governor sheave and switch and adjusted as needed.
		Examined the selector tape sheave and switch; adjusted as needed.
		Examined the compensation chain, rope, guide or sheaves and adjusted to provide proper clearance and tracking.
		Informed customer of water, excessive debris, or unsafe conditions that exceed normal expectations.
	Pit Maintenance – Traction Elevator	Maintained traction elevator's pit and associated equipment.
		Determined specific adjustments, renewals, cleaning, and lubrication to be completed based on observation.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.4.4, 8.6.4.7 & 8.6.4.18
	Scheduled Unit Visit	Elevator visited as scheduled by usage, calendar and/or contract calculations.
		Checked general operation of elevator.
		Checked ride quality for unusual noises/vibrations.
		Checked car door operation.
		Leveling accuracy observed at multiple landings.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.1.4.1, 8.6.4.16 & 8.6.5.7
	Scheduled Unit Visit	Elevator visited as scheduled by usage, calendar and/or contract calculations.
		Checked general operation of elevator.
		Checked ride quality for unusual noises/vibrations.
		Checked car door operation.
		Leveling accuracy observed at multiple landings.
		ASME CODE A17.1a / CSA B44a-08 reference 8.6.1.4.1, 8.6.4.16 & 8.6.5.7

Appendix C – Grand Valley Transit Maintenance Policies and Procedures

GRAND VALLEY TRANSIT

MAINTENANCE POLICIES AND PROCEDURES

PROGRAM GOAL & OBJECTIVES

It is the objective of the vehicle maintenance program to assure safe, reliable, and clean vehicles for operation in the GRAND VALLEY TRANSIT (GVT) fixed route and paratransit service. The goal of Mesa County is to have maintenance performed in the most efficient and cost effective manner possible, utilizing preventative maintenance in lieu of unscheduled maintenance, thereby minimizing the number of preventable mechanical failures which would result in a disruption of GVT fixed route and paratransit service.

FIGURE 1. FLEET CONFIGURATION

Vehicle Number	Usage	Description	Model	Fuel
70	Contingency	2010 Ford	Aerotech	GA
72	Contingency	2010 Ford	Aerotech	GA
81	Contingency	2015 Ford	Entourage	CNG
82	Contingency	2015 Ford	Entourage	CNG
83	Contingency	2015 Ford	Entourage	CNG
84	Contingency	2015 Ford	Entourage	CNG
85	Fixed Route	2015 Ford	Entourage	CNG
86	Fixed Route	2016 Ford	Entourage	CNG
87	Fixed Route	2016 Ford	Entourage	CNG
88	Fixed Route	2017 Ford	Entourage	CNG
89	Fixed Route	2017 Ford	Entourage	CNG
90	Fixed Route	2017 Ford	Entourage	CNG
91	Fixed Route	2017 Ford	Entourage	CNG
92	Paratransit	2017 Ford	Entourage	CNG
93	Paratransit	2017 Ford	Entourage	CNG
94	Paratransit	2017 Ford	Entourage	CNG
95	Paratransit	2017 Ford	Entourage	CNG
96	Paratransit	2018 Ford	Goshen	CNG
97	Paratransit	2018 Ford	Goshen	CNG
98	Paratransit	2018 Ford	Goshen	CNG
99	Paratransit	2021 Ford	Senator II	CNG
00	Paratransit	2021 Ford	Senator II	CNG
01	Paratransit	2021 Ford	Senator II	CNG
108	Fixed Route	2012 ElDorado	Axess	CNG
109	Fixed Route	2012 ElDorado	Axess	CNG
110	Fixed Route	2013 ElDorado	EZ Rider	CNG
111	Fixed Route	2013 ElDorado	EZ Rider	CNG
112	Fixed Route	2018 Gillig	G31E	CNG
113	Fixed Route	2018 Gillig	G31E	CNG
114	Fixed Route	2018 Gillig	G31E	CNG
115	Fixed Route	2018 Gillig	G31E	CNG
116	Fixed Route	2021 Gillig	G31E	CNG

PROGRAM DESCRIPTION

GVT buses are maintained by both Mesa County Fleet Management Department and the City of Grand Junction Fleet Management Department. All PM maintenance intervals have been established based on work-experience by fleet maintenance or by manufactures recommendations to optimize the life of the vehicle and its components. All intervals fall within manufacturer recommended levels. See Attachment A for service interval checklists for CNG cutaways, gasoline cutaways, and CNG lowfloor buses.

It is the policy of Mesa County and the City of Grand Junction for the Fleet Management Departments to inspect and repair all items and or components during PM maintenance, thereby minimizing unscheduled maintenance. Components are rebuilt to OEM specifications to ensure equal or better life.

A computer system provides accurate up-to-date mileage and data for each vehicle on a daily basis and triggers the preventative maintenance program in addition to tracking the GVT fleet and fuel use.

SCHEDULED MAINTENANCE FOR CUTAWAY FORD VEHICLES (2010, 2015, 2016, 2017, 2018 and 2021 MODELS)

The preventive maintenance program is performed in cycles as follows:

A INSPECTIONS

- Performed at 3,000 miles on all cutaway vehicles and includes lube, oil, filter, check all fluids, tires, and lights.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- CNG buses:
    - Replace spark plugs and run engine overhead @ 21,000 miles (every 7th A - level interval).

    - Drain, disassemble and inspect coalescing (high pressure fuel filters) every 3,000 miles. Replace if contaminated.

    - Replace fuel filter every 3,000 miles.

    - Test cooling system@ 30,000 miles and service system if SCA is over 3 units (every 10th A - level interval).

    - Annually remove PRD vent line and drain water.

    - An engine oil sample is drawn and submitted to CTC Analytical or ALS Tribology Services in Phoenix Arizona for analysis. CTC or ALS

furnishes GVT Fleet Management a document of the analysis results.

B INSPECTIONS

- Performed at 6,000 miles on the cutaway vehicles and includes lube, oil, filter, rotate tires, check brake systems and check all fluids, tires, lights and safety equipment.

- Ensure wheelchair lifts are in working order.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- CNG buses: Replace fuel filters @ 6,000 miles.

C INSPECTIONS

- Performed every 15,000 miles on the cutaway vehicles and includes lube, oil, and filter. Replace fuel system filter, replace air cleaner element and check all fluids, tires, lights and safety equipment.

- Tasks under "Fill Out Secondary Inspection Sheet" on bus checklists include:
  - 11-point inspection on wheelchair lifts
  - Brake measurements
  - Tire pressure measurements

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- CNG buses:
  - Engine fan gear box fluid change and lube fan drive line joints, unless equipped with electric fans @ 15,000 miles.

  - Fire Suppression System inspection is due every 6 months.

D INSPECTIONS

- Performed every 30,000 miles on the cutaway vehicles and includes lube, oil, filter, tire rotation, brake check and service wheelchair lift. Replace fuel system filter and repack non-drive wheel bearings and replace seals. Service transmissions, flush cooling system, and check A/C. Replace air cleaner element and check all fluids, lights, and safety equipment.

- Tasks under "Fill Out Secondary Inspection Sheet" on bus checklists include:
  - 11-point inspection on wheelchair lifts
  - Brake measurements

  - Tire pressure measurements

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- A sample of transmission fluid is drawn from the buses at the D inspection every 48,000 miles and submitted to CTC Analytical or ALS Tribology Services in Phoenix Arizona for analysis CTC or ALS furnishes GVT Fleet Management a document of the analysis results.

E INSPECTIONS

- Performed every 60,000 miles on the cutaway vehicles and includes lube, oil, and filter as well as tire rotation and brake check. Service wheelchair lift, replace fuel system filter. Repack non-drive wheel bearings; replace seals and service transmission. Flush cooling system and check A/C system. Replace air cleaner element, tune-up, spark plugs, scope and timing. Check all fluids, lights and safety equipment.

- Tasks under "Fill Out Secondary Inspection Sheet" on bus checklists include:
  - 11-point inspection on wheelchair lifts
  - Brake measurements
  - Tire pressure measurements

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

SCHEDULED MAINTENANCE FOR CNG LOWFLOOR ELDORADO AND GILLIG VEHICLES (2012, 2013, 2018, 2019 and 2021 MODELS)

The preventive maintenance program is performed in cycles as follows:

A INSPECTIONS

- Performed at 6,000 miles on all lowfloor vehicles and includes lube, oil, filter, check all fluids, tires, and lights.

- Replace spark plugs and run engine overhead @ 21,000 miles (every 7th A - level interval).

- Drain, disassemble and inspect coalescing (high pressure fuel filters) every 3,000 miles. Replace if contaminated.

- Replace fuel filter every 6,000 miles.

- Test cooling system@ 30,000 miles and service system if SCA is over 3 units (every 10th A - level interval).

- Annually remove PRD vent line and drain water.

- An engine oil sample is drawn and submitted to CTC Analytical or ALS Tribology Services in Phoenix Arizona for analysis. CTC or ALS furnishes GVT Fleet Management a document of the analysis results.

B INSPECTIONS

- Performed at 12,000 miles on the lowfloor vehicles and includes lube, oil, filter, rotate tires, check brake systems and check all fluids, tires, lights and safety equipment.

- Ensure wheelchair lifts, ramps and all related components such as kneelers and alarms are in working order.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

C INSPECTIONS

- Performed every 24,000 miles on the lowfloor vehicles and includes lube, oil, and filter. Replace fuel system filter, replace air cleaner element and check all fluids, tires, lights and safety equipment. Tire rotation and brake check, service lift, check ride height and tighten front and rear u-joints.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- CNG buses:
    - Engine fan gear box fluid change and lube fan drive line joints, unless equipped with electric fans @ 15,000 miles.

    - Service hydraulic system and filters @ 24,000 miles.

    - Fire Suppression System inspection is due every 6 months

D INSPECTIONS

- Performed every 48,000 miles on the cutaway vehicles and includes lube, oil, filter, tire rotation, brake check and service wheelchair lift. Replace fuel system filter and repack non-drive wheel bearings and replace seals. Service transmissions, flush cooling system, and check A/C. Replace air cleaner element and check all fluids, lights, and safety equipment. Adjust ride height, tightens front and rear u-bolts and sample transmission fluid.

- A sample of transmission fluid is drawn from the buses at the D inspection every 48,000 miles and is submitted to CTC Analytical or ALS Tribology Services in Phoenix Arizona for analysis. CTC or ALS furnishes GVT Fleet

Management a document of the analysis results.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

E INSPECTIONS

- Performed every 96,000 miles on the lowfloor vehicles and includes lube, oil, and filter as well as tire rotation and brake check. Service wheelchair lift, replace fuel system filter. Repack non-drive wheel bearings; replace seals and service transmission. Flush cooling system and check A/C system. Replace air cleaner element, tune-up, spark plugs, scope and timing. Check all fluids, lights and safety equipment. Check and adjust ride height, tightens front and rear u-bolts and inspect/replace brake actuators if needed and run engine overhead.

- Ensure the ITS system is in working order. Visually inspect elements of the vehicle logic unit, mobile data terminal, and ram mount.

- Three Years (36 months): CNG fuel tank certifications.

SCHEDULED MAINTENANCE ON ODYSSEY FAREBOXES

The farebox PM schedule does not coincide with other PM cycles and therefore has a separate cycle. PM 1 is service every 3 months, PM 2 is service every 6 months, and PM 3 is service every 3 years. See Attachment B for complete PM requirements for the Odyssey fareboxes.

PREVENTATIVE MAINTENANCE ON ACCESSIBILITY FEATURES

GVT monitors and maintains vehicle accessibility features for persons with disabilities to ensure they are operational for revenue service. The list below shows the accessibility features, who is responsible for ensuring working order of the features, and the action to ensure accessibility if the feature is not in working order.

- Lifts and Ramps
  - Fleet maintenance staff ensures lifts and ramps are in working order in the PM Inspections B-E.
  - Vehicle operators also ensure lifts and ramps are in working order, as listed in the Daily Vehicle Inspection Report (see Attachment C). Vehicle operators will contact dispatch immediately if any lift or ramp fails to operate in service.
  - If the lift or ramp is not in working order, the vehicle will be placed out of service for maintenance as soon as possible (see GVRTC Policies and Procedures Article XI, Section 2).
- Securement Devices
  - Vehicle operators ensure securement devices are in working order, as listed in the Daily Vehicle Inspection Report (see Attachment C).

    - If the securement devices are not in working order, the vehicle operator will obtain new straps and identify the malfunctioning straps for repair. If the securement points in the vehicle are not in working order, the vehicle will be placed out of service for maintenance.
- Destination Signs
    - Vehicle operators ensure the destination signs are in working order, as listed in the Daily Vehicle Inspection Report (see Attachment C).
    - If the destination signs are not in working order, it will be marked on the DVI and for the short term vehicle operators will call out the route at stops. Fleet maintenance will contact the manufacturer for repair or replacement parts.
- Communication Equipment
    - Public Announcement (PA) System
        - Vehicle operators ensure the PA is in working order, as listed in the Daily Vehicle Inspection Report (see Attachment C).
        - If the PA is not in working order, vehicle operators will call the stops loud enough for at least the first three rows to hear it. It will be marked on the DVI for maintenance.
    - Automatic Annunciators from the ITS for Stop Announcements
        - Fleet Maintenance ensures the ITS system is in working order in regular PM Inspections.
        - If the automatic annunciator is not in working order, it will be marked on the DVI for maintenance and vehicle operators will call the stops loud enough for at least the first three rows to hear it. If the problem is with the ITS programming, dispatch will be notified and a work order will be created for resolution with the manufacturer.

UNSCHEDULED MAINTENANCE

Unscheduled maintenance is any work necessary due to premature failure, and items that are impractical or impossible to include on a preventative maintenance schedule. These items may include public address (PA) systems, surveillance cameras, bus-mounted two-way radios, headsigns, stop annunciation system, electrical components, turn signals flashers, wiper motors, relays, valves, door motors, glass, and light bulbs. Although many of these items are checked during the PM inspections and are repaired/replaced when it is determined the useful life is nearing completion, many items have minimal indicators or none at all.

Vehicle operators complete a daily vehicle inspection (DVI) sheets during pre- and post-trip inspection. The DVI has inspection items that, when marked as unsatisfactory, requires it to be brought to the Road Supervisor's attention immediately and indicates items that place a vehicle out of service until repair is completed. When this occurs, the Road Supervisor will notify and submit the DVI to Fleet Management, who will schedule the repair as soon as possible. The vehicle will remain out of service until the repair is completed.

If the malfunctioning equipment does not meet out of service criteria, is not safety related and does not prevent the bus from performing revenue service, the malfunctioning

equipment will be identified on the DVI. Mesa County and City of Grand Junction Fleet Management conducts a daily review of DVI sheets submitted by vehicle operators, and all occurrences of mechanical failures are analyzed. Information on the malfunctioning equipment will be entered into the fleet computer system creating a deferred repair that will be conducted during the next scheduled PM cycle.

The review and analysis serves as the basis for unscheduled vehicle maintenance beyond that which is required for the actual repair of failed vehicles. The daily monitoring of individual vehicle mechanical performance can be effectively accomplished manually. The monitoring identifies deviations from expected component failure rates so adjustments can be made to inspection intervals. In most cases, timely inspections will detect the failure before they occur on the road.

PROGRAM PERFORMANCE

GVT operates eight (8) Lowfloor transit buses and eighteen (18) Body-On-Chassis vehicles in revenue service; two (3) vehicles are identified as a contingency fleet. All running repairs, minor electrical repairs, inspections, and maintenance work is performed by Mesa County and City of Grand Junction Fleet Management with the exception of body work and some technical component work. GVT uses City of Grand Junction Fleet facilities to wash vehicles twice weekly. Each night buses are fueled, fluids checked, and buses are cleaned (windows, floors, and seating) by vehicle operators.

All of the buses have wheelchair lifts or ramps to comply with the needs of the disabled that make use of mobility aids such as wheelchairs. Mesa County and City of Grand Junction Fleet Management mechanics perform the majority of the maintenance on the vehicles with the exception of body work and some overhaul work on engines and transmissions are sublet out to private sector shops which are qualified for that type of repair.

QUALITY CONTROL

Quality control is accomplished through OEM requirements, report data, and Fleet Management input. No time frames are established for work performance while a vehicle component is worked on. It is Mesa County and City of Grand Junction Fleet Management's policy that all jobs are completed in a reasonable amount of time based on problems found, and the amount of work required to complete the task that will enable the vehicle to be placed into revenue service in a safe, and reliable condition without the necessity of further repairs prior to the next scheduled maintenance. It is also Mesa County and City of Grand Junction Fleet Management's policy that the vehicle is inspected each and every time it is bought into the shop for any reason as time permits. All items in need of attention/repair are evaluated and either repaired or noted and scheduled for repair at a future date.

Mesa County and City of Grand Junction Fleet Management utilizes journeymen mechanics with extensive training both from OEM's, Transit/Vendor classes, and years of on-hands experience. All vehicle engine and transmission overhauls are sublet out to private sector shops which are qualified for type of repair. Mesa County and City of Grand

Junction Fleet Management mechanics do all AC work, electrical work, brake jobs, wheelchair and/or ramp repairs, and both scheduled and unscheduled work.

MAINTENANCE PROTECTION AND REVIEWS

The GVT Operations Supervisor and the Mesa County and City of Grand Junction Fleet Supervisors meet quarterly and as needed to discuss equipment problems, workloads, and the scheduling of major repairs. A formal operations report is filed with GVT's Management on a daily basis summarizing the past days major maintenance activities and future maintenance needs. Budget needs are addressed on an annual basis or as unanticipated needs dictate. Labor needs are analyzed on a yearly basis also.

NON-REVENUE VEHICLES

Non-Revenue vehicles operated by the Contractor but owned by Mesa County will be maintained by Mesa County and City of Grand Junction Fleet Management.

MAINTENANCE BUDGET

The Maintenance Budget consists of salaries, maintenance services, lubricants, fuels, parts, tires, maintenance operating supplies, tools, training, safety equipment/supplies and building upkeep.

2022 GVT Maintenance Budget				
Fuel	**Parts**	**Labor**	**Sublet**	**Misc**
$321,000	$331,487	$296,724	$82,300	$6,002

WARRANTY PROGRAM

It is Mesa County and City of Grand Junction Fleet Management's goal to maximize the use of the warranty on each vehicle as stated by the OEM. When Mesa County and City of Grand Junction Fleet Management receives a new vehicle, a separate file is set up to record and store all warranty work performed on the vehicle during the warranty period by Mesa County and City of Grand Junction Fleet Management.

When a repair is needed and the part is under warranty, a work order is created for diagnosing the issue and the Supervisor or Lead Mechanic completes this work order. Once the issue is diagnosed and the repair is determined to be covered by warranty, the manufacturer is contacted for their approval and process for resolution. The first possible resolution process is for the bus to go to the manufacturer's warranty outlet. Mesa County and City of Grand Junction Fleet Management makes an appointment with the outlet to have the work done, and a copy of work order is obtained and filed in the Warranty Folder for the vehicle.

The second possible resolution process is for warranty repair to be conducted by Mesa County or City of Grand Junction Fleet Management. The manufacturer will outline the acceptable billing process—either the manufacturer will identify the total billable hours allowed on this repair and send that payment directly to Fleet Management, or they instruct Fleet Management to conduct the repair and invoice the parts and labor cost to the manufacturer. Mesa County or City of Grand Junction Fleet Management files this work order in the Warranty Folder for the vehicle.

2015 and 2016 Ford CNG buses (bus unit numbers 1180-1187) have experienced engine failure within their warranty periods. Warranty claims on these buses follow the same procedure as outlined above. Diagnosis is conducted using engine oil samples.

Mesa County and City of Grand Junction Fleet Management actively pursues the use of vehicles warranties to see that they are utilized to the fullest extent possible.

ATTACHMENTS

Appendix D – City of Grand Junction CNG Fuel Station Maintenance Plan

City of Grand Junction
CNG Fuel Station
Maintenance Plan

333 West Ave
Grand Junction Colorado

Update December 2019

HIGH LEVEL OVERVIEW / INTRODUCTION

The Compressed Natural Gas (CNG) Fueling Station Maintenance Plan is a joint effort between the City of Grand Junction and Mesa County/Grand Valley Transit (GVT).

Compressed Natural Gas Station Vision

The primary impetus for the Grand Junction CNG station came from the City of Grand Junction and GVT to increase the stability of fuel cost for fleet, support local jobs in the regional CNG extraction industry, reduce dependency on fossil fuels, and lower exhaust emissions, especially particulate matter, to maintain our standing as an Air Quality Attainment Area. In addition, the CNG fueling station is part of a statewide vision to make Interstate 70 a viable corridor for natural gas vehicles from Colorado to California, helping to fill a CNG fueling gap between Denver and Central Utah. The public sector CNG fleet offers a market base to float the public station on until the private sector vehicle and fuel demand catches up.

Overall, the existing CNG fueling station combined with the proposed fueling equipment will boost capacity for both public sector fleets and encompasses the foreseeable expansion of fleet vehicles. The quantity of fueling posts matches the fueling demand at any given time for both partners: the City of Grand Junction will have 20 time fill posts for their fleet and GVT will have 20 time fill posts for their buses. The fast fill post will be dedicated to the GVT fleet but will be available to City fleet as needed.

Through fuel and post availability for the City and GVT fleet, this equipment setup eliminates public sector fleet consumption from the public fast fill station. By ensuring the public fast fill is primed for individuals when they pull up to the pump, this project will bolster a shift towards CNG in both the private and public sectors, further promoting alternative fuel use for a more livable Mesa County.

The existing equipment, as well as the public fast fill post, will be interconnected. By interconnecting the CNG fueling equipment, maintenance and operation costs will be reduced. While interconnected, this CNG fueling complex will have the option to isolate particular sections to become a stand-alone system, providing redundancy should our existing system go down. Currently, there is not another CNG station, slow or fast fill, within 50 miles that could be used as a backup system should the City system go down. The impacts of a station failure would be that trash collection would be halted until the station was fixed and put back on line. Snow removal, street sweeping, bus service, and certain public safety functions would also be impacted.

The equipment also allows the compressors to rest periodically, increasing the useful life of these compressors.

The storage vessel assembly will also capture and store more of the CNG coming from the BioCNG from Persigo Wastewater Treatment Plant methane conversion process. This allows more efficient use of CNG energy sources and has the added benefits of reduced fuel costs and greenhouse gas emissions.

CNG Fuel Agreement
As demand increases for CNG, the price for CNG fuel will decrease. Based on an agreement between GVT and the City, the long term forecast for CNG is substantially less than the Diesel Gallon Equivalent (DGE) costs. The fuel agreement between the City of Grand Junction and GVT is a $1.50 per DGE until the original Persigo infrastructure investment of $2.3 million has been reached. When the original investment is reached, the price of fuel will drop to approximately $1.15 per DGE. Based on projected fuel consumption, the original investment of the BioCNG station is estimated to be paid back in 2020.

CDOT would be able and encouraged to join the existing fuel agreement.

CNG Fleet
Both agencies have received directives from their governing boards to replace existing gasoline- and diesel-powered vehicles with CNG vehicles. The cost savings from these CNG vehicles over traditional fuel is built into the fleet replacement schedule to ensure CNG vehicles continue to be replaced with CNG vehicles. GVT's fleet of buses travel over one million miles annually, so the cost savings of CNG becomes a measurable benefit to the local population. Prior to 2014, GVT data shows that CNG transit buses have an annual fuel cost savings of over $18,000 per year compared to diesel buses. These cost savings are similar in the City CNG fleet, compounding the benefit to taxpayers.

In 2010, the Grand Valley Regional Transportation Committee (GVRTC)—which is the governing board of GVT—adopted a Policy 7.0: Alternative Fuels-Compressed Natural Gas Buses, in which all future bus purchases would be CNG.

The City of Grand Junction supports CNG fleet replacement under the following Goals from the Comprehensive Plan:
Goal 11: *Public facilities and services for our citizens will be a priority in planning for growth.*
Policy A: *The City will plan for the locations and construct new public facilities to serve the public health, safety and welfare, and to meet the needs of existing and future growth.*

Goal 12: *Being a regional provider of goods and services the City will sustain, develop and enhance a healthy, diverse economy.*
Policy A: *Through the Comprehensive Plan policies the City will improve as a regional center of commerce, culture and tourism.*

In addition, the project is in accordance with Resolution No. 112-07 supporting the efforts of GJ CORE to promote conservation and use of our resources, which, in part, states:
Local governments are in a unique position to implement and coordinate local action that will lead to significant and real reductions in energy use by influencing land use, transportation, building construction, waste management and management of City facilities and operations. Local government actions taken to conserve resources and increase energy efficiency provide multiple local benefits by decreasing pollution, creating jobs, reducing energy expenditures, enhancing urban livability and sustainability, and saving money for the City government, its businesses and its citizens.

Grand Junction now requires inclusion of hybrid or CNG vehicles as part of its procurement process, which facilitates consideration of CNG options.

Between the City of Grand Junction and GVT, the slow fill stations accommodates 71 CNG fleet vehicles. GVT currently has 27 CNG fleet vehicles. The City of Grand Junction's CNG fleet includes 13 refuse trucks, 3 sweepers, 16 pickup trucks, 2 cars, and 10 dump trucks. The City has an additional 32 vehicles it has identified as eligible for CNG.

INFRASTRUCTURE DESCRIPTION

Existing CNG Station
The City of Grand Junction Compressed Natural Gas fueling facility began operation in 2009. It is made up of three 40 horse power Ingersoll Rand 20H40NG compressors, and one ANGI station consisting of a 50 horse power Quincy compressor. The units provide compression for three storage spheres with a 200 DGE capacity that feeds 20 time fill posts used by both City of Grand Junction and Grand Valley Transit and a fast fill station that is used by both City of Grand Junction and the general public.

The Persigo Wastewater Treatment Facility began operation of their BioCNG Project in 2015. This includes a 5.8 mile pipeline that transports CNG to City Municipal Campus and stores fuel when not being pumped. The closest CNG providers in the area are over 50 miles away, so using CNG provided by the Persigo wastewater plant is a great benefit to the public partners.

Additional CNG Fueling Equipment Dedicated to Grand Valley Transit
We are increasing slow fill capacity of over fast fill due to the nature of our operations. Since GVT vehicles are primarily in operation during the daytime, the slow fill approach allows for a large number of vehicles to be filled overnight to maximum capacity. In order to increase GVT's fast fill capacity, we would need a substantial increase in CNG storage capacity. Without the proper storage capacity, along with the fact that complete fills cannot be accomplished in fast fill systems due to tank pressure limitations, drivers would have to stop and fuel more often impacting the hours of service and productivity.

Below is the equipment list for the CNG fueling equipment dedicated to GVT buses. A complete record that complies with Federal Transit Administration (FTA) is included as Addendum A to this plan.

Equipment Item	
200 HP NG300 Package	Storage Vessel Assembly
Compressor Site Connection Materials	Estimated Commissioning Service
Inlet Dryer	Estimated Freight Cost
200 HP Starter Assembly	Site Work
Site Control Panel	Conduit Bulkhead Connections
Single Hose Dispenser	HMI for each Compressor
1" Priority / Time Fill Panel	Time Fill Simulator Vessel
20 Dual Hose Time Fill Posts	

PROGRAM GOAL & OBJECTIVES

It is the objective of the City of Grand Junction Fleet Services division to provide a safe, reliable, and consistent compressed natural gas fueling operation and supply of CNG for the City of Grand Junction Fleet, Grand Valley Transit, and public access compressed natural gas vehicles.

The goal of Fleet Services is to have maintenance performed in the most efficient and cost effective manner possible, utilizing preventative and planned maintenance, thereby minimizing the number of preventable mechanical failures which would result in a disruption of our users' daily schedules.

PROGRAM DESCRIPTION

The preventive maintenance program is performed as follows by one or more of the City of Grand Junction fleet personal. All inspection intervals have been established based on work-experience by Fleet Staff or by manufacturer recommendations to optimize the life of the system and its components. All intervals fall within manufacturer recommended levels.

Service and operations manuals are located in the Fleet Supervisor's office.

It is the policy of the Fleet Service department to inspect and repair all items and or components during inspections, thereby minimizing unscheduled maintenance. Having technicians on-site who can conduct preventative maintenance to the CNG equipment greatly reduces the operating costs. A seven (7) cents per DGE will be charged to cover maintenance costs.

Components are rebuilt in house, or contracted to an authorized repair facility to OEM specifications to ensure equal or better life.

All repairs are tracked using existing tracking software. An example of this report is included as Addendum B.

CNG Fueling Station Preventative Maintenance

Daily Inspection

- Performed Monday through Friday, and weekends as determined necessary. Visual inspection of all compressors, fill hoses, valves, and storage spheres. Look, listen and smell for leaks, oil, frost, vibrations, splitting hoses and other abnormal conditions. Drain and record oil from storage spheres, pulsation tank and ESD control tank. Record compressor pressures and temperature on compressors while running. Abnormal or inconsistent pressures are an indication of compressor malfunction. Fill out daily inspection work sheet.

Weekly Inspection

- Perform daily inspection, plus check oil levels and record any amount added in ounces. Compare recorded amount drained with amount added. These

numbers should be close to equal. Report amounts over 24 ounces in a week to the Fleet supervisor, and remove that compressor from service until further inspection and verification of oil usage can be made.

Oil Change

- Compressor oil changes are conducted at 500, or 1000 hour intervals depending on the compressor manufacture recommendations and are tracked through our computerized fleet management data base

Semi Annual Inspection

- Performed every September includes rebuild of all external check valves, (5 per compressor) located at the condensates tubes, dragon valve, and the ESD supply line, Check and re torque all mounting bolts and inspect drive belts for cracks and wear.

Annual Maintenance

- Performed in March includes Semi Annual inspection items, plus replace all system inlet, and coalescing filters, steam clean all compressors and enclosures, regenerate the NGV fuel drier, Inspection and certification of all Pressure relief valves (sublet). Test emergency shutdown system and verify inlet valve closes.

Unscheduled Maintenance

- Seismic activity has been found to weaken or damage welded joints in CNG pipes, which can lead to leaks. A leak in a natural gas line can disrupt GVT and municipal services, or worse, lead to fires if the leak occurs where gas is able to build up under high pressure. The Grand Junction CNG system is equipped with a Guardit alarm system that places a call within five minutes of a fault condition to an on-call Fleet Technician who has attended manufacture system training for system inspection and trouble shooting. Fleet Technicians rotate the responsibility to be on call 24/7 to respond to any failures of the CNG station. Emergency contact information has been provided to the appropriate people.
- Unscheduled maintenance such as break downs are diagnosed by the Fleet Supervisor, Lead Technician, and Technician to determine if repairs can be made in-house or if a sublet vendor needs to be notified.
- Repairs beyond the scope of City of Grand Junction are sublet out to certified repair companies.
- It is often several days before a vendor can drive to Grand Junction to perform repairs. Therefore, when repairs require a sublet, we take the next available opportunity send staff to training in order to make these repairs in the future.

Long term

- The City of Grand Junction is currently developing life time cost analysis of the compressors systems to determine a replacement cycle in years, or hours of operation and funds will be collected through our equipment accrual process to replace ageing compressors when the cost of ownership exceeds

the value of replacement. This will be determined through a combination of life in years, hours operated, and maintenance costs including time out of service due to failures.

Additional information

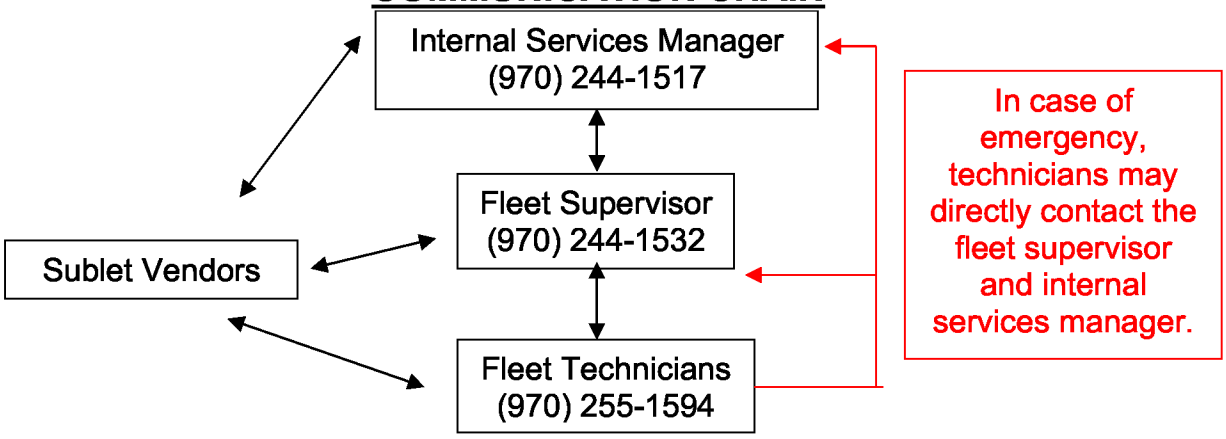
- Fleet Services stocks common use spare parts such as second and third stage valves for the compressors, system check valve, fittings, fill valves, fill nozzles, O rings and belts which enables us to make timely repairs in order to keep the station running.

MANAGEMENT MATRIX

All in house repairs are performed either by or under the supervision of the Fleet Supervisor or Crew Leader.

Position	Staff Name	Roles and Responsibilities
Internal Services Manager	Jay Valentine	• Final decision making authority for the financing of system replacement and upgrades.
Fleet Supervisor	Tim Barker	• Trained by equipment suppliers in diagnosis and repairs on all system components including priority panels, dome loads, compressor fundamentals, system isolation and bleed down. • Certified CNG installer. • Determines the protocol for repair process, sublet requests, emergency procedures and general system management.
Fleet Technicians	Walter Meders, Mel McCurley, Bruce Moyer, John Turner Joe Cain	• Trained by equipment suppliers and supervisory staff in diagnosis and repair of system faults, system isolation, fleet tank inspection, and daily inspection. • Rotate on-call responsibility to monitor Guardit alarm
Sublet Vendors	Angi Energy Systems, Trillium	• Various sublet vendors certified in compressor remanufacturing and operation.

COMMUNICATION CHAIN



ADDENDUM A
CNG FUELING STATION INVENTORY

Title	Equipment ID	Use	Location	Manufacture & Model	Condition	Grant Number	Value	Funding Source	Federal Percentage	Acquistion Date	Useful Life	Replacement Year
RTPO/GVT	Electrial Switchgear	Fueling	333 West Avenue	Siemens-NEM-SB3 Switchboard	Good	CO-2017-019 & DOLA	$ 51,820	OF, NFPA, NFPE	32%	2017	10	2027
RTPO/GVT	Communication Panel & Card Reader	Fueling		Fuel Master(card reader), standard communication panel	Good		$ 12,171			2017	routine	
RTPO/GVT	Process Connections-Equipment	Parts		misc valves (see as-built drawings)	Good		$ 8,201			2017	10	2027
RTPO/GVT	Process Heating, Cooling and Drying Equipment	Fueling		NG-SV-10-3-DDP (dryer)	Good		$ 22,676			2017	15	2032
RTPO/GVT	CNG Compressors	Fueling		Ariel JGQ/2(compressor), CNG 2200-4Q-C5(skid)	Good		$ 258,875			2017	10	2027
RTPO/GVT	Auxillary Gas Equipment	Auxillary equipment and upgrade to 33' hoses		48" sphere-448IDS ASME CNG (Storage Sphere), Kraus SAM 3CGG P62CX11SXX01DP1100 (dispenser), JN4C-4CN (coalescing filter), 3C-2D-1TF-1S-1/2" (buffer panel)	Good		$ 155,692			2017	10-20	2027-2037
RTPO/GVT	Upgrade Programmable PLC and pressure tranducer	Fueling		CEC Priority Panel, ASCO Numatics Seccies 44_ pressure transmitter, VAA B Angle Relief Valves, Kepner Check Valves, Mecer Valve Co- Spring Operated Valves, Wika Block and Bleed Valves, Explisionproof Meter Housings,	Good		$ 19,367			2017	10	2027
Non-equipment Expenses in Contract												
RTPO/GVT	General Conditions-Project Management and Engineering, Freight, Bonding	Fueling					$ 117,340			2017		
RTPO/GVT	Concrete- Site Work	Fueling					$ 41,438			2017	30	2047
RTPO/GVT	Electrical- Labor	Fueling					$ 66,655			2017		
RTPO/GVT	Earthwork	Fueling					$ 31,801			2017		
RTPO/GVT	Process Connections-Labor	Fueling					$ 56,318			2017		
RTPO/GVT	Removable Bollards	Fueling					$ 1,279			2017		
RTPO/GVT	Hardwire FuelMaster to IT Panel	Fueling					$ 826			2017		

ADDENDUM B
EXAMPLE OF CNG PREVENTATIVE MAINTENACE TRACKING

PM DUE	10474	1-18 THROUGH 1-22 Mel Mccurley							
DATE	METER	Compressor A (SER.# 1012105)	INLET	CRANKCASE	1ST STAGE	2ND STAGE	3RD STAGE	DISCHARGE	Running Hrs.
18-Jan		Monday	out	out	out	out	out	out	-9983
19-Jan		Tuesday	out	out	out	out	out	out	0
20-Jan		Wednesday	out	out	out	out	out	out	0
21-Jan		Thursday	out	out	out	out	out	out	0
22-Jan		Friday	out	out	out	out	out	out	0
PM Due	6123	Compressor B (SER.# 1012115)							-9983
18-Jan	5877	Monday	13	14	100	400	1300	2600	13
19-Jan	5889	Tuesday	14	15	100	400	1300	2400	12
20-Jan	5898	Wednesday	13	14	100	400	1300	2600	9
21-Jan	5904	Thursday	15	16	100	400	1300	2400	6
22-Jan	5905	Friday	13	15	100	400	1200	2800	1
		CHECK OFF	MON	TUES	WED	THURS	FRI		41
		DRAIN VENT GAS RECOVERY TANK	MM	MM	MM	MM	MM		
		DRAIN CNG COALESCING FILTER	MM	MM	MM	MM	MM		
		DRAIN PULSATION TANK	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR OIL & FROST ON LINES	MM	MM	MM	MM	MM		
		LISTEN FOR UNUSUAL NOISES/VIBRATIONS	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR ANY OTHER LEAKS	MM	MM	MM	MM	MM		
		LISTEN AND SMELL FOR GAS LEAKS	MM	MM	MM	MM	MM	oil captured	
OIL A		RECORD AMOUNT OF OIL ADDED COMP A	x	x	x	x	x	x	
OIL B		RECORD AMOUNT OF OIL ADDED COMP B			8 oz			6 oz	
PM DUE	3931	Compressor C (SER# 1012190)	INLET	CRANKCASE	1ST STAGE	2ND STAGE	3RD STAGE	DISCHARGE	
18-Jan	3828	Monday	12	12	90	400	1400	2600	29
19-Jan	3843	Tuesday	12	12	90	400	1300	2400	15
20-Jan	3849	Wednesday	12	12	90	400	1300	2600	6
21-Jan	3859	Thursday	12	12	90	400	1300	2400	10
22-Jan	3883	Friday	12	12	90	400	1200	2800	24
									84
		CHECK OFF	MON	TUES	WED	THURS	FRI		
		DRAIN VENT GAS RECOVERY TANK	MM	MM	MM	MM	MM		
		DRAIN STORAGE SPHERES (BRT's)	MM	MM	MM	MM	MM		
		DRAIN PULSATION TANK	MM	MM	MM	MM	MM		
		DRAIN ESD TANK	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR OIL & FROST ON LINES	MM	MM	MM	MM	MM		
		LISTEN FOR UNUSUAL NOISES/VIBRATIONS	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR ANY OTHER LEAKS	MM	MM	MM	MM	MM		
		LISTEN AND SMELL FOR GAS LEAKS	MM	MM	MM	MM	MM		
OIL		RECORD AMOUNT OF OIL ADDED COMP C			6 oz			10 oz	
		CHECK OFF	MON	TUES	WED	THURS	FRI		
		Site Walk, INCLUDES Fast Fill system	MM	MM	MM	MM	MM		
		visually inspect hoses and nozzles	MM	MM	MM	MM	MM		
		Check for leaks, cracks, hose wear, frost	MM	MM	MM	MM	MM		
PM DUE	1229	Compressor D (SER 01272)	INLET	CRANKCASE	1ST STAGE	2ND STAGE	3RD STAGE	DISCHARGE	
18-Jan	1251	Monday	10	10	90	280	1000	3000	12
19-Jan	1254	Tuesday	10	10	90	280	1000	3100	3
20-Jan	1261	Wednesday	10	10	90	280	1000	3100	7
21-Jan	1267	Thursday	10	10	90	280	1000	4100	6
22-Jan	1267	Friday	Out	Out	Out	Out	Out	Out	0
		CYLINDER TEMPERATURE	IST	2ND	3RD	4TH	Amb. Temp	run time	28
18-Jan	MON		246	262	214	167	33	15 min	
19-Jan	TUES		237	254	204	168	34	10 min	
20-Jan	WED		237	255	204	167	31	14 min	
21-Jan	THURS		231	255	211	195	30	30 min	
22-Jan	FRI								
		CHECK OFF	MON	TUES	WED	THURS	FRI		
		DRAIN VENT GAS RECOVERY TANK	MM	MM	MM	MM	MM		
		DRAIN STORAGE SPHERES (BRT's)	MM	MM	MM	MM	MM		
		DRAIN PULSATION TANK	MM	MM	MM	MM	MM		
		DRAIN ESD TANK	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR OIL & FROST ON LINES	MM	MM	MM	MM	MM		
		LISTEN FOR UNUSUAL NOISES/VIBRATIONS	MM	MM	MM	MM	MM		
		VISUALLY LOOK FOR ANY OTHER LEAKS	MM	MM	MM	MM	MM		
		LISTEN AND SMELL FOR GAS LEAKS	MM	MM	MM	MM	MM		
OIL OUT		RECORD AMOUNT OF OIL DRAINED COMP D			2	4			
OIL ADD		RECORD AMOUNT OF OIL ADDED COMP D	12 oz			6 oz			
	19-Jan	Comp B fault, Rebuild ck vlve at Tnk							
	20-Jan	Replace fill vlve # 12 SFP							
	20-Jan	Lock out #18 SFP, ordered fill valves ETA 2-1-16							
	22-Jan	Pull comp A to replace crank seal							
	22-Jan	Lock out comp D PRV failure again							

Appendix E – Transit Vehicle and Facility Condition Assessment Guidance

September 2014

Transit Vehicle and Facility Condition Assessment Guidance

Prepared for:
Colorado Department of Transportation
Division of Transit and Rail

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Table of Contents

1. Introduction

Purpose of the Document

The Colorado Department of Transportation (CDOT) has developed the State Transit Capital Inventory (STCI) to improve the forecasting of needs for transit capital rehabilitation and replacement funding throughout the State of Colorado, and to program available funding to meet the highest priority needs. As part of the STCI reporting, CDOT is giving transit agencies the option of conducting a condition assessment on vehicles and facilities, and reporting that with other inventory data. While not required, condition assessment reporting is recommended; it will provide CDOT with additional data for their use in determining the best use of limited funds available for transit capital improvements.

This document was developed to support Colorado transit agencies in conducting vehicle and facility condition assessments for the purpose of reporting them in the STCI. It provides instructions for how to conduct an assessment, and the rating scale to apply. This document provides all of the detail needed for transit agencies embarking on the process of conducting condition assessments.

The condition inspection and assessment process described in this document is designed to determine the overall condition of the vehicle or facility at a particular time for the purpose of evaluating capital investment needs. The assessment is intended to supplement but not replace other preventive maintenance and safety inspections. Thus, the components emphasized in the assessment are included with this objective in mind and may differ from those addressed through other inspections.

Document Organization

The document includes the following sections:

- **Section 2: Vehicle Condition Assessment.** This section describes the approach to conducting vehicle assessments, and the rating scale to apply to vehicle components.
- **Section 3: Facility Condition Assessment.** This section describes the approach to conducting facility assessments, and the rating scale to apply to facility components.
- **Section 4: Assessment Forms.** This section includes the assessment forms to support the processes of conducting the assessments.

For agencies focusing only on the assessment of vehicles (Section 2) or facilities (Section 3), the relevant section provides process instructions as well as the rating scale and guidance. Section 4 provides the forms that can support the condition assessments. They are designed as stand-alone documents to have during the assessment process.

2. Vehicle Condition Assessment

Overview

The purpose of the vehicle condition assessment is to provide an overall snapshot of the current state of repair of a vehicle to aid in decisions concerning when it is most cost effective to replace it. This section describes how to assess the condition of a vehicle based on inspection of a standard set of vehicle components (e.g., engine, transmission, lift ramp, etc.). Inspection standards are the primary source for component scoring. Notes made during the inspection should be used as secondary scoring justification. Optionally one may record additional information as part of the inspection process if desired, such as notes on recommended improvements to the asset/component or associated maintenance.

Table 1 shows the general condition assessment rating scale used for inspecting each vehicle component. Subsequent tables detail how this general scale should be applied by component. Upon completion of the vehicle inspection, the vehicle is given an overall rating. This overall rating should be determined by calculating the median condition rating. To calculate this value one should tabulate the number of components inspected at each condition rating, and use as the overall rating the lowest rating achieved by at least half of the components that were inspected.

Table 1. General Condition Assessment Rating Scale

Rating	Condition	Description
5	Excellent	No visible defects, near new condition
4	Good	Some (slightly) defective or deteriorated component(s)
3	Adequate	Moderately defective or deteriorated component(s)
2	Marginal	Defective or deteriorated component(s) in need of replacement
1	Poor	Critically damaged component(s) or in need of immediate repair

NOTE: the condition assessment approach, including the language and photos, is substantially based on the approach originally defined by the Denver Regional Transit District (RTD). CDOT greatly appreciates RTD's assistance.

Conducting the Vehicle Condition Assessment

The vehicle condition assessment procedures are designed for the assessment of buses, and are based directly on those developed by Denver RTD. However, the procedures can be readily applied to other vehicles, such as minivans.

Each bus in your fleet should be inspected, per the components and tasks listed in Table 2. Each of ten components of the vehicle is evaluated and scored independently during inspection using the rating scale shown in Table 1. An inspection template is included in Section 4 of this document for recording the component ratings.

During the inspection, note any defects that may constitute a safety concern or potential service delay. These types of defects require immediate attention and should be reported for repair. Completion of the inspection should be done after the necessary actions of reporting have been taken. Defects found should be recorded and used in your initial assessment.

Table 2 describes each of the components and the tasks associated with conducting the assessment.

Table 2. Vehicle Condition Assessment Components and Tasks

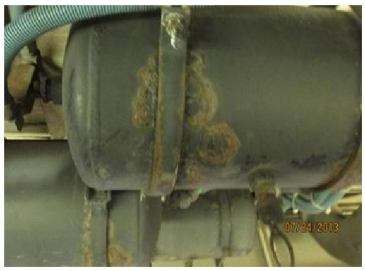
Component Number	Component Name	Task
1	Brake/Wheel/Hub/Air-System	Check condition and security of all components related to the brakes, hubs, and air-systems. Inspect each brake shoe, drum, spring, s-cam tube and slack adjuster, Clevis & pin, pushrod and brake chamber looking at the overall condition of the brake system. Check for indication of other system problems. Inspect for fatigue cracks or other major defects. Inspect all special asset specific components related to these systems in the rating as required.
2	Chassis/Body	Inspect all components for cracks, major rust, security of mounting, and bushing wear including all rods and linkages. (Pay close attention to floor from underside.)

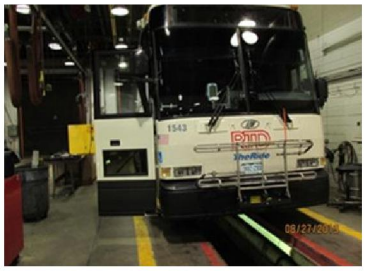
Component Number	Component Name	Task
3	Cooling System	Check of evidence of fluid leakage and inspect all hoses and hard lines. Check condition and security of the radiator, fun, fan drive and mounts. If installed, inspect the auxiliary engine heater system.
4	Electrical	Visually inspect all harnesses and connections that are easily accessed for condition and security. Special attention should be given at areas showing wear or damage to protective covering. A quick systems test of lights and other systems should verify the basic condition of the electrical system. Open the circuit breaker/relay cabinet and visually inspect the area looking for problem areas or water intrusion. Note: The electrical system is designed to last the useful life of the vehicle and with rare exception these systems should meet that goal.
5	Engine	Inspect the engine looking for oil leaks, and loose or damaged accessories. Insure that the starter is tight and that there is no evidence of metal flake or dust on the outside of the bell-housing. *Note: Oil sample results can be used optionally to decrease (but not increase) the rating of engine life. Higher than average readings are cause to decrease the score.*

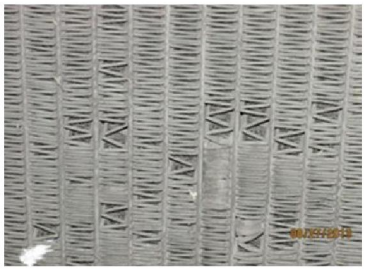
Component Number	Component Name	Task
6	Transmission	Inspect the transmission looking for wear, leaks, or cracks. *Note: Oil sample results can be used optionally to decrease (but not increase) the rating of transmission life. Higher than average readings are cause to decrease the score.*
7	HVAC	The baseline condition for the HVAC system is determined by the total life miles of the vehicle and adjusted up or down from there.
8	Interior and Structure	A complete interior inspection including the floors, seats, seat frame wall panels, overhead cornice panels and ceiling should be inspected. Inspect lights, stanchions, windscreens, operator's areas for loose, damage components and evidence of deterioration.
9	Lift Ramp	Operate the ramp or lift. Inspect the lift/ramp for overall condition. Open and inspect the lift operator if applicable. Pay close attention to the hinges as hinge failure is the most common wear.
10	Steering/Axle/Suspension	Check all mounts for cracks, major rust, security of mounting, and bushing wear including all rods and linkages.

Component Condition Rating Descriptions

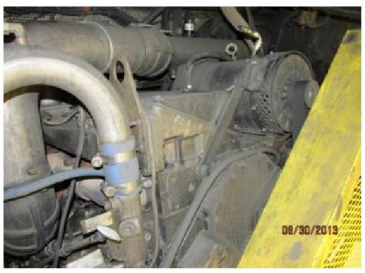
This section provides description of conditions corresponding to each condition rating for each component. Use these ratings and descriptions as a guide to assign a score to the individual components for each of the vehicles as you rate them. The form included in Section 4 can be used to record the component scores, and to note comments.

Component Number 1: Brakes / Wheels / Hubs / Air-Systems		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Shows minimal signs of wear, no major problems, some minor defects are ok. Minimal rust on air tanks, brake lines in almost new condition, no oil on exhaust valves, brake canisters and actuators fully functional.
	3 Adequate	Showing signs of normal use, nothing broken or in need of repair. Air system showing signs of oil on air valves, hoses showing weather cracking on outer surface only, wheels undamaged, hubs are not leaking lubricant, air compressor on engine not leaking or showing signs of excessive wear, brake canisters and actuators fully functional.
	2 Marginal	Components needing to be replaced. Excessive amounts of oil at exhaust ports on air valves, hoses need replaced, air tanks showing flaking rust. Brake canisters and actuators showing signs of excessive wear i.e. loose clevis pins, gaps in or loose bushings. Presence of audible air leaks. Multiple repairs needed to bring system to a state of good repair.
	1 Poor	Multiple components in need of repair. Brake lines and compressor leaking fluids. Air tanks need replacement and in addition brake pads worn to the wear line. One or more items are a possible safety concern.

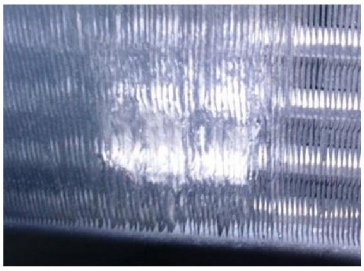
Component Number 2: Chassis / Body		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	No signs of rust, body panels in good shape. Under coating holding fast, no signs of physical damage. No water entering the body areas.
	3 Adequate	Signs of minimal rust on small framework of chassis and undercoating lifting. Surface rust of large frame members is okay but no swelling. Minor body damage and signs of rust. Body panels showing movement between frame and body panel.
	2 Marginal	Thicker flaking rust on small frame members. Large members having rust that does not affect the load integrity. Metal swelling in body panels. Multiple areas of minor body damage or one large area having damage.
	1 Poor	Heavy frame members having significant rust which can affect load integrity. Smaller frame members failing and multiple rust holes. Multiple rust holes in the body and major structural damage. Accumulation of damage in multiple areas giving bus a poor appearance.

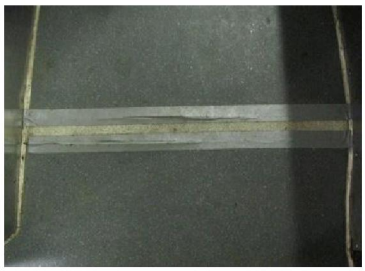
Component Number 3: Cooling System		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Cooling system is in good working order. Radiator and CAC (charge air cooler) have no signs of corrosion, fins are in good shape and are all intact. All components showing no signs of fluid seepage.
	3 Adequate	Cooling system is functioning as designed but some small defects are noticeable. Radiator and CAC have minimal damage and corrosion. Some components showing seepage trails but are not wet. Site glass on reservoir leaking fluid.
	2 Marginal	Cooling fins showing separation from tubes, corrosion forming all around lower tubes at lower flanges and possible coolant leaks. Showing signs of performance loss due to damage of components. Leaking hoses have minimal effect on the overall score. Small chips out of fan blade not larger than a quarter.
	1 Poor	Excessive damage to fins and/or fins missing from tubes. Fluids actively leaking from cooling system. Fan loose and large chunks from blades missing causing an unstable condition.

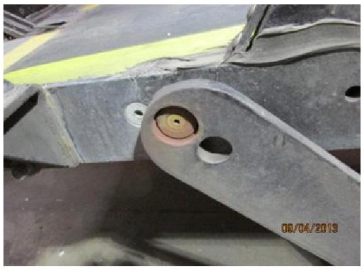
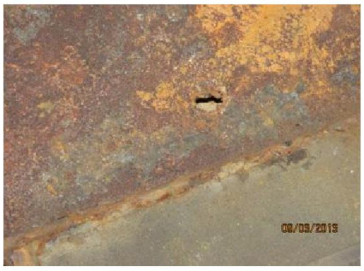
Component Number 4: Electrical		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Wire harnesses are in good working order, may show signs of wear but no damage or corrosion. Batteries and charging system may be dirty but having no fluid seepage. Electrical compartments clean, orderly and sealed.
	3 Adequate	Batteries and charging system no longer in their ideal condition, signs of fluid seepage are present. Wire harnesses are fading and may show some indications of rubbing but still intact. Small amount of corrosion on connections. Compartment seals showing minimal loss of integrity.
	2 Marginal	Batteries and charging system leaking fluid with heavier corrosion that require the replacement of multiple parts. Wire harnesses cracking with insulation separation. Compartment seals have failed with multiple signs of corrosion. Discoloration at connections.
	1 Poor	Batteries and charging system no longer mounted securely causing safety concerns. Multiple wire harnesses in need of replacement. Standing water in electrical compartments or holes to the outside of the vehicle.

Component Number 5: Engine		
	5 Excellent	Bus is new and all components are new (typically less than eight months old). First oil sample after install should be ignored due to break in.
	4 Good	Some signs of wear, but engine needs no notable repairs.
	3 Adequate	Evidence of oil seepage, small items need repairs, oil collection on blow by tube.
	2 Marginal	Significant or multiple repairs are needed that do not involve rebuilding the engine, including cracked exhaust manifold, turbo leaking or blowing oil, coolant leaks on the engine, or loose components. More than one oil sample in a row that is reportable for wear metals (not silica).
	1 Poor	Major repairs needed that involve removing from vehicle, such as fluid leaks coming from main gaskets that is causing puddles on the ground. At least 2 consecutive oil samples showing high levels of wear metals, one critical with at least one reportable or critical before.

Component Number 6: Transmission		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Some signs of wear, but transmission needs no notable repairs.
	3 Adequate	Evidence of oil seepage, small items need repairs, fittings need tightened, or electrical connecters are cracked.
	2 Marginal	Significant or multiple repairs are needed that do not involve rebuilding the transmission; including damaged hoses, leaking accumulator or cooler. More than one oil sample in a row that is reportable for wear metals.
	1 Poor	Major repairs needed that involve removing from vehicle, such as fluid leaks coming from main gaskets that is causing puddles on the ground. At least 2 consecutive oil samples showing high levels of wear metals, one critical with at least one reportable or critical before.

Component Number 7: HVAC		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	No visual signs of damage to compressor, evaporator and condenser. Hoses are intact and not leaking any fluids. Fan motors and fans are showing no signs of rust or damage.
	3 Adequate	A small percentage of condenser and evaporator fins damaged. Minor seepage of compressor oil from gaskets and seals of compressor. Slight surface rust may be seen on fans and fan motors.
	2 Marginal	Coil fins showing separation from tubes, corrosion forming all around tubes at flanges and possible refrigerant leaks. Showing signs of performance loss due to damaged components. One of the major components needs replacement (compressor, condenser, and/or evaporator).
	1 Poor	Multiple major component failure. 70% or more of system is in need of major repair or replacement.

Component Number 8: Interior and Structure / Doors		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Corrosion minimal, doors working without any problems, glass good, sensitive edges in good working order, no other problems with the doors. Interior panels and frame work in good order, seats not torn or loose on floor. Stanchions are all secure. Main structure in good shape.
	3 Adequate	Accumulation of minor defects in a few areas such as tears in seat cushions, individual window panes cracked or loose, floors weathering, stanchions loose, pull cord guides loose, etc.
	2 Marginal	Accumulation of several of the above defects or a major repair of any of the above areas such as the floor in need of repair, several window frames corroded and in need of replacement. Loose ceiling fixtures and stanchions creating safety concerns. Leaking from the roof. Door panels in need of replacement.
	1 Poor	Accumulation of multiple major defects such as window and door replacements with a floor replacement. Ceiling panels and stanchions needing replacement.

Component Number 9: Lift / Ramp		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	Lift or ramp shows minimal signs of wear, no major problems, some minor defects ok. Only minimal signs of weathering exist. Functioning without any problems.
	3 Adequate	All functions are working as designed. Pump area may have some seeping but no dripping leaks. Platform shows signs of wear and small deterioration that is not affecting the movement. Hoses may have rub marks but no leaks.
	2 Marginal	Rust on main platform, weak floor, barrier hinges lifting from rust or abuse. Lift not working correctly (e.g. jerking or stopping during functions). Hydraulic pump in need of repair or replacement.
	1 Poor	Large rust pockets on the platform and hinges jamming. Excessive rust on hydraulic components. Lift not operating properly causing safety concerns.

Component Number 10: Steering/Axles/Suspension		
	5 Excellent	Bus is new and all components are new (typically less than eight months old).
	4 Good	All steering and suspension is functioning as designed. No leaks in steering system. If rust is present it is only on the surface with no depth to it.
	3 Adequate	No leaks in the steering system, and differential is dry. Suspension bushings are showing some wear but holding in position. Rust is minimal on frame and components, less than 1/8in. Suspension bushings showing signs of movement.
	2 Marginal	Some repairs are needed, such as steering joints, suspension bushings, air bags. Rust on suspension parts is growing deeper than 1/8th inch.
	1 Poor	Many large components need replaced, such as axles and large suspension members.

3. Facility Condition Assessment

Overview

The purpose of the facility condition assessment is to provide an overall snapshot of the current state of repair of a facility to aid in decisions concerning capital investments to improve the facility's condition. This section describes how to assess the condition of a facility based on inspection of a standard set of components (e.g., roof, interior, HVAC, etc.). Inspection standards are the primary source for component scoring. Notes made during the inspection should be used as secondary scoring justification. Optionally one may record additional information as part of the inspection process if desired, such as notes on recommended improvements to the asset/component or associated maintenance.

Table 3 shows the general condition assessment rating scale used for inspecting each facility component. Subsequent tables detail how this general scale should be applied by component. CDOT does not require calculating an overall condition rating for a facility. However, if an agency wishes to compute an overall rating, it is recommended that this be based on the median condition rating. To calculate this value one should tabulate the number of components inspected at each condition rating, and use as the overall rating the lowest rating achieved by at least half of the components were inspected.

Table 3. General Condition Assessment Rating Scale

Rating	Condition	Description
5	Excellent	No visible defects, near new condition
4	Good	Some (slightly) defective or deteriorated component(s)
3	Adequate	Moderately defective or deteriorated component(s)
2	Marginal	Defective or deteriorated component(s) in need of replacement
1	Poor	Critically damaged component(s) or in need of immediate repair

NOTE: the condition assessment approach is adapted from the approach originally defined by the Denver Regional Transit District (RTD). CDOT greatly appreciates RTD's assistance.

Conducting the Facility Condition Assessment

Each facility that your agency uses to operate and maintain its service should be inspected using the components and tasks listed in Table 4. Each of ten components of the facility is evaluated and scored independently during inspection using the rating scale described above. An inspection template is included in Section 4 of this document for recording the component ratings.

The condition assessment is primarily intended to assess the overall physical condition of the facility to support capital investment decisions. However, during the inspection you should note any defects that may constitute a safety concern or potential service delay. These types of defects require immediate attention and should be reported for repair. Completion of the inspection should be done after the necessary actions of reporting have been taken. Defects found should be recorded and used in your initial assessment. Note that in performing the inspection you may wish to supplement visual assessment of facility components with information on repair history and any information available on the technical obsolescence of components.

Table 4 describes each of the components and the tasks associated with conducting the assessment.

Table 4. Facility Condition Assessment Components and Tasks

Component Number	Component	Task
1	Roof	Inspect rubber membrane, roof tiles, gravel, flashing, hardware and painted or coated surfaces.
2	Shell (e.g., exterior structure, walls)	Inspect downspouts, doors, and windows. Inspect walls, foundations, columns and pillars. Inspect paint, coatings, siding, concrete or masonry.
3	Interior	Inspect lighting, electrical conduit and boxes, plumbing, signage, doors and windows. Inspect walls, floors, ceiling stairs, and foundations. Inspect flooring, drywall, ceiling tiles, paint and other coatings.
4	Conveyance (e.g., elevators, escalators,	Check elevator operation. Ensure the elevator doors open and close freely.

Component Number	Component	Task
	wheelchair lifts)	Inspect the interior of any escalators. Look at the condition of the floors, glass and ceiling. Check the condition of the paint and look for signs of deterioration. Inspect escalators, lifts and other conveyance assets. Check equipment operation.
5	Plumbing	Inspect any pipes for damage or leaks including any drainage.
6	HVAC	Inspect coils, housing, drains, and wiring. Evaluate overall performance of the system.
7	Fire Protection	Evaluate fire alarms, and overall protection system.
8	Electrical	Inspect electrical assets including conduit, boxes, solar panels and mountings for any damage wire chaffing or loose or corroded connections. Evaluate overall performance of the system.
9	Equipment (e.g., lifts, washing systems)	Inspect major pieces of equipment permanent to the facility, such as lifts, fueling systems, and bus washing systems.
10	Site (e.g., sidewalks, parking lot, grounds)	Inspect paved areas outside the facility. Look for cracking or settling of the concrete or asphalt. Look for signs of drainage problems such as flooded areas, eroded soil and water damage to the asphalt and clogged storm drain inlets. Inspect the curbing and ramps for cracking, settling, holes, uneven surfaces and trip hazards. Pay special attention to the wheelchair ramp areas.

Component Number	Component	Task
		Inspect lighting, signage, fencing and gates. Look for corrosion, structural integrity and condition of paint. Visually inspect the irrigation system, if installed. Look for signs of leaks, such as sagging areas in grass and/or pooling water. Look for dead spots in the grass which would indicate lack of water possibly caused by a mechanical failure. Inspect the passenger huts and benches for corrosion, paint condition, glass condition and damage.

Component Condition Rating Descriptions

This section provides description of conditions corresponding to each condition rating for each component. Use these ratings and descriptions as a guide to assign a score to the individual components for each facility. The form included in Section 4 can be used to record the component scores, and to note comments.

Component Number 1: Roof Surface		
	5 Excellent	New construction, no visible defects. Roof surface has no visible damage or has been recently replaced. Less than 3 years old.
	4 Good	Minor improvement needed. No visible damage and more than 3 years old.
	3 Adequate	Needs repair. Any surface cracking or drainage problems which could be indicated by vegetation or puddling.
	2 Marginal	Needs replacement or extensive repair. Surface membrane damaged and appears to be leaking.
	1 Poor	Critical defects affecting function, health, or safety. Cannot be repaired, needs replacement.

Component Number 2: Shell		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. No visible damage such as cracking, sagging, rust, or shifting.
	3 Adequate	Needs repair. Noticeable cracking, sagging, rust, or shifting on any single structural component. Surface deterioration exists, cosmetically "fair", but functioning as designed.
	2 Marginal	Needs replacement or extensive repair. Significant cracking, sagging, swelling, rust, or shifting, that does not appear to be a safety issue on any single structural component.
	1 Poor	Critical defects affecting function, health, or safety. Structure is visibly in poor condition.

Component Number 3: Interior		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. Minimal signs of wear, no major problems, minimal signs of deterioration. Primarily cosmetic issues.
	3 Adequate	Needs repair. Some deterioration exists, cosmetically "fair", but functioning as designed.
	2 Marginal	Needs replacement or extensive repair. Defects are critical and/or widespread, repairs are necessary in several areas.
	1 Poor	Cannot be repaired, needs replacement.

Component Number 4: Conveyance		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. Minimal signs of wear, no major problems, minimal signs of deterioration. No corrosion or leaks. Paint may be fading on painted surfaces
	3 Adequate	Needs repair. Deterioration exists, cosmetically "fair", but all systems are functioning as designed. Surface rust and peeling paint but no leaks.
	2 Marginal	Needs replacement or extensive repair and/or fails to meet current standards. Defects are critical and/or widespread, repairs are necessary in several areas but in serviceable condition. Heavy surface corrosion/flaking/bubbling on metal items.
	1 Poor	Critical defects affecting function, health, or safety. Needs replacement, appears to be non-functional.

Component Number 5: Plumbing		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. Minimal signs of wear, no major problems, minimal signs of deterioration. No corrosion or leaks.
	3 Adequate	Needs repair. Some deterioration exists, cosmetically "fair", but functioning as designed. Surface rust only on metal components.
	2 Marginal	Needs replacement or extensive repair. Defects are critical and/or widespread, repairs are necessary in several areas.
	1 Poor	Critical defects affecting function, health, or safety. Complete system needs replacement.

Component Number 6: HVAC (Heat and/or AC)		
	5 Excellent	New construction, no visible defects. Energy efficient, meets capability needs and consistent temperatures throughout the building
	4 Good	Minor improvement needed. Meets capability needs and consistent temperatures throughout the building
	3 Adequate	Needs repair. Meets capability needs, requires continuous maintenance
	2 Marginal	Needs replacement or extensive repair and/or fails to meet current standards. Does not meet capacity needs, temperature varies greatly and requires maintenance
	1 Poor	Critical defects affecting function, health, or safety. Complete system needs replacement.

Component Number 7: Fire Protection		
	5 Excellent	New system, no visible defects.
	4 Good	Minimal signs of wear. No corrosion, leaks or blockages to sprinkler system.
	3 Adequate	Needs repair.
	2 Marginal	Needs replacement or extensive repair and/or fails to meet current standards. Defects are critical and/or widespread, repairs are necessary in several areas.
	1 Poor	Critical defects affecting function, health, or safety.

Component Number 8: Electrical		
	5 Excellent	New, no visible defects. Meets capability needs
	4 Good	Minor Improvement needed. Minimal signs of wear, no major problems, minimal signs of deterioration. Cosmetic defects. Meets capability needs but no room in panel for future expansion
	3 Adequate	Needs repair. Some deterioration exists, cosmetically "fair," but functioning as designed.
	2 Marginal	Needs replacement or extensive repair. Does not meet current capacity. Defects are critical and/or widespread, repairs are necessary in several areas.
	1 Poor	Critical defects affecting function, health, or safety. Does not meet capacity needs and creates safety hazards. Needs replacement.

Component Number 9: Equipment		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. No corrosion or leaks. Mechanical systems have minor signs of wear.
	3 Adequate	Needs repair. Surface rust and peeling paint but no leaks.
	2 Marginal	Needs replacement or extensive repair. Defects are critical and/or widespread, repairs are necessary in several areas.
	1 Poor	Critical defects affecting function, health, or safety. Appears to be non-functional. Needs replacement.

Component Number 10: Site		
	5 Excellent	New construction, no visible defects.
	4 Good	Minor improvement needed. Minimal signs of wear, no major problems, and minimal signs of deterioration. Primarily cosmetic defects. Small surface cracks that are not big enough to fill.
	3 Adequate	Needs repair. Deterioration exists, cosmetically "fair", but functioning as designed. Cracks large enough to fill.
	2 Marginal	Needs replacement or extensive repair. Defects are critical and/or widespread, repairs are necessary in several areas but in serviceable condition. Potholes or cracks too big to fill with crack filler (over 2" wide)
	1 Poor	Needs replacement. Critical defects affecting function, health, or safety.

4. Assessment Forms

This section includes forms used for recording and scoring the condition rating for each of the components. There is one form for vehicles, and one for facilities.

Vehicle Condition Assessment Form

Inspection Date:

Inspector Name:

Vehicle Type:

VIN:

Miles at time of inspection:

Engine miles at time of inspection:

Component Number	Component Name	Notes	Score (1-5, with 5 as the highest) 0 if N/A
1	Brake/Wheel/Hub/ Air-System		
2	Chassis/Body		
3	Cooling System		

Component Number	Component Name	Notes	Score (1-5, with 5 as the highest) 0 if N/A
4	Electrical		
5	Engine		
6	Transmission		
7	HVAC		
8	Interior and Structure		
9	Lift Ramp		

Component Number	Component Name	Notes	Score (1-5, with 5 as the highest) 0 if N/A
10	Steering/Axle/ Suspension		
		Overall Vehicle Score *Note:* To calculate this value one should tabulate the number of components inspected at each condition rating, and use as the overall rating the lowest rating achieved by at least half of the components that were inspected.	

Facility Condition Assessment Form

Inspection Date:

Inspector Name:

Facility Name/Type:

Address/Location:

Year Built:

Component Number	Component Name	Notes	Score (1-5) 0 if N/A
1	Roof		
2	Shell		
3	Interior		
4	Conveyance		

Component Number	Component Name	Notes	Score (1-5) 0 if N/A
5	Plumbing		
6	HVAC		
7	Fire Protection		
8	Electrical		
9	Equipment		
10	Site		

Appendix F – 2019 Shelter & Bench Inventory

2019 Bench and Shelter Inventory			
Stop ID	Stop Name	Stop Description	Advertisement
S10	Patterson Road east of Placer Street	Bench	Yes
S110	North Avenue west of 5th Street	Bench	Yes
S111	North Avenue east of 5th Street	Bench/Shelter	Yes
S116	Walnut Avenue west of 19th Street (Walnut Park Apartments)	Bench	No
S117	North Avenue east of 23rd Street (Teller Arms)	Bench	Yes
S119	North Avenue east of 28 Road	Bench/Shelter	Yes
S12	Patterson Road east of 30 Road	Bench/Shelter	Yes
S120	North Avenue west of 28 Road	Bench/Shelter	Yes
S121	North Avenue east of 28¾ Road (East Gate Shopping Center)	Bench	Yes
S122	North Avenue east of 28¾ Road (Solaris Square)	Bench/Shelter	Yes
S123	North Avenue east of 28½ Road (Homeward Bound)	Bench/Shelter	Yes
S124	North Avenue east of 28¾ Rd (Walmart)	Bench/Shelter	Yes
S125	North Avenue east of 29¼ Road	Bench	Yes
S127	North Avenue west of 28¾ Road (Texas Road House)	Bench	Yes
S130	Orchard Avenue east of 28¼ Road	Bench	Yes
S131	Orchard Avenue east of 28¼ Road (Columbine Park)	Bench	Yes
S136	Horizon Drive north of G Road	Bench/Shelter	Yes
S137	Horizon Drive east of G Road	Bench	Yes
S138	Horizon Drive at Denny's Restaurant	Bench	Yes
S139	Horizon Drive at Applebee's	Bench/Shelter	Yes
S14	Patterson Road west of Shoshone Street	Bench	Yes
S141	Orchard Avenue east of 28½ Road	Bench	Yes
S142	Horizon Drive at Taco Bell	Bench/Shelter	Yes
S145	Horizon Drive at Wendy's	Bench/Shelter	Yes
S146	Horizon Drive at Clarion Inn	Bench/Shelter	Yes
S148	12th Street south of Walnut Avenue	Bench	Yes
S149	Horizon Drive and Crossroads Boulevard (Grand Vista Hotel)	Bench	Yes
S15	Patterson Road and east of 31 Road	Bench	Yes
S150	Horizon Drive north of Horizon Court (America's Best Value Inn)	Bench	Yes
S151	Social Security Office	Bench	Yes
S153	Horizon Drive at Motel 6	Bench	Yes
S154	Horizon Drive across from Motel 6	Bench	Yes
S155	Grand Junction Regional Airport	Bench/Shelter	No
S16	Patterson Road at Long Family Memorial Park	Bench/Shelter	Yes
S161	Spruce Street north of Rood Avenue (Justice Center)	Bench/Shelter	Yes
S163	12th Street north of Ouray Avenue	Bench	Yes
S165	12th Street south of Teller Avenue (Lincoln Park)	Bench/Shelter	Yes
S166	12th Street south of North Avenue (Lincoln Park Barn)	Bench/Shelter	Yes
S169	Grand Avenue west of 10th Street (Strive)	Bench	Yes
S17	Patterson Road west of 31½ Road	Bench/Shelter	Yes
S171	Grand Avenue east of 7th Street	Bench	Yes
S172	Grand Avenue west of 8th Street	Bench	No
S173	1st Street north of Rood Avenue	Bench/Shelter	Yes
S179	5th Street north of Gand Avenue (Mesa County Library)	Bench/Shelter	Yes
S18	Patterson Road east of Conestoga Circle	Bench/Shelter	Yes
S182	4th Street south of Gunnison Avenue	Bench	Yes
S19	32 Road south of Patterson Road (Clifton Library)	Bench/Shelter	Yes
S199	Grand Avenue west of 22nd Street (R-5 High School)	Bench	Yes
S203	24th Street south of Teller Avenue	Bench	No
S205	23rd Street south of North Avenue (Veterans Hospital)	Bench/Shelter	Yes
S206	Patterson Road east of 29½ Road	Bench/Shelter	Yes
S207	Patterson Road east of 29½ Road	Bench	Yes
S208	Patterson Road west of Cris Mar Drive	Bench	Yes
S209	Patterson Road west of 29 Road (Safeway)	Bench/Shelter	Yes
S21	E½ Road west of 31 Road	Bench	Yes
S210	Patterson Road east of 29 Road (Safeway)	Bench/Shelter	Yes
S212	F¼ Road at Goodwill	Bench	Yes
S213	Patterson Road west of Beechwood Street	Bench	Yes
S214	25½ Road south of Dewey Place	Bench	Yes
S215	25½ Road north of Patterson Road	Bench	Yes
S219	Unaweep Avenue west of Roubideau Street	Bench	Yes
S222	Unaweep Avenue west of 27...œ Road (Orchard Mesa Middle School)	Bench	Yes
S226	Highway 50 north of Santa Clara Avenue	Bench	Yes
S228	St. Marys Hospital (West Side)	Bench	Yes
S229	4th Street south of Main Street (Wells Fargo Bank)	Bench	No
S230	Patterson Road east of 28 Road	Bench	Yes
S231	Patterson Road west of 28¼ Road	Bench	Yes
S232	Patterson Road west of 28¼ Road (Mantey Heights)	Bench/Shelter	Yes
S237	Patterson Road west of 12th Street (Life Center)	Bench/Shelter	Yes
S24	E½ Road and Peachwood Drive	Bench	Yes
S244	B½ Road west of 28 Road	Bench	Yes
S246	4th Street north of Grand Avenue (Chamber of Commerce)	Bench	Yes

S248	5th Street north of Main Street	Bench	Yes
S254	Grand Avenue east of 5th Street (Library)	Bench	Yes
S26	Orchard Avenue east of 30 Road	Bench	Yes
S262	24¾ Road north of Highway 6 and 50 (Grand Mesa Center)	Bench/Shelter	Yes
S264	Kokopelli Boulevard east of Highway 340	Bench	Yes
S268	15th Street south of Hermosa Avenue (Larchwood)	Bench	Yes
S274	Base Rock Street and Rimrock Avenue (Walmart - Loop at east Corner)	Bench	Yes
S275	Rim Rock Shopping Plaza (Lowes)	Bench/Shelter	Yes
S28	E½ Road east of East Valley Drive	Bench	Yes
S280	Horizon Drive east of 12th Street (Safeway)	Bench	Yes
S282	750 Wellington Avenue (Surgical Center / Dialysis)	Bench/Shelter	Yes
S283	North Avenue east of 8th Street	Bench/Shelter	Yes
S29	E½ Road east of Hoover Court	Bench	Yes
S292	North Avenue west of 29 Road (Big O Tires)	Bench	Yes
S295	Highway 340 west of West Avenue (Riverside)	Bench	Yes
S296	Pine Street south of Ottley Avenue	Bench	Yes
S297	Pine Street north of Carolina Avenue	Bench	Yes
S298	Highway 6 and 50 east of Pine Street (Fruita High School)	Bench/Shelter	No
S3	Patterson Road east of Orchard Run Drive	Bench	Yes
S30	E½ Road west of Warrior Way (Long Family Memorial Park and Walmart)	Bench/Shelter	No
S31	32 Road and Kennedy Avenue	Bench	Yes
S314	Coulson Street at Independence Village	Bench	Yes
S315	Aspen Street east of Elm Street (Chamber Of Commerce)	Bench	Yes
S323	Rodeo Road west of Logan Street (Riverbend Park)	Bench/Shelter	No
S33	North Avenue east of 29½ Road (Community Services Campus)	Bench/Shelter	Yes
S331	Elberta Street north of Highway 6 (Dollar General)	Bench	No
S343	Patterson Road east of 12th Street (City Market)	Bench	No
S345	Blichmann Avenue east of 25 Road (Western Colorado Community College Inbound)	Bench	No
S347	Patterson Road west of Ford Street	Bench	Yes
S359	Patterson Road and 9th Street (St. Mary's Pavilion)	Bench/Shelter	Yes
S363	7th Street south of Colorado Avenue (Enstrom's)	bench	No
S364	Main Street east of 8th Street (Ratekin Towers)	Bench	Yes
S367	12th Street south of Orchard Avenue	Bench	Yes
S372	12th Street at Mesa Manor Care Center	Bench	Yes
S377	Patterson Road east of 25 Road	Bench	Yes
S379	Patterson Road west of 1st Street	Bench	Yes
S38	32 Road and D¾ Road	Bench	Yes
S380	Patterson Road 7th Street (west of St. Mary's Entrance)	Bench	Yes
S383	Patterson Road west of 7th Street (St. Mary's Hospital)	Bench	Yes
S384	Patterson Road west of 1st Street	Bench	Yes
S388	Patterson Road east of 25½ Road	Bench	Yes
S39	32 Road north of E Road (Corner Store)	Bench	Yes
S394	7th Street west of Peach Avenue (Fire Station)	Bench/Shelter	No
S399	29 Road south of Patterson Road (Safeway)	Bench	Yes
S40	32 Road and Elm Avenue	Bench	Yes
S417	Blichmann Avenue east of 25 Road (Western Colorado Community College Outbound)	Bench/Shelter	No
S425	F¼ Road west of 25 Road	Bench	Yes
S427	G Road east of 23½ Road (Community Hospital)	Bench/Shelter	Yes
S428	7th Street north of White Avenue	Bench	Yes
S438	D Road west of Riverwood Drive	Bench	Yes
S442	D Road west of 30 Road	Bench	Yes
S443	D Road and Broken Arrow Drive	Bench	Yes
S448	D½ Road and Clear Creek Drive	Bench	Yes
S450	Patterson Road east of 27½ Road	Bench/Shelter	Yes
S451	Highway 6 east of Lois Street (No Sign - Stop and Save)	Bench	Yes
S460	Kokopelli Boulevard north of Jurassic Avenue	Bench	Yes
S462	Rice Street north of White Avenue (Mesa County Sheriff)	Bench	Yes
S465	Horizon Drive at Safeway	Bench/Shelter	Yes
S466	Patterson Road west of 29½ Road (Maverick)	Bench	No
S471	G Road west of 24 Road (Community Hospital)	Bench/Shelter	Yes
S478	West Transfer Facility (Arrive)	Bench/Shelter	No
S481	Highway 6 and 50 west of Valley Court	Bench	Yes
S491	North Avenue west of 11th Street (Colorado Mesa University)	Bench	Yes
S493	24½ Road at Picture Show	Bench/Shelter	Yes
S497	29 Road south of Unaweep Avenue	Bench	Yes
S5	Patterson Road west of 31 Road	Bench	Yes
S50	Plum Street south of Aspen Avenue (City Market)	Bench	Yes
S502	D½ Road west of 32 Road (Chatfield Elementary)	Bench	Yes
S511	Iowa Avenue south of Frontage Road	Bench	No
S52	32 Road north Of D½ Road	Bench	Yes
S57	D½ Road west of 31 Road	Bench	Yes
S6	Patterson Road west of Mesa Valley Drive	Bench	Yes
S62	D Road east of Alamo Street	Bench	Yes
S63	D Road west of Wedgewood Avenue	Bench	Yes

S72	29 Road north of Highway 50 (Orchard Mesa Market)	Bench	Yes
S82	Clifton Transfer Station (32 Road and I-70 Business Loop) (Arrive)	Bench/Shelter	No
S85	Orchard Avenue east of 29 Road	Bench	No
S86	Orchard Avenue east of 29 Road	Bench	No
S87	Downtown Transfer Facility (6th Street and South Avenue) (Arrive)	Bench/Shelter	No
S9	Patterson Road east of Broken Spoke Road	Bench	Yes
S90	North Avenue west of 29½ Road (Career Center)	Bench/Shelter	Yes
S91	Patterson Road west of 30 Road (Rite-Aid)	Bench	Yes
S93	29½ Road north of North Avenue (Community Service Campus)	Bench/Shelter	No
S98	25½ Road north of Pinyon (Food Bank)	Bench	Yes
S99	25½ Road south of Patterson Road (Pomona Elementary)	Bench	Yes
S113	North Ave west of 7th St -- NO LONGER IN SERVICE	Bench	Yes
S258	Grand Avenue east of 3rd Street -- NO LONGER IN SERVICE	Bench/Shelter	Yes
S259	Grand Avenue west of 5th Street (Library) -- NO LONGER IN SERVICE	Bench/Shelter	Yes

Exhibit C
Grand Valley Transit- Fleet List

Fixed Route and Paratransit Vehicles-Active

Vehicle Number	Usage	Description	Model	Fuel	VIN Number	Length	Date in Service	Replacement Year	Vehicle Weight	License Plate
70	Contingency/AAA	2010 Ford	Aerotech	GA	1FDFE45S19DA90595	25 feet	02/11/10	2017	14500	887TTW
72	Contingency	2010 Ford	Aerotech	GA	1FDFE45S59DA90597	25 feet	02/19/10	2017	14500	889TTW
81	Contingency	2015 Ford	Entourage	CNG	1FDGF5GY9FEC42167	33 feet	08/06/15	2022	19500	816UQU
82	Contingency	2015 Ford	Entourage	CNG	1FDGF5GY7FEB16406	33 feet	08/06/15	2022	19500	813UQU
83	Contingency	2015 Ford	Entourage	CNG	1FDGF5GY0FEC42168	33 feet	08/06/15	2022	19500	817UQU
84	Contingency	2015 Ford	Entourage	CNG	1FDGF5GY1FEC42163	33 feet	08/07/15	2022	19500	815UQU
85	Fixed Route	2015 Ford	Entourage	CNG	1FDGF5GY9FEB16407	33 feet	08/14/15	2022	19500	814UQU
86	Fixed Route	2016 Ford	Entourage	CNG	1FDGF5GY0GEA61217	33 feet	05/28/16	2023	19500	CQH115
87	Fixed Route	2016 Ford	Entourage	CNG	1FDGF5GY4GEA61219	33 feet	05/28/16	2023	19500	CQH114
88	Fixed Route	2017 Ford	Entourage	CNG	1FDGF5GY3GEB88589	31 feet	03/08/17	2024	19500	OAM402
89	Fixed Route	2017 Ford	Entourage	CNG	1FDGF5GY4GEB88570	31 feet	03/13/17	2024	19500	OAM403
90	Fixed Route	2017 Ford	Entourage	CNG	1FDGF5GY3GEB64700	31 feet	03/17/17	2024	19500	OAM404
91	Fixed Route	2017 Ford	Entourage	CNG	1FDGF5GY3GEB88592	31 feet	03/22/17	2024	19500	OAM405
92	Para Transit	2017 Ford	Entourage	CNG	1FDGF5GYXGEB88573	31 feet	03/27/17	2024	19500	OAM406
93	Para Transit	2017 Ford	Entourage	CNG	1FDGF5GY0GEB88582	31 feet	04/04/17	2024	19500	OAM407
94	Para Transit	2017 Ford	Entourage	CNG	1FDGF5GY3GEB88575	31 feet	03/29/17	2024	19500	OAM408
95	Para Transit	2017 Ford	Entourage	CNG	1FDGF5GY1GEB88574	31 feet	03/31/17	2024	19500	OAM409
96	Para Transit	2018 Ford	Goshen	CNG	1FDFE4FS0JDC18537	26 feet	12/19/18	2025	11660	VAO807
97	Para Transit	2018 Ford	Goshen	CNG	1FDFE4FS2JDC18538	26 feet	01/18/19	2026	11660	VAO808
98	Para Transit	2018 Ford	Goshen	CNG	1FDFE4FS4JDC18539	26 feet	01/29/19	2026	11660	VAO809
99	Para Transit	2021 Ford	Senator II?	CNG		26 feet	pending	2028		TBD
??	Para Transit	2021 Ford	Senator II?	CNG		26 feet	pending	2028		TBD
??	Para Transit	2021 Ford	Senator II?	CNG		26 feet	pending	2028		TBD
108	Fixed Route	2012 ElDorado	Axess	CNG	1N9APALG0CC084015	40 feet	11/08/11	2023	43420	536OSQ
109	Fixed Route	2012 ElDorado	Axess	CNG	1N9APALG2CC084016	40 feet	11/08/11	2023	43420	537OSQ
110	Fixed Route	2013 ElDorado	EZ Rider	CNG	1N9MNALG6EC084087	32 feet	01/23/14	2026	27400	942MQF
111	Fixed Route	2013 ElDorado	EZ Rider	CNG	1N9MNALG4EC084086	32 feet	01/16/14	2026	27400	941MQR
112	Fixed Route	2018 Gillig	G31E	CNG	15GGE3112J3093363	30 feet	06/01/18	2028	34500	DEC113
113	Fixed Route	2018 Gillig	G31E	CNG	15GGE3114J3093364	30 feet	05/31/18	2028	34500	DEC112
114	Fixed Route	2018 Gillig	G31E	CNG	15GGE3116J3093365	30 feet	05/31/18	2028	34500	DEC111
115	Fixed Route	2019 Gillig	G31E	CNG	15GGE3111K3093520	30 feet	12/06/19	2029	34500	BDJU28
116	Fixed Route	2021 Gillig	G31E	CNG	15GGE3116M3094018	29 feet	pending	2031	34500	TBD

*All GVT Titles are held by and under Mesa County.

Exhibit D
Fleet Maintenance Oversight Checklist

City of Grand Junction- Fleet Maintenance Oversight Checklist

	Source	Frequency	Comments	Follow-up Action, if needed	Completed By	Date Completed	
Facility							
Facility walk-through:							
· Interior cleanliness and condition	Site Visit	Annually					
· Exterior condition, neatness (Check condition of building and pavement, security of facility, drainage, runoff basins)							
· Safety (orderly, no tripping hazards, safety equipment in place and operational, etc.)							
· Postings (workplace rules, emergency rules, PTASP, Title IV, EEO, etc.)							
Verify functional status of primary systems – plumbing, heating/cooling, overhead doors, lifts, etc.							
Verify CNG system and condition							
Verify equipment inventory, condition							
Review preventive maintenance records for building	Electronic Records	Annually					
Review preventive maintenance records for CNG system	Electronic Records	Annually					
CNG system	Electronic Records	Annually					
Vehicles							
Select and review preventive maintenance records for 2 vehicles.	Electronic Records	Annually					
Distribute PM summary	Electronic Records	Quarterly					
Review Status of out-of-service vehicles	Virtual Meeting	Weekly Fleet Call					
Administrative							
Verify Drug and Alcohol procedures, policies, education, testing (49CFR655.4 requirement not applicable)	Electronic Records	Annually					
Review city fleet procurement policy	Electronic Records	Annually					
Review purchases over $15,000	Electronic Records	Annually					
Review record keeping, file retention, and retrieval	Electronic Records	Annually					
Current certificates of insurance	Electronic Records	Annually					
Review trainings, Safety Meeting agendas, attendance	Electronic Records	Quarterly as part of PTASP					
Review accident and incident records (vehicle, equipment, workers' comp, hazardous materials)	Electronic Records	Quarterly as part of PTASP					

Exhibit E
Public Transportation Agency Safety Plan (PTASP)

Grand Valley Transit

Public Agency Transportation Safety Plan

Prepared by: Mesa County Regional Transportation Planning Office

August, 2020

Table of Contents

Under the Public Transportation Agency Safety Plan (PTASP) Final Rule, Mesa County is required to develop a safety plan that include the processes and procedures to implement a Safety Management Systems (SMS). This plan was developed by Regional Transportation Planning Office (RTPO) staff with input from Mesa County Fleet and Facilities, City of Grand Junction Fleet and current transit operations contractor Transdev.

1. Transit Agency Information:

Mesa County receives 5307, 5310, and 5339 funds from Federal Transit Administration (FTA) and/or the Colorado Department of Transportation (CDOT) for fixed route, paratransit and limited on-demand service for Grand Valley Transit(GVT) and well as capital purchases for buses and equipment. GVT does not provide transit services on behalf of another agency. All GVT service is currently operated through a multi-year contract with Transdev, a private transportation provider.

Grand Valley Transit is located: at 525 S 6th St, Grand Junction, CO 81501

Accountable Executive: Grand Valley Regional Transportation Committee Chair- Scott McInnis
Chief Safety Officer/SMS Executive: RTPO Director- Dana Brosig.

2. Plan Development, Approval, and Updates

Drafted by: Regional Transportation Planning Office staff/ Grand Valley Transit

Approved by:

The Grand Valley Regional Transportation Committee approved the PTASP and appointed the GVRTC chair as the Accountable Executive on August 24, 2020 by resolution 2020-008 as attached in Appendix F.

Certification documentation found in Appendix G.

Version Number	Section/Pages Affected	Reason for Change	Date Issued
1		New Document	

This plan will be jointly reviewed and updated by the Chief Safety Officer(CSO) and GVT Contractor- General Manager by July 1 of each year. The Accountable Executive will review and approve any changes, signing the new ASP, then forward to the Grand Valley Regional Transportation Committee (GVRTC) for review and approval.

This ASP addresses all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan

3. Safety Performance Targets

Fixed route and paratransit operations are intertwined in that cutaway buses are used for both services whereas the lowfloor buses are utilized only for fixed route service. Fixed Route and ADA Paratransit are operated by the same contractor and maintained through the same facilities. Targets below are based on review of the previous 2 years of GVT's safety performance data

Safety Performance Targets

Mode of Transit Service	Fatalities (total)	Fatalities (per 100k VRM)	Injuries (total)	Injuries (per 100k VRM)	Major Safety Events (total)	Major Safety Events (per 100k VRM)	System Reliability (VRM / failures)
Fixed Route Bus /ADA Paratransit	0	0	4	0.4	4	0.4	10,000 mi

3.1. Safety Performance Target Coordination

GVT's Accountable Executive shares our ASP, including safety performance targets, with the Grand Valley Metropolitan Planning Organization (MPO) annually after its formal adoption by the Grand Valley Regional Transportation Committee (GVRTC). GVT's Accountable Executive also provides a copy of our formally adopted plan to the Colorado Department of Transportation (CDOT). GVT personnel are available to coordinate with CDOT and the MPO in the selection of Colorado and MPO safety performance targets upon request.

Targets Transmitted to Colorado Department of Transportation on November 12, 2020
Targets Transmitted to Grand Valley Metropolitan Planning Organization on November 12, 2020.

4. Safety Management Policy

Safety is a core value at GVT, and managing safety is a core business function. We will develop, implement, maintain, and continuously improve processes to ensure the safety of our customers, employees, and the public. GVT is committed to the following safety objectives:

- Communicating the purpose and benefits of the Safety Management System (SMS) to all staff, managers, supervisors, and employees.
- Providing a culture of open reporting of all safety concerns, ensuring that no action will be taken against any employee who discloses a safety concern through GVT's Employee Safety Reporting Program (ESRP), unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures.
- Providing appropriate management involvement and the necessary resources to establish an effective ESRP that will encourage employees to communicate and report any unsafe work conditions, hazards, or at-risk behavior to the management team.
- Identifying hazardous and unsafe work conditions, collecting data from the ESRP as well as other methods of data collection, and, after thoroughly analyzing provided data, developing and implementing processes and procedures to mitigate safety risk to an acceptable level.
- Establishing safety performance targets that are realistic, measurable, and data driven. Continually improve our safety performance through management processes that ensure appropriate safety management action is taken and is effective

4.1. Safety Management Policy Communication

GVT's safety management policy will be communicated throughout the organization through:

- SMS Training provided by Safety Managers for all transit-related employees annually;
- Notice to All Personnel (memo to all transit-related employees informing them of SMS and posted on all general bulletin boards) and given to new employees by Safety Managers;
- Discussion of dissemination of the safety policy at Safety Meetings to be included in meeting minutes

The Public Transit Agency Safety Plan will be maintained by the Chief Safety Officer in an electronic file and in hard copy(s) and made available to transit-related employees through the Safety Managers.

4.2. Authorities, Accountabilities, and Responsibilities

An organigram showing the relationship between the Accountable Executive, Chief Safety Officer, Safety Managers, and Safety Committees is shown below in Figure 1.

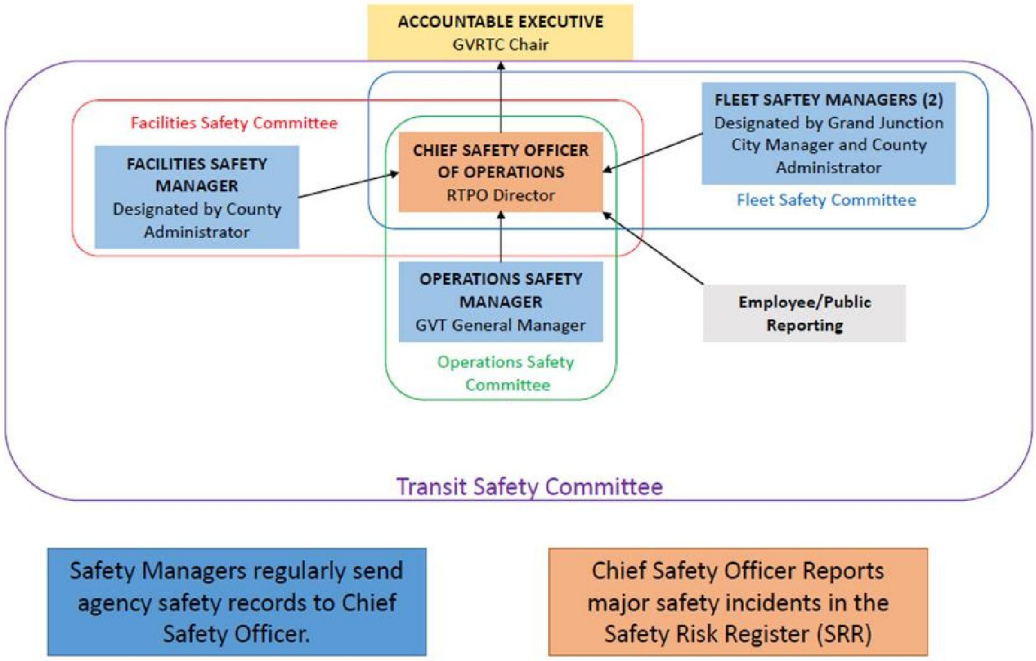


Figure 1: Organigram of PTASP personnel

4.2.1. Accountable Executive

The Chair of the GVRTC is identified as the Accountable Executive (AE). The AE, with support of the entire GVRTC, is accountable for ensuring the agency's SMS is effectively implemented throughout the Transit Agency system; and ensuring action is taken, as necessary, to address substandard performance in the Transit Agency's SMS.

The GVRTC is made up of an elected official from the local transit funding partners of Mesa County, City of Grand Junction, City of Fruita and Town of Palisade. As these partners provide funding for the system through an intergovernmental agreement (IGA) and oversee the facilities (Mesa County facilities) and maintenance of fleet (Mesa County and City of Grand Junction fleet), they are responsible for controlling and directing the human and capital resources to develop and carry out the ASP and TAM Plan. The Chair of the GVRTC, designated as the AE on behalf of the GVRTC, will ensure the SMS is effectively implemented and action is taken, as necessary, to address substandard performance in the agency's SMS.

4.2.2. Chief Safety Officer

The Accountable Executive designates the Regional Transportation Planning Office (RTPO) Director as the Chief Safety Officer. The Chief Safety Officer (CSO) will have direct communication with the Accountable Executive and will be adequately trained for the position.

The Chief Safety Officer has the following authorities, accountabilities and responsibilities under this plan:

- Oversees the safety function within the transit agency
- Communicates with GVRTC and Safety Managers
- Works with the Safety Managers to confirm that each entity complies with federal, state and local regulations.
- Chair of the Transit Safety Committee
  - Coordinates the activities of the committee to support SMS implementation
  - Maintains and distributes minutes of Transit Safety Committee Meetings
  - Establishes and maintains the Safety Risk Register
- Advises the Accountable Executive on SMS progress and status
- Administers contractual agreements with operations and maintenance providers and ensure they comply with SMS
- Ensures that Safety Managers are collecting data related to safety events and key performance indicators.

4.2.3. Executive Management: Safety Managers

The Accountable Executive with support of Mesa County, City of Grand Junction, and the transit operations contractor will designate a representative from Mesa County Fleet, Mesa County Facilities, City of Grand Junction Fleet and Grand Valley Transit to be Safety Managers.

Safety Managers have authorities and responsibilities for day-to-day SMS implementation and operation of GVT's SMS Plan within their department including:

- Dissemination of the SMS Plan and other relevant safety information
- Hazard identification
- Accident investigation
- Safety Certification, as required by their agency
- Reporting requirements
- Participation in Transit Safety Committee meetings

4.2.4. Other Committees/Activities:

GVT (Grand Valley Transit) uses a Transit Safety Committee as well as a number of other safety committees and existing safety procedures to support its SMS and safety programs including:

- **Transit Safety Committee**

Made up of a member from GVT operations, Mesa County facilities, and Mesa County and City of Grand Junction fleet maintenance. CSO will share and discuss the Chief Safety Officer Safety Summary, which is prepared before each Transit Safety Committee meeting and includes a narrative of safety issues based on safety data collected from meeting notes of other safety committees, ESRP, and other sources. Hazard reports and mitigations will be shared, safety topics will be brought up for open discussion, further feedback solicited, and hazard self-reporting further encouraged. Information discussed in these meetings will be documented and shared through meeting minutes. The committee will meet quarterly or as needed.

- **Operations Safety Committee**

Made up of contractor staff and includes the General Manager, Operations Supervisor, Safety Supervisor, and a representative from road supervisors, dispatch, utility and from fixed route/paratransit who meet monthly to review issues and make recommendations to improve safety.

- **Operations Monthly All-Staff Safety Meeting**

The operations contractor conducts a safety meeting monthly which all staff is required to attend. Safety topics will be discussed and feedback is solicited. Hazard reporting will be encouraged at these meetings.

- **Mesa County Safety Committee**

Made up of Public Works, Fleet, Transportation, Traffic and Risk Management. Meets monthly to discuss safety issues seen across departments. Hazard reporting will be encouraged at these meetings.

- **Mesa County Fleet Safety Meeting**

Conducts safety meetings monthly or as needed with all fleet staff to discuss safety issues and related topics. Hazard reporting will be encouraged at these meetings.

- **City Fleet Safety Meeting**

Conducts monthly safety meetings with all fleet staff. Hazard reporting is expected at these meetings.

The Safety Managers will report to the CSO any input regarding major events or patterns of minor events received from the respective Safety Committee meetings.

4.3. Employee Safety Reporting Program (ESRP)

GVT's ESRP encourages employees who identify safety concerns in their day-to-day duties to report them to senior management in good faith without fear of retribution. There are many ways employees can report safety conditions:

All:

- Report conditions directly to any supervisor, manager, safety manager or director.
- Report conditions during safety meetings or to safety committee
- Report conditions using their name or anonymously to gvtsafety@mesacounty.us
- Report condition to RTPO Office at 525 S. 6th Street 2nd Floor, Grand Junction, CO 81501

Operations:

- During bus operations, report conditions directly to the dispatcher, who will inform the supervisor and Safety Manager.
- Report bus safety conditions on daily vehicle inspection form

Facilities:

- Mesa County Facilities- Enter safety issues in the Computerized Maintenance Management System (CMMS)

Major safety concerns are reported to the Chief Safety Officer who manages the Safety Risk Register (SRR). These concerns will be discussed and entered into the SRR and reviewed at the Transit Safety Committee meetings.

The Chief Safety Officer reviews ESRP reporting and includes findings into SRM Process. GVT's Chief Safety Officer, supported by the Transit Safety Committee and RTPO staff, as necessary, will review reported safety concerns, ensuring that hazards and their consequences are appropriately identified and resolved through GVT's SRM process and that reported deficiencies and non-compliance with rules or procedures are managed through GVT's Safety Assurance process.

GVT's Chief Safety Officer discusses actions needed/taken to address safety concerns reported through the ESRP during the quarterly Transit Safety Committee Meetings or, if necessary, during the bimonthly GVRTC meetings. Additionally, if a reporting employee provided his or her name during the reporting process, the Chief Safety Officer or designee follows up directly with the employee when GVT determines whether or not to take action and after any mitigations are implemented.

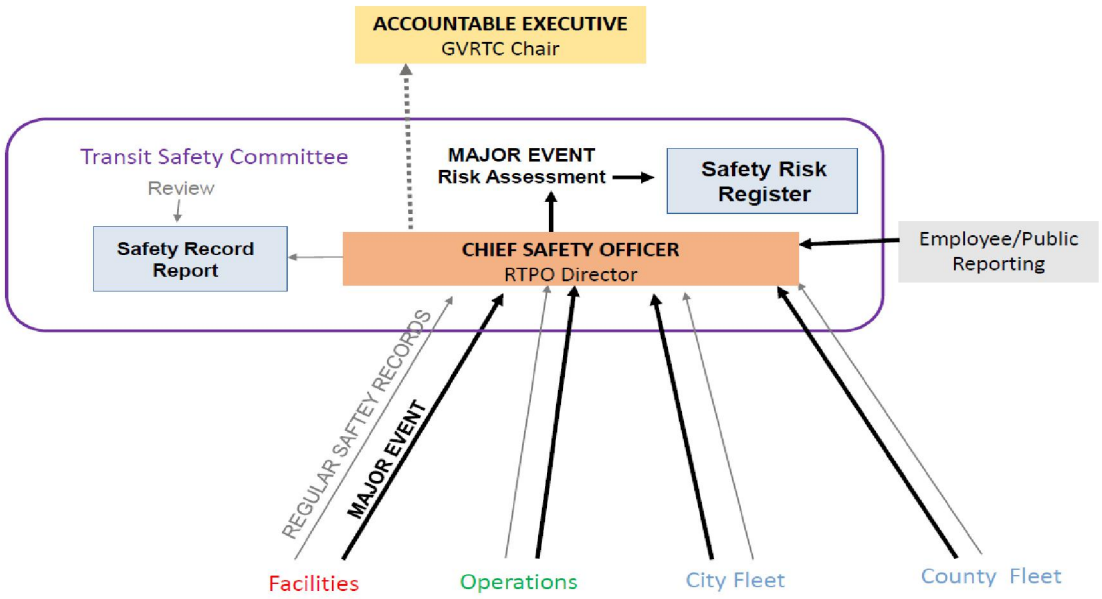
GVT encourages participation in the ESRP by protecting employees that report safety conditions in good faith. GVT will notify and request disciplinary action of the respective jurisdiction if the report involves any of the following:

- Willful participation in illegal activity, such as assault or theft;
- Gross negligence, such as knowingly utilizing heavy equipment for purposes other than intended such that people or property are put at risk; or
- Deliberate or willful disregard of regulations or procedures, such as reporting to work under the influence of alcohol or controlled substances.

5. Safety Risk Management

5.1. Safety Risk Management Process (SRM)

GVT uses the SRM process to ensure the safety of our operations, passengers, employees, vehicles, and facilities. It is a process whereby hazards and their consequences are identified, assessed for potential safety risk, and resolved in a manner acceptable to GVT's leadership. GVT's SRM process allows us to carefully examine what could cause harm and determine whether we have taken sufficient precautions to minimize the harm, or if further mitigations are necessary. The diagram in Figure 2 below shows how events are reported and documented.



Chief Safety Officer Reports major safety incidents in the Safety Risk Register (SRR)
Transit Safety Committee assists CSO in risk assessment of major safety events
Safety Managers send regular safety records to CSO, who compiles information into a quarterly report, which is then reviewed by the Transit Safety Committee

Figure 2: PTASP Reporting Structure

GVT's Chief Safety Officer and Safety Managers lead GVT's SRM process, working with GVT's various Safety Committees to identify hazards and consequences, assess safety risk of potential consequences, and mitigate safety risk. The results of GVT's SRM process are documented in the CSO Safety Summaries and the Safety Risk Register (SRR) and referenced materials.

In carrying out the SRM process, GVT uses a number of specific terms found in Section 9.

Minor events related to transit should be recorded internally in each department and may be included in safety committee reports/notes submitted to the CSO. The Safety Managers shall report Major events, in writing, to the CSO for inclusion in the SRR.

Safety Managers will send reports from safety meetings to the Chief Safety Officer after each meeting. Reports should include the following information:

- Completed safety trainings
- Accidents including "near miss" incidents, property & equipment damage and employee injuries- related to transit
- Hazards or unsafe work practices observed

Those events included in the SRR shall be discussed and prioritized by the Transit Safety Committee with a recommendation to the Accountable Executive, if additional resources are needed.

GVT's SRM process applies to all elements of our system including our operations and maintenance; facilities and vehicles; and personnel recruitment, training, and supervision.

5.2. Safety Hazard Identification

The Safety Hazard Identification Process offers GVT and contractors the ability to identify hazards and potential consequences in the operation and maintenance of our system. Examples of sources hazards can be identified through include:

- ESRP;
- Review of vehicle camera footage;
- Review of monthly performance data and safety performance targets;
- Observations from supervisors;
- Maintenance reports;
- Design Review
- Walk-throughs
- Monthly facility self-inspections
- Customer, Contractor, and Employee Complaints
- Safety Committee Meetings
- Results of audits and inspections of vehicles and facilities;
- Results of training assessments;
- Investigations into safety events, incidents, and occurrences; and

- Federal Transit Administration (FTA) and other oversight authorities (mandatory information source).
- Transit Industry Experience

When a major safety event is observed by GVT's management or supervisory personnel, whatever the source, it is reported to GVT's Chief Safety Officer. Procedures for reporting hazards to GVT's Chief Safety Officer are reviewed during the Transit Safety Committee meetings. GVT's Chief Safety Officer also receives employee reports from the ESRP and input from the public. GVT's Chief Safety Officer reviews these sources for hazards and may document major issues in the Safety Risk Register.

GVT's Chief Safety Officer may conduct, or request that a Safety Manager conducts, further analyses of hazards and consequences entered into the Safety Risk Register to collect information and identify additional consequences and to inform which hazards should be prioritized for safety risk assessment. In following up on identified hazards, GVT's Chief Safety Officer and/or Safety Managers may:

- Reach out to the reporting party, if available, to gather all known information about the reported hazard;
- Conduct a walkthrough of the affected area, assessing the possible hazardous condition, generating visual documentation (photographs and/or video), and taking any measurements deemed necessary;
- Conduct interviews with employees in the area to gather potentially relevant information on the reported hazard;
- Review any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);
- Contact other departments that may have association with or technical knowledge relevant to the reported hazard;
- Review any past reported hazards of a similar nature; and
- Evaluate tasks and/or processes associated with the reported hazard.

GVT's Chief Safety Officer will then prepare an agenda to discuss identified hazards and consequences with the Transit Safety Committee during quarterly meetings. This agenda may include additional background on the hazards and consequences, such as the results of trend analyses, vehicle camera footage, vendor documentation, reports and observations, or information supplied by FTA or other oversight authorities.
Any identified hazard that poses a real and immediate threat to life, property, or the environment must immediately be brought to the attention of the Chief Safety Office and Transit Safety Committee and addressed through the SRM process for safety risk assessment and mitigation. This means that the Chief Safety Officer believes immediate intervention is necessary to preserve life, prevent major property destruction, or avoid

harm to the environment that would constitute a violation of Environmental Protection Agency or Colorado environmental protection standards. Otherwise, the Safety Committee will prioritize hazards for further SRM activity.

5.3. Safety Risk Assessment

GVT assesses safety risk associated with identified major safety hazards using its safety risk assessment process. This includes an assessment of the likelihood and severity of the consequences of hazards, including existing mitigations, and prioritizing hazards based on safety risk.

The Chief Safety Officer and Transit Safety Committee assess prioritized hazards using GVT's Safety Risk Matrix. This matrix expresses assessed risk as a combination of one severity category and one likelihood level, also referred to as a hazard rating. For example, a risk may be assessed as "1A" or the combination of a Catastrophic (1) severity category and a Frequent (A) probability level.

RISK ASSESSMENT MATRIX				
SEVERITY / LIKELIHOOD	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High	High	High	Medium
Probable (B)	High	High	Medium	Medium
Occasional (C)	High	Medium	Medium	Low
Remote (D)	Medium	Medium	Low	Low
Improbable (E)	Medium	Low	Low	Low

Figure 3 GVT Safety Risk Assessment Matrix

This matrix categorizes combined risks into levels, High, Medium, or Low, based on the likelihood of occurrence and severity of the outcome. For purposes of accepting risk:

- "High" hazard ratings will be considered unacceptable and require action from GVT to mitigate the safety risk,

- "Medium" hazard ratings will be considered undesirable and require GVT's Safety Committee to make a decision regarding their acceptability, and
- "Low" hazard ratings may be accepted by the Chief Safety Officer without additional review.

Using a categorization of High, Medium, or Low allows for hazards to be prioritized for mitigation based on their associated safety risk.

The Chief Safety Officer schedules safety risk assessment activities on the Transit Safety Committee agenda and prepares a Safety Risk Assessment Package for each major hazard identified. This package is distributed at least one week in advance of the Safety Committee meeting. During the meeting, the Chief Safety Officer reviews the hazard and its consequence(s) and reviews available information distributed in the Safety Risk Assessment Package on severity and likelihood.

If it's determined by the Transit Safety Committee that sufficient information has not been obtained, the Chief Safety Officer may request support from members of the Transit Safety Committee and Safety Managers in obtaining additional information to support the safety risk assessment. If it's determined that sufficient information has been obtained, the Chief Safety Officer will facilitate completion of relevant sections of the Safety Risk Register, using the GVT Safety Risk Assessment Matrix shown above in Figure 3, with the assistance of the Transit Safety Committee. The Chief Safety Officer will document the Safety Committee's safety risk assessment, including hazard rating and mitigation options for each assessed safety hazard in the Safety Risk Register. The Chief Safety Officer will maintain on file Safety Committee agendas, Safety Risk Assessment Packages, additional information collection, and completed Safety Risk Register sections for a period of three years from the date of successful mitigation.

5.4. Safety Risk Mitigation

By reducing the likelihood and/or severity of potential consequences or hazards GVT can reduce safety risk. GVT's Accountable Executive and Chief Safety Officer review current methods of safety risk mitigation and establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards based on recommendations from the Safety Committee.

Prioritization of safety risk mitigations is based on the results of safety risk assessments. GVT's Chief Safety Officer tracks and updates safety risk mitigation information in the Safety Risk Register and makes the Register available to the Safety Committee during quarterly meetings and to GVT staff upon request. In the Safety Risk Register, GVT's Chief Safety Officer will also document any specific measures or activities, such as reviews, observations, or audits, that will be conducted to monitor the effectiveness of mitigations once implemented.

6. Safety Assurance

6.1. Safety Performance Monitoring and Measurement

Through a variety of activities, GVT's Safety Assurance Process monitors the system for compliance with procedures for operations and maintenance. Through our Safety Assurance process, GVT:

- Works with contractor and partners to ensure that operations and maintenance procedures are in place to control our safety risk;
- Assesses the effectiveness of safety risk mitigations to make sure the mitigations are appropriate and are implemented as intended;
- Investigates safety events to identify causal factors- investigation process shown in; and
- Analyzes information from safety reporting, including data about safety failures, defects, or conditions.

GVT and its contractor and partners may monitor compliance with this plan through a variety of activities including:

- Safety audits,
- Informal inspections,
- Review of camera footage to assess events
- Safety surveys,
- ESRP,
- Investigation of safety occurrences,
- Regular vehicle inspections and preventative maintenance.

Results from the above processes will be discussed at the quarterly Transit Safety Committee Meetings to determine if action needs to be taken. The Chief Safety Officer will enter any identified non-compliant or ineffective activities, including mitigations, back into the SRM process for reevaluation by the Safety Committee.

GVT monitors safety risk mitigations to determine if they have been implemented and are effective, appropriate, and working as intended. The Chief Safety Officer maintains a list of safety risk mitigations in the Safety Risk Register. The mechanism for monitoring safety risk mitigations varies depending on the mitigation.

The Chief Safety Officer establishes one or more mechanisms for monitoring safety risk mitigations as part of the mitigation implementation process and assigns monitoring activities to the appropriate Safety Manager. These monitoring mechanisms may include tracking a specific metric on daily, weekly, or monthly logs or reports; conducting job performance

observations; or other activities. The Chief Safety Officer will endeavor to make use of existing GVT processes and activities before assigning new information collection activities.

GVT's Chief Safety Officer and Transit Safety Committee review the performance of individual safety risk mitigations during quarterly Transit Safety Committee meetings, based on the reporting schedule determined for each mitigation, and determine if a specific safety risk mitigation is not implemented or performing as intended. If the mitigation is not implemented or performing as intended, the Transit Safety Committee will propose a course of action to modify the mitigation or take other action to manage the safety risk. The Chief Safety Officer will approve or modify this proposed course of action and oversee its execution.

GVT's Chief Safety Officer and Transit Safety Committee will also monitor GVT's operations on a large scale to identify mitigations that may be ineffective, inappropriate, or not implemented as intended by:

- Reviewing results from accident, incident, and occurrence investigations;
- Monitoring employee safety reporting;
- Reviewing results of internal safety audits and inspections; and
- Analyzing operational and safety data to identify emerging safety concerns.

The Chief Safety Officer works with the Transit Safety Committee to carry out and document all monitoring activities.

GVT maintains documented procedures to conduct safety investigations of major events (accidents, incidents, and occurrences, as defined by FTA) to find causal and contributing factors and review the existing mitigations in place at the time of the event. These procedures are found in Appendix E.

The Chief Safety Officer maintains all documentation of GVT's investigation forms, checklists, activities, and results. An investigation report is prepared and may be sent to the Transit Safety Committee for review.

The Chief Safety Officer will work with the appropriate Safety Manager to determine whether:

- The event was preventable or non-preventable;
- Personnel require discipline or retraining;
- The causal factor(s) indicate(s) that a safety hazard contributed to or was present during the event; and
- The event appears to involve underlying organizational causal factors beyond just individual employee behavior.

The Chief Safety Officer and Safety Managers routinely review safety data captured in employee safety reports, safety meeting minutes/notes, customer complaints, the ESRP, and other safety communication channels. When necessary, the Chief Safety Officer and Safety Committee ensure that the concerns are investigated or analyzed through GVT's SRM process.

The Chief Safety Officer and Safety Committee also review internal and external reviews, including audits and assessments, with findings concerning GVT's safety performance, compliance with operations and maintenance procedures, or the effectiveness of safety risk mitigations.

7. Safety Promotion

7.1. Competencies and Training

Each respective department including Operations contractor, City of Grand Junction Fleet, Mesa County Fleet and Mesa County Facilities, shall be responsible for providing comprehensive safety training to their employees including:

- Bus vehicle operators,
- Dispatchers,
- Utility Staff
- Mechanics
- Managers and supervisors,
- Agency Leadership and Executive Management,

Trainings conducted by each entity shall be documented and provided to the Chief Safety Officer.

The scope of the safety training, including annual refresher training, is appropriate to each employee's individual safety-related job responsibilities and their role in the SMS as determined by each entity. Safety Trainings are on-going and part of the monthly safety meetings. Safety topics are dependent on safety issues identified.

The following safety policies are attached:

- Appendix A- Mesa County Fleet Services Safety Policies and Procedures
- Appendix B- Mesa County Division of Transportation Safety Policy and Procedures Manual
- Appendix C- City of Grand Junction Safety Manual
- Appendix D- Transdev Safety Training Table of Contents

GVT's Chief Safety Officer and Safety Managers must complete FTA's SMS Awareness online training and an executive session on safety management.

7.2. Safety Communication

GVT's Chief Safety Officer and Safety Managers coordinate GVT's safety communication activities for the SMS. GVT's activities focus on the three categories of communication activity established in 49 CFR Part 673 (Part 673):

- *Communicating safety and safety performance information throughout the agency:* GVT communicates information on safety and safety performance in quarterly Transit Safety Committee meetings or other means, as needed, and Safety Managers will share information within their department through internal meetings, flyers, etc.

- *Communicating information on hazards and safety risks relevant to employees' roles and responsibilities throughout the agency:* Safety Managers will be responsible for communicating information on hazards and safety risks to employees within their department.

- *Informing employees of safety actions taken in response to reports submitted through the ESRP:* Safety Managers will inform employees of safety actions taken in response to reports submitted through the ESRP which may include handouts and flyers, safety talks, updates to bulletin boards, and one-on-one discussions between employees and supervisors.

8. Additional Information

8.1. SMS Documentation Retention

The Mesa County RTPO staff including the CSO will collect data from Mesa County, City of Grand Junction, and transit operator, Transdev. Required SMS documentation will be organized and retained in a secure RTPO drive for at least three years and available upon request to the FTA or other oversight agencies.

8.2. Supporting Documents

See the following for supporting documentation from Mesa County and City of Grand Junction Fleet:

Appendix A- Mesa County Fleet Services Safety Policies and Procedures
Appendix B- Mesa County Division of Transportation Safety Policy and Procedures Manual
Appendix C- City of Grand Junction Safety Manual
Appendix D- Transdev Safety Training Table of Contents
Appendix E- GVT Safety Event Investigation Processes
Appendix F- Resolution Adopting PTASP
Appendix G- TrAMS Certification

9. Definitions of Special Terms Used in the Safety Plan

GVT incorporates all of FTA's definitions that are in 49 CFR § 673.5 of the Public Transportation Agency Safety Plan regulation.

- **Accident-** An Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.
- **Accountable Executive**- A single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan, in accordance with 49 U.S.C. 5326.
- **Consequence** – An effect of a hazard involving injury, illness, death, or damage to GVT property or the environment.
- **Equivalent Authority**- An entity that carries out duties similar to that of a Board of Directors for a recipient or subrecipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.
- **Event**- Any Accident, Incident, or Occurrence that occurs: on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility, during a transit related maintenance activity, or involving a transit revenue or non-revenue vehicle.
- **Fatality**- A death due to collision (including suicides), derailment, fire, hazardous material spill, acts of God, system or personal security event (including suicides), or other safety event. Must be reported within 30 days of an event
- **Hazard**- Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.
- **Incident**- An event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.
- **Investigation**- The process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
- **Major Safety Event (National Transit Database (NTD))- An event that includes one or more of the following:**
    - A fatality confirmed within 30 days (including suicide)
    - An injury requiring transport away from the scene for medical attention for one or more persons (partial exception in the case of Other Safety Events)

  - Estimated property damage equal to or exceeding $25,000
  - An evacuation for life safety reasons.
  - Collisions involving transit roadway revenue vehicles that require towing away of a transit roadway vehicle or other non-transit roadway vehicle
  - Any event that cannot be addressed within 14 calendar days using internal resources
  - Events include: Collisions, Fires, Hazardous Material Spills (requires specialized clean-up), Acts of God, system security, personal security, Other Safety Events (two injuries and/or another threshold)
  - Any event that is entered into the Safety Risk Register resources
  - Included in Safety Performance Target

- **Major Mechanical Failure (NTD)-** A failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns. Used in system reliability performance measure.
- **Minor Safety Event (NTD)-** A less severe events that are NOT a result of a collision, evacuation, security event, hazmat spill, or Act of God; and non-major fires. These are events that can be addressed with internal resources within 14 calendar days using internal resources.
- **National Public Transportation Safety Plan**- The plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- **Occurrence**- An Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.
- **Operator**- A provider of public transportation as defined under 49 U.S.C. 5302.
- **Performance measure**- An expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- **Performance target**- A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the FTA.
- **Public Transportation Agency Safety Plan (or Agency Safety Plan)**- The documented comprehensive Agency Safety Plan for a transit agency that is required by 49 U.S.C. 5329 and Part 673.
- **Risk**- The composite of predicted severity and likelihood of the potential effect of a hazard.
- **Risk Assessment**- The methods or processes to assess the safety risks associated with identified safety hazards.
- **Risk mitigation**- The methods or processes to identify mitigations or strategies necessary as a result of safety risk assessment.
- **Safety Assurance**- Processes within a transit agency's Safety Management System that function to ensure the implementation and effectiveness of safety risk mitigation, and to

ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.

- **Safety Event (NTD)-** Other Safety Events include but are not limited to slips, trips, falls, smoke, power failure, maintenance-related issues, electric shock, or runaway train events. To be reported as a major event, these events must either meet the fatality, evacuation, or property damage threshold or result in two or more injured persons. Other Safety Events that cause only one person to be immediately transported from the scene for medical attention, and that do not trigger any other reporting threshold, are reported on the Non-Major Monthly Summary Report form. The FTA includes Other Safety Events that occur in a transit maintenance facility and meet a reporting threshold but continues to exclude occupational safety events occurring in administrative buildings.
- **Safety Management Policy**- A transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.
- **Safety Management System**- The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- **Safety performance target**- A performance target related to safety management activities.
- **Safety Promotion**- A combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
- **Safety risk assessment**- The formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.
- **Safety Risk Management**- A process within a transit agency's Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- **Serious injury**- Any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date when the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- **System Reliability-** Vehicle Revenue Miles/Major Mechanical Failure
- **Transit agency-** An operator of a public transportation system.
- **Transit Asset Management (TAM) Plan**- The strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR Part 625.

10. List of Acronyms Used in the Safety Plan

Acronym	Word or Phase
ADA	American's with Disabilities Act of 1990
ASP	Agency Safety Plan (also referred to as a PTASP in Part 673)
CDOT	Colorado Department of Transportation
CFR	Code of Federal Regulations
CT	County Transit
ESRP	Employee Safety Reporting Program
FTA	Federal Transit Administration
GVRTC	Grand Valley Regional Transportation Committee
MPO	Metropolitan Planning Organization
NTD	National Transit Database
Part 673	49 CFR Part 673 (Public Transportation Agency Safety Plan)
RTPO	Regional Transportation Planning Office
SMS	Safety Management System
SRM	Safety Risk Management
U.S.C.	United States Code
VRM	Vehicle Revenue Miles

Appendix A-Mesa County Fleet Services Safety Policies and Procedures

Fleet Services Safety Policies and Procedures

These Policies and Procedures are guidelines specific to the various job related activities that Fleet Services personnel may encounter on a day-to-day basis. The stated Policies and Procedures, although not all inclusive, address specific issues that will promote the safety of the employees and minimize liability, lost time and monetary losses to Mesa County.

No job is so urgent that we cannot take time to perform our work safely. Compliance with established safety policies and standards is a primary job requirement and is considered a condition of continued employment. *Violation of established safety policies/Procedures and standards may be a cause or disciplinary action.*

Each employee will be given a copy of the Policies and Procedures and required to read and study the content and then sign off acknowledging their awareness and individual responsibility to safety.

I. General Safety: Each employee, regardless of position, will be responsible for his or her immediate work area. Work environments are to be kept clean and uncluttered. Upon completion of an assignment, the immediate work area is to be left clean and organized. Leftover materials or discarded parts will be placed in proper places. All air hoses, drop lights, electrical cords, tools, high lift adapters, shop rags, aerosol products and miscellaneous items are to be picked up and placed in designated areas at the end of each shift.

The following tasks are the responsibility of shop personnel individuals in general and should addressed appropriately to maintain and promote a safe/healthy work environment. Dispose of trash, clean areas daily, maintain used oil, filter disposal area, lunch/break areas, library/shop manuals, tool room, and wash areas. Personnel assigned to these tasks shall complete them by the end of their shifts each day.

II. Ventilation and Exhaust Systems: The repair shop is equipped with a vehicle exhaust system with hoses and adapters, which will fit various tail pipe or exhaust stacks of vehicles and equipment. The exhaust system is to be used any time an engine is running in the shop for any reason other than vehicle shop entry and/or exit.

IV. Welding Area: When welding or cutting metal materials in the welding shop, ventilation is essential. There is an exhaust system located on the wall, which must be used to discharge welding fumes as much as possible.

V. Welding and Machine Work/Grinders: When performing any type of welding or metal cutting procedure, carefully inspect surrounding areas to make sure there are no flammable materials in close proximity that may have the potential of exploding or igniting. Ensure that there is a fire extinguisher close by and fully charged.

Proper welding helmets, goggles and/or face shields must be worn at all times when welding, cutting or grinding metal materials. Extreme caution must be taken when performing welding and grinding activities around others who may be in the shop area. Use fireproof screen if necessary to protect others from welding flashes and grinding sparks. Always wear safety glasses or face shields and proper hearing protection when chipping welding slag.

Always wear protective heat insulated welding gloves when performing arc, wire feed, mig/tig or gas welding procedures. Always check your personal clothing and make sure cuffs and collars are fully buttoned and that pant or coverall pant legs are not frayed at the bottoms so they will not catch fire from sparks.

Oxygen, acetylene, argon or other compressed gases must be capped and securely stored when not in use or while in transport if not in an enclosed cabinet with secure bottle racks.

VI. Bench Grinders and Side Grinders: When operating any type of grinder, safety glasses and/or a full-face shield must be worn at all times. Before use, make sure that tool rests are properly adjusted and that grinding wheels are in good condition. Check clothing to make sure shirt or coverall cuffs are buttoned and secured and that shirt tails are tucked in preventing clothing from being caught in high speed grinders. Finger rings should also be removed as well as neck jewelry.

VII. Shop Drill Press: When operating the drill press, safety glasses must worn at all times. Shirtsleeves must be buttoned at the cuffs, shirttails must be tucked in, shirt fronts or coveralls must be fully zipped or buttoned to prevent loose clothing from becoming tangled in high speed rotating arbors, chucks, tools and bits. Finger rings should be removed as well as neck jewelry.

VIII. Flammable Materials and Chemicals: The shop and part's room have fireproof cabinets to store flammable materials. When not in use and at the end of each work shift, individual employees are to inspect their work areas and make sure flammable materials are secured in the fireproof cabinets.

IX. Tire Repair: When repairing tires the following practices must be followed. Tires must be fully deflated before dismounting. Carefully check rims, rings and lock rings for corrosion and damage before assembly. If rust corrosion or other damage is found on rims, rings and/or lock rings they must be wire brushed until clean or discarded if corrosion or damage is too severe for continued use. Tire

beads should be lubricated with mounting lubrication before installing tires on rims. Tires should be only partially inflated until tire beads are seated against sealing area on rims. When the tire bead has seated, inflate tire to proper inflation pressures.

X. Vehicle/Equipment Wash Area: Before washing a vehicle in the wash bay area make sure that wash bay floor is unobstructed and that floor grating is in place. Clean up any grease spots, which could cause loss of footing. Be cautious while washing the vehicle, as soap and water can make the floor surface slippery. Clean up the area upon completion of wash/steam cleaning assignment. Use rubber gloves when using steam cleaner/high and pressure washer to prevent potential burns from hot water and steam. Place cloths and rags used to clean windows and interior trim in trash can or rag bin. Place all cleaning materials back in storage cabinet upon completion of job.

XI. Driving Vehicles/Heavy Trucks: When operating a Mesa County vehicle the driver/operator must check the vehicle to make sure that engine and power train fluids are at proper levels, tires are inflated and that all lighting works. When operating a vehicle with a "Gross Vehicle Weight of 26,001 pounds or more," a pre/post trip inspection form must be completed, signed, and dated acknowledging that the unit is safe to operate as mandated by the "Federal Department of Transportation".

Driver/operators and passengers in Mesa County vehicles must wear seat belts at all times. Mesa County has a no smoking policy in vehicles that must be adhered to. Drivers/operators are to obey all traffic laws and drive defensively and courteously at all times. Vehicle use policies are also addressed in "Chapter 12 of Mesa County's Personnel Manual."

CDL "Commercial Drivers License's" holders must carry a valid health card with them while driving a vehicle with a gross vehicle weight exceeding 26,001 pounds. All CDL holders will be subject to drug and alcohol testing. The drug and alcohol policy is further defined in "Chapter 14 of Mesa County's Personnel Manual".

XII. Shop Vehicle High-Lifts: The shop vehicle high-lifts are rated at 10,000-50,000 pounds lifting capacity. Carefully check the lift you are using to make sure the vehicle weight does not exceed the maximum lifting capacity. Check to make sure latch mechanisms are securely locked in place when the vehicle is at the preferred lifted height. Always check placement of lift adapters to frame lift points to make sure they are even and centered.

When the hoist if not in use, swing out arms are to be retracted and parked parallel to the hoist frame. All lift adapters are to be placed on hoist pedestal platforms when not in use. Check system hydraulic pump/motor and lines for

damage or leakage and report any leakage or damage. Lifts will be inspected annually by a licensed lift inspector and safety certified.

XIII. Lifting, Moving and Securing Parts and Materials for Transport: When lifting heavy items use the shop crane/hoist, fork lift, or service truck auto cranes when possible. Ask for assistance if needed when lifting or moving heavy objects manually. The shop has a two-wheeled manual dolly for use in transporting components from one area to another.

XIV. Material Safety Data File (MSDS): The shop has a "Material Safety Data File" located in the shop office upper level where the vehicle reference library area is located. The Material Data Sheets list products and chemicals utilized in the shop environment. Each sheet contains information specific to the chemical make-up of products, safety precautions and protective gear required for safe usage and handling of materials. The information sheets also provide product names, manufacturer contacts and emergency medical information. The Material Safety Data File is accessible to all personnel twenty-four hours a day and seven days a week.

XV. First Aid Kit and Eye Wash Stations: There are two master first aid kits located in each shop wash area equipped with first aid supplies. Part's room personnel and the Fleet Safety Representative will ensure the first aid kits are stocked and replenished. Two eyewash stations is also located in the shop wash are.

XVI. Fire Extinguishers: Several fire extinguishers are located in strategic areas within the shop facility and identified with signs, which are visible from a distance. When a fire extinguisher is discharged, immediately inform shop supervision or parts personnel so that the extinguisher can be re-charged and inspected. Fire extinguishers will be checked for proper charge and certified annually. Shop service trucks are also equipped with fire extinguishers and must also be checked and refilled in the event of a discharge.

XVII. Shop Electrical/Breaker Box Panels: The main electrical shop service and breaker panels must remain un-obstructed and easily accessible at all times. These defined areas must remain open and accessible at all times in the event that power would need to be disconnected quickly.

Gasoline filters are to be discarded in separate disposal drums identified as gasoline filter recycling containers. Gasoline cannot be mixed with waste oils. Used brake fluid and paint wastes must also be disposed of in separate containers which are labeled for specific waste types.

Soiled cloth shop rags are to be placed in container labeled shop rag disposal for cleaning. Do not place paper rags in with cloth rags. Rags which are heavily saturated with fuel, solvents, reducers or thinners should not be placed in a waste

can with other materials as this could cause a spontaneous combustion. All waste cans are to be covered when not in use.

XVIII. Maintenance and Repair Activities: When performing maintenance and repair to vehicles and equipment always follow guidelines found in OEM "Original Equipment Manufacturer's" operator's and maintenance manuals. Always use safety props and latches when working under truck dump bodies. Never work beneath a raised dump body without making sure that it is secured and locked in the raised position. Always lock or block articulated joints in place before working on or around an articulation point. Always block and support raised implements such as loader booms, backhoe booms, forklift masts, dozer blades, motor grader blades and rippers etc. before performing maintenance and/or repairs. Always remove keys, de-energize units and utilize lock-out/tag-out method to disable the vehicle from being started until you have completed repairs and/or maintenance.

When using jack stands always make sure that stands are weight rated to the vehicle or piece of equipment being supported. Carefully check stands to make sure locking latches are not damaged and are working properly. Check the structure of the jack stand to make sure it is not bent or damaged. Never use a damaged jack stand.

Always set the park brake or chock wheels when performing service work that may cause the vehicle to roll unexpectedly. Disconnect vehicle power supply when working on electrical components that could cause a shock, burn or component damage if shorted to ground.

When performing brake work wear a dust mask and do not blow brake dust residue with compressed air from brake and drum/rotor surfaces. If cleaning of brake residue is required, use the shop brake wet wash collector to prevent brake particles from being discharged and circulated in the atmosphere.

Always be aware of engine and power-train components that may be rotating when operating the component is required for diagnostic purposes. Always be extremely careful of moving parts in relationship to fingers, hands, legs, feet, etc. to prevent entanglement and possible serious injuries or possible fatalities.

When working in the field carefully survey surrounding conditions and make adjustments such as moving equipment to level ground or other actions when possible. Ask for assistance if heavy or awkward lifting or positioning is required to perform the recommended repair. Each service truck is equipped with an electric auto crane to lift and place heavy items. Check condition of hoist cable, pulleys, hooks, boom and other components of the auto crane before operating. Never walk directly under any hoisted item, always work a safe distance away and operate crane controls with cable remote.

XIX. Fork Lift and Hoist Equipment: Before operating a forklift or any other type of lifting equipment check to make sure that the object being lifted does not exceed the weight lifting capacity of the piece of equipment being utilized. Always make sure that the forklift or hoisting equipment is in proper working condition. Check all operating and safety devices of lifting equipment before use. Report any safety or operational problems to supervisory personnel and tag the unit out-of-service until the defects have been corrected.

Always check the condition of straps or chains before attaching or lifting an object. If chains, lifting straps, or brackets are frayed or damaged they should be repaired or discarded. Always make sure that chains, straps, or other lifting devices are capable of lifting and supporting the object being lifted.

XX. Power Tools: Always check condition of power tools before use. Make sure power cords are not cut, frayed, or damaged before tools are put into service. Carefully check power tool cases, handles, grips, triggers and trigger locks to make sure they are not damaged and that they function properly. When using pneumatic power tools check condition of air supply hoses and connectors. Air hoses are not be used if there is evidence of cuts, tears or separations. Refer to operators information found in operator's/owner manuals or notify supervisory personnel if you are unsure about the safe operation of a specific power tool.

XXI. Provided Safety Equipment: Mesa County will provide employees with required safety equipment to perform their jobs safely. The part's department stocks safety glasses, hearing protection, reflective vests, face shields, several types of gloves, respirators, dust masks, welding hood lenses etc. It is the responsibility of the employee to use and care for these items. When a piece of safety equipment is worn out or damaged, part's department personnel will issue replacement equipment.

XXII. Hearing Protection: Ear protection in the form of ear muffs or approved ear plugs must be worn on all high noise level jobs, or as directed by a supervisor.

XXIII. Field Work: When employees are required to work away from the shop, they shall be aware of conditions that are more critical in the field. Always be aware of traffic while working along roadways. Always pull service trucks as far off roadway as possible and activate vehicle emergency flashers and strobe lights to warn traffic. Place emergency triangles along roadway if needed to further warn oncoming traffic of activity. Wear reflective, highly visible vests when working along roadways and/or shoulders.

Field-work can pose more safety issues since individuals will routinely be working alone in an environment that is less controlled and monitored. Always maintain situational awareness and survey the surrounding conditions of terrain, weather, traffic, power lines, etc. before beginning work. Be sure to communicate any safety hazards to your supervisor and refuse risk if in a hazardous situation.

XXIV. Lock Out/Tag Out: When work is being performed on mobile or stationary equipment, proper lock-out/tag out procedures must be taken to prevent accidental starting and moving of equipment.

The following minimum procedures must be followed.

1. The power source must be de-energized, tagged, and properly locked. In the event that a lockout cannot be utilized, because of design or circumstances, an equally comprehensive tag-out procedure must be performed.

2. All Potentially hazardous stored or residual energy must be relieved, disconnected, restrained or otherwise rendered safe to work with or around.

3. An authorized person shall verify isolation and de-energization of a system has taken place before maintenance and/or repair work is begun.

4. Equipment is not to be re-energized and put back into service until all lock-out devices and tags have been removed and rendered safe for operation.

Conclusion: It is the responsibility of the employee to maintain, wear and utilize the proper safety equipment for the environment they are working in. If an employee feels that he/she does not have proper protective equipment (PPE) for the environment they are working in, or for a specific chemical or product they may have contact with, they need to notify supervisory personnel to communicate the hazard.

By signing this document, I acknowledge that I understand my responsibility to safety, not only to myself, but also to those around me. I will follow the policies and guidelines as established in these policies and procedures. I will take a pro-active approach to safety in my day-to-day job activities.

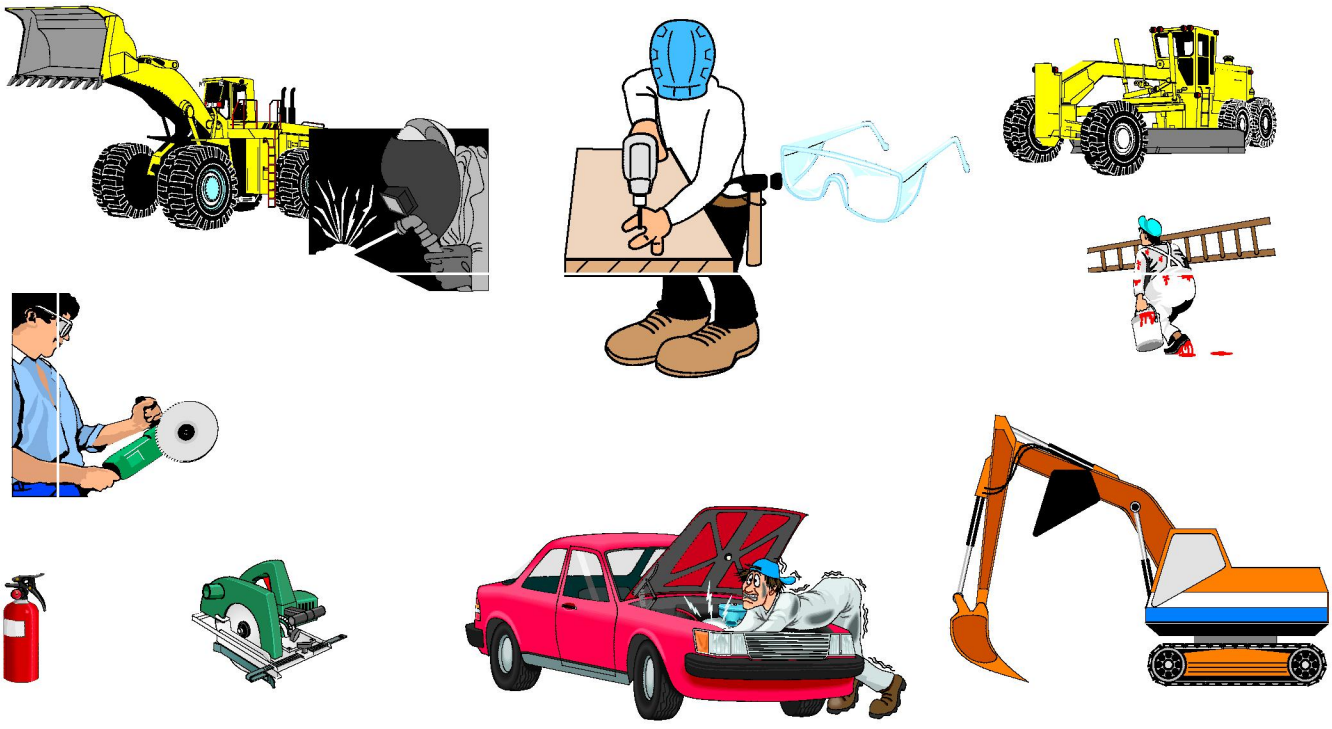
Employee Signature:_____Date:_____

The only other PPE item issued by Fleet is a $130.00 boot allowance used towards the purchase of steel toe boots only.

Division of Transportation
Safety Policy and Procedures Manual

Adopted by the Division of Transportation Safety Committee in cooperation with the Fleet Maintenance Section, November 2, 1999

Revised November 2004



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MESA COUNTY SAFETY POLICY

Policy Statement:

Mesa County recognizes the importance of safety and health on the job for the well being of the individual worker, the protection of the equipment and property, and overall productivity on the job.

We are committed to providing a safe work place for employees, and in turn, require that established standards and policies be adhered to.

We also recognize the jurisdiction of the various Federal and State agencies that have authority in the realm of workers health and safety and fully intend to comply with the mandated standards of these agencies.

The Mesa County Division of Transportation (MCDOT), Fleet Management, and its employees will give *safety* **Top Priority** at all times. No job is so important and no service is so urgent that we cannot take time to perform our work safely. Mesa County considers no phase of our work or operation as being of greater importance than *Accident Prevention.*

This policy is extended to and includes all contractors, subcontractors, vendors and visitors of the County while present on a County Project.

Compliance with established safety policies and standards is a primary job requirement and is considered to be a condition of continued employment.

Violation of safety policies and standards may be cause for disciplinary action.

!! Everyone is accountable for safety!!

A conscientious effort will be made to provide a safe work place for all employees. It is a job requirement to observe safety policies and to perform designated tasks according to prescribed methods giving diligence to Safety Standards.

Primary consideration must be given to safe work practices in order to prevent injury to the general public, fellow workers, County property as well as to oneself.

It is the responsibility of the employee to maintain, wear and utilize the proper safety equipment for the environment they are working in. If an employee feels that he/she does not have adequate protective equipment for the environment they are working in, or for a specific chemical or product they may have contact with, they need to notify their supervisor, and together resolve the problem.

GENERAL RULES OF SAFETY

Purpose:
These policies have been implemented for your protection. Please use issued equipment and protect yourself and your fellow employee from injury.

Scope:
All Division of Transportation employees shall comply with the requirements set forth in this policy. Administrative staff is exempt from wearing high visibility shirts or vests, but shall wear safety equipment when exposed to any of the conditions outlined in this policy.

Responsibility:
Employees not dressed according to these policies will be sent to change clothing on their own time. Failure to adhere to the policies outlined will result in disciplinary action up to and including termination. Failure to properly wear or use personal protective equipment may reduce compensation, including injury leave. It shall be the responsibility of each employee to dress in clothing that is in good repair and free of tears that expose any part of the body. Other related County policies or requirements still apply.

All employees must follow safe practices by demonstrating the practice of safety and give all possible assistance to maintaining safe operations. Unsafe conditions or practices must be reported promptly to your supervisor.

I. Personal Protective Equipment.

A. Appropriate Dress:

1. Each Division employee is expected to come to work prepared for the day's work activities and dressed for the occasion. Wear clothing suitable for weather and work conditions. As a minimum: long pants, a short sleeved shirt and sturdy shoes or boots are required. Shorts, tank-tops and sandals are not considered to be appropriate apparel. In addition, each employee is expected to wear proper safety gear such as high-visibility clothing while working in road right-of-way, high-visibility head-wear with the Division of Transportation's identifying emblem.
2. Loose, baggy clothing must not be worn while working on or around moving machinery.
3. The wearing of jewelry such as rings, earrings, and long necklaces is discouraged.
4. Use gloves when handling rough-edged or abrasive materials, or when the work subjects hands to laceration, puncturing or burns, gloves with leather palms or a reasonable substitute must be used. Use rubber or neoprene gloves when handling caustic materials such as cleaning agents, solvents, wet cement, or when working in water.

B. Eye/Face Protection:

1. When performing work that may subject eyes or face to injury from physical or chemical

agents, appropriate and adequate protection is required. The individual performing work that poses a hazard to eyes or face is responsible for obtaining and using the appropriate protection.
2. MCDOT will provide employees with safety glasses, safety goggles or full face shield upon request from their supervisor.

C. Hearing Protection:

1. Ear protection in the form of ear muffs or approved ear plugs must be worn on all high noise level jobs, or as directed by supervisor. In the event of exposure to noise levels that are suspect, hearing protection shall be used until an investigation of exposure confirms or disproves need for wearing protection.
2. MCDOT will provide employees with approved ear plugs or ear muffs upon request from their supervisor.

D. Respirator Protection:

1. Appropriate, approved respiratory protection must be used when exposure to dust, fumes, gases or other harmful atmospheres could potentially pose a health hazard.
2. Effective respiratory protection depends on a tight fit between the apparatus and face. In order to attain an adequate fit, employees that are subject to wearing respirators may be required to be clean shaven to a point to facilitate a proper fit. Fit testing will be performed by the individual and/or a supervisor to verify adequacy of respirator.
3. Employees required to use respiratory protection must be trained in the use and care of respirators.
4. Appropriate respiratory protection devises will be provided by MCDOT.

E. Shoes/Boots:

1. Adequate footwear will be required at all times for any job that presents a potential hazard to the workers feet. Safety shoes or steel toed shoes/boots may be required. As a minimum, sturdy leather shoes or boots must be worn for all work performed outside. Other suitable footwear may be worn as approved by the supervisor excluding sandals.

F. Hard Hats:

1. An ANSI approved hard hat is required to be worn on the job whenever there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shocks and burns.
2. A hard hat must be worn when entering any gravel pit, Mesa County owned or privately owned.
3. This policy is extended to and includes all contractors, subcontractors, vendors and visitors of the County while present on a County Project referenced in these policies.

G. Seat Belts:
Mesa County is concerned with the well being and safety of its employees during the operation of mobile equipment, whether on-road or off-road, as well as complying with various

regulatory agency requirements.

1. Mobile equipment, including on-road and off-road vehicles, must be supplied with adequate operable seat belts. The only exceptions to this requirement are those types of construction equipment not provided with an approved ROPS (roll over protection structure).

2. Employees operating a vehicle that is required to be supplied with a seat belt shall not operate that vehicle until properly restrained with the seat belt. All outboard front seat passengers must be properly restrained while the vehicle is being operated.

3. A conscientious effort must be made to maintain the seat belt assembly in an acceptable condition. The vehicle operator must report broken or less than acceptable assemblies to the supervisor. All passengers must be properly restrained while the vehicle is being operated.

H. Confined Space Entry:

A confined space is any work area that has a restricted entrance and exit, it is not designed for extended occupancy, has little or no ventilation, or may contain a hazardous atmosphere. Employees are not to enter a confined space until the environment within the confined space is determined to be safe by a competent person. When a confined space is identified to exist, appropriate measures must be taken to provide for workers' safety before the worker is permitted to enter.

I. Lock Out/Tag Out:

1. When work is being performed on mobile or stationary equipment, proper lock-out and tag-out procedures must be taken to prevent accidental starting of the equipment.

2. The power source must be de-energized and locked out with a personal lock for each individual performing work on the unit.

3. In the event that a lockout can't be utilized, because of design or circumstance, an equally comprehensive Tag-out procedure shall be performed.

4. All Potentially hazardous stored or residual energy must be relieved, disconnected, restrained or otherwise rendered safe.

5. An authorized person shall verify isolation and de-energization before servicing or maintenance work is started.

6. Equipment is not to be re-energized until all locks and tags are removed and all participants are accounted for.

II. Use of Equipment and Tools.

A. Tool Safety:

1. Always check condition of power tools before use. Broken or damaged tools must be replaced. Use the correct tool for the job. Assure that the tool is firmly engaged to prevent slips. Be aware of, and avoid pinch points. Safety devices on any power tools are not to be altered or tampered with. Don't drop or throw portable tools. Never carry tools by the cord, or yank the cord from the receptacle. Make sure that power cords are not cut, frayed, or otherwise damaged before tools are put into service. Carefully check power tool cases, handles, grips, triggers and trigger locks to make sure they are not damaged and that they function properly. When using pneumatic power tools check condition of air supply hoses and connectors. Air hoses are not to be used if there is evidence of cuts, bruises or separations. Refer to operators information found in operator's/owner manuals or notify supervisory personnel if you are unsure about the safe operation of a power tool.

B. Bench Grinders and Side Grinders:

1. When operating any type of grinder, safety glasses or a full face shield must be worn at all times. Before use, make sure that tool rests are properly adjusted and that grinding wheels are in good condition. Check clothing to make sure shirt or coverall cuffs are buttoned and secured and that shirt tails are tucked in preventing clothing from being caught in high speed grinders. Finger rings should also be removed.

C. Mechanical Guarding:

1. Adequate guards must be provided and maintained for all equipment. Altering or removal of safety guards while using tools or machines is a violation of these safety policies.

D. Welding:

1. When performing any type of welding or metal cutting procedure, carefully police surrounding areas to make sure there are no flammable materials in close proximity that may have the potential of exploding or igniting. Make sure that there is a fire extinguisher close by and fully charged. Proper welding helmets, goggles and/or face shields must be worn at all times when welding, cutting or grinding. Extreme caution is to be taken when performing welding and grinding activities around others who may be near. Use a fireproof screen if necessary to protect others from welding flashes and grinding sparks. Always wear safety glasses or face shields when chipping welding slag.

2. Always wear protective heat insulated welding gloves when performing arc, wire feed, mig/tig or gas welding procedures. Always check your personal clothing and make sure cuffs and collars are fully buttoned and that pant or coverall pant legs are not frayed at the bottoms so they will not catch fire from sparks.

3. Oxygen, acetylene, argon or other compressed gases must be capped and secured in an upright position while being stored or transported. Acetylene at 15 pounds of pressure is highly explosive. Check cutting torch regulator gage. The gage should read between 5 and 10 pounds of pressure depending on the tip size being used.

5. The welding area must be ventilated in such a way as to draw fumes away from the person

doing the welding and anyone in the immediate area.

E. Lifting Safety/Back Safety:

1) Learn to lift properly. Bend knees, keep back erect and let your legs do the lifting. Hold the load close to you. Get help for heavy loads. Use proper lifting equipment.

F. Safety Belt/Life Line:

1. Safety belts shall be worn and tied off when working on any unguarded platform or structure where there is a chance of falling six feet or more.

G. Ladder Usage:

Always assure that the ladder is in good condition and sized properly for the job. Keep both hands free when climbing a ladder and make sure the base of the ladder is firmly planted. Use safety belts and tie offs if necessary.

H. Mobile Equipment:

1. A pre-trip and post-trip inspection must be conducted for all on-highway equipment. Written inspections must be done according to federal and Colorado DOT.

2. If repairs or adjustments are required only authorized adequately trained individuals are permitted to make repairs or adjustments.

3. People who are not County employees, volunteers performing County business, or clients of the County are prohibited from operating or riding in County owned vehicles, including friends or family members, and hitchhikers.

4. Only authorized adequately trained individuals will be permitted to operate mobile equipment. Equipment will be used only in the manner for which it was intended.

I. Housekeeping/Fire Prevention:

1. Caution must be taken in order to maintain a clean and safe work place. Items must be properly stored. Refuse must be disposed, of in a timely, proper fashion. Work areas are not to become cluttered, and must be kept clean as possible.

2. Spills must be promptly cleaned up.

3. Combustible, flammable and hazardous materials must be properly stored. Gasoline is not to be used as a cleaning agent. Only use properly approved cleaning substances in the method for which they were intended.

4. Adequate fire protection devices must be maintained at all work stations and in all vehicles.

III. Driving Vehicles / Heavy Trucks:

1. When operating a Mesa County vehicle the driver/operator must check the vehicle to make sure that engine and power train fluids are at proper levels, tires are properly inflated and that all lighting works. When operating a vehicle with a "Gross Vehicle Weight of 26,001 pounds" a pre/post trip inspection form must be completed, signed, and dated acknowledging that the unit is safe to operate as mandated by the "Federal Department of Transportation".

2. Driver/operators and passengers in Mesa County vehicles must wear seat belts at all times. Mesa County has a no smoking policy in vehicles that must be adhered to. Drivers/operators are to obey all traffic laws and drive defensively and courteously at all times. Vehicle use policies are also addressed in "Chapter 12 of Mesa County's Personnel Manual."

3. Holders of "Federal Commercial Drivers License's" must carry a valid health card with them while driving a vehicle with a gross vehicle weight of 26,001 pounds. All commercial drivers' license holders will be subject to drug and alcohol testing. The drug and alcohol policy is further defined in "Chapter 14 of Mesa County's Personnel Manual".

4. All loads must be properly secured during transit. ANSI and/or DOT approved tie-down straps, cables or chains must be used. Always check the condition of straps or chains before use. Tension adjusters such as chain boomers should be used to firmly hold the load in place. Vehicles must tarp their loads if they are subject to blowing, sifting, dropping, leaking or otherwise escaping from the vehicle. A vehicle is allowed to drive up to two miles without tarping when transporting materials one inch in diameter or less. Hot asphalt, including asphalt patching material, wet concrete, and other materials not susceptible to blowing, are not considered aggregate material and are therefore not subject to the tarping requirements.

IV. Maintenance and Minor Repair Activities:

1. When performing maintenance and/or minor repair to vehicles and equipment always follow guidelines found in "Original Equipment Manufacturer's" operator's and maintenance manuals. Always use safety props and latches when working under truck dump bodies. Never work beneath a raised dump body without making sure that it is secured and locked in the raised position. Always lock or block articulated joints in place before working on or around an articulation point. Always block and support raised implements such as loader booms, backhoe booms, forklift masts, dozer blades, motor grader blades and rippers etc. before performing maintenance and /or repairs. Never walk directly under any hoisted item. Always remove the keys or by some other method disable the vehicle from being started until you have completed the service work. (**See Section I.** I. Lock Out/Tag Out of these policies).

2. When using jacks and/or jack stands always make sure that they are weight rated to the

vehicle or piece of equipment being supported. Carefully check stands to make sure locking latches are not damaged and are working properly. Check the structure of the jack stand to make sure it is not bent or damaged. Never use a damaged jack stand.

3. Always set the park brake or chock wheels when performing service work that may cause the vehicle to roll unexpectedly. Disconnect vehicle power supply when working on electrical components that could cause a shock, burn or component damage if shorted to ground.

4. Always be extremely careful of moving parts in relationship to fingers, arms, legs, feet, etc. to prevent entanglement and possible serious injuries or even possible fatalities.

V. Fork Lift and Hoist Equipment:

1. Before operating a forklift or any other type of lifting equipment check to make sure that the object being hoisted is within the weight lifting capabilities of the piece of equipment being utilized. Always make sure that the forklift or hoisting equipment is in good working condition. Check all operating and safety devises of lifting equipment before use. Report any safety or operational problems to supervisory personnel and do not operate until the defects have been corrected.

2. Always check the condition of straps or chains before attaching or lifting an object. If chains, lifting straps or brackets are frayed or otherwise damaged they should be repaired or discarded. Always make sure that chains, straps, or other lifting devices are capable of lifting and supporting the object being lifted.

Employee Training

It is the policy of Mesa County that it's employees shall be adequately trained to perform the tasks to which they are assigned.

Workers shall have demonstrated ability and aptitude to perform a given job and shall be trained in the job to a minimum proficiency level before assignment to the position can occur.

Training for a position will be based upon Safety and Efficiency, and will require that the candidate for the position be able to perform the task in a manner that is considered to be safe to the candidate, other workers, the general public, property and equipment, and be able to do so at an acceptable production rate.

Regular Safety Training will be conducted in order to keep employees informed on safety issues, and to maintain a safety-conscious work force.

A pre-start safety meeting will be held for certain designated large projects.

As a minimum, all employees shall be required to attend a quarterly safety training session.

Workers that have satisfactorily completed the training program for a specific task or position will then be "certified" for that position as having met the minimum proficiency standards.

A. Supervisor/Foreman Responsibilities

1. Supervisory personnel have the ultimate responsibility to monitor and enforce compliance with established Safety Standards and Policies.
2. The responsibilities of Supervisors include, but are not limited to:
   a. Assure that safe working procedures are incorporated into normal job responsibilities.
   b. Assure use of proper safety equipment and procedures.
   c. Look for and correct unsafe acts and conditions.
   d. Assure that workers are adequately trained and competent.
   e. Assure that all tools and equipment are properly maintained and are used in an appropriate manner. All safety-related guards and controls must be maintained and in place.
   f. Issue reprimands for safety violations.

3. Report all accidents and injuries to Personnel Office immediately and submit an Accident/injury Report. Please see Mesa County's "Guide to Reporting Claims" February ,19, 1998

B. Employee's Responsibilities

1. It is the responsibility of every employee to make "Safety" part of your normal duties. Ultimate success of a safety program depends on everyone doing his or her part to provide and maintain a safe work place.

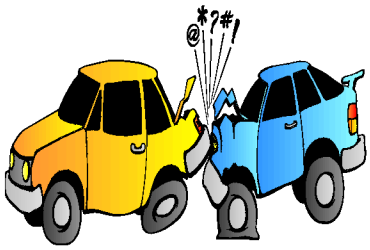
2. The responsibilities of every employee include, but are not limited to:
   a. Know the safety policies and standards for your job and make a commitment to comply for the benefit of everyone on the job.
   b. If an accident occurs involving an on-highway vehicle, the appropriate law enforcement agency shall be notified. Do not leave the scene of the accident until clearance is received from the law enforcement agency to do so.
   c. Report any unsafe acts or conditions to your supervisor. If the unsafe act or condition can be easily corrected, DO IT!
   d. Attend safety meetings with zeal to make Mesa County a safe place to work.
   e. Report All accidents or injuries to your supervisor immediately.
   f. Submit a written Report of Injury for all work-related injuries or illnesses to the office within 24 hours of the incident.
   g. Offer suggestions to improve safety at the work place.
   h. Observe all safety policies and standards whether written, verbal, or common sense to the best of your ability.
   i. Refrain from "horseplay" or other behavior that could cause injury or accident.
   j. Failure to report any accidents or incidents the day of occurrence may result in discipline action.

Reporting Accidents: If you are involved in an accident involving vehicles, property damage and/or bodily injury Please see **"Mesa County Guide To Reporting Claims."** An outline and check list of procedures are described below:

Automobile Liability

When a vehicle is involved in an accident involving another party, please use the check list provided.

By agreement between Fleet Management and Risk Management, vehicle damage will not be repaired until reports have been supplied to Risk Management.



Check List

_ Notify the law enforcement office which has jurisdiction.

_ Notify Fleet Management of the incident as soon as possible at 244-1820.

_ Notify Risk Management of the incident as soon as possible at 244-1868.

_ Have the employee in charge of the vehicle complete a Vehicle Accident / Incident Report. *This report will open both the auto liability claim and auto physical damage claim*.

_ Be sure the Supervisor reviews the report and comments in the Director's and Supervisor's Accident Review area.

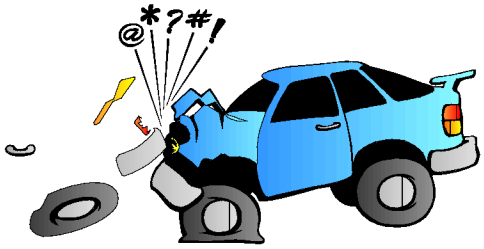
_ Send the Vehicle Accident/Incident Report, and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing.

_ If the employee was injured in the Accident/Incident, turn to the Workers' Compensation section of this booklet.

Automobile Physical Damage

Please use the following checklist when **only a County vehicle** is damaged and no third party's vehicle or property is involved.

By agreement between Fleet Management and Risk Management, vehicle damage will not be repaired until reports have been supplied to Risk Management.



Check List

_ Notify the law enforcement office which has jurisdiction.

_ Notify Fleet Management of the incident as soon as possible at 244-1820.

_ Notify Risk Management of the incident as soon as possible at 244-1868.

_ Have the employee in charge of the vehicle complete a Vehicle Accident / Incident Report.

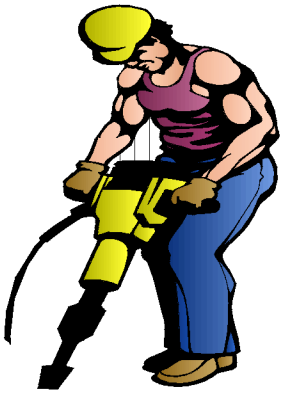
_ Be sure the Supervisor reviews the report and comments in the Director's and Supervisor's Accident Review area.

_ Send the Vehicle Accident/Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing.

_ If the employee was injured in the Accident/Incident, turn to the Workers' Compensation section of this booklet.

Property

Any loss or destruction of County equipment or property while performing you job as a County employee, (hand-held radios, laptop computers, tools, etc.) is covered under the County's property insurance. **This does not include personal property.** Personal property is generally insured through personal home owners insurance.



Checklist

_ Notify Risk Management of the incident within 48 hours if possible, at 244-1868.

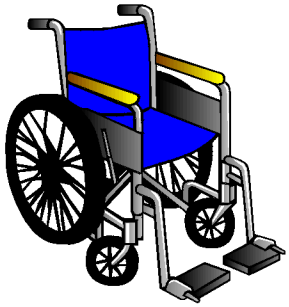
_ Have the employee who is involved with the incident complete a Property Damage/Incident Report.

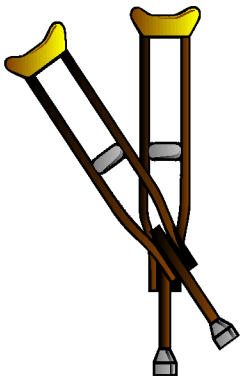
_ Send the Property Damage/Incident Report to Risk Management for processing.

_ If the employee was injured in the incident, turn to the Workers' Compensation section of this booklet.

Workers' Compensation

When an employee is injured, use the following check list.





Checklist

_ An employee must notify their Supervisor immediately of the injury. A Preliminary Accident Form should be completed by employee.

_ The Supervisor fills out First Report of Injury using information from the Preliminary Report. Both forms go to Risk Management.

_ Once the injury has been reported to the Supervisor, the Supervisor should contact Risk Management within 24 hours of notification, so the process of the claim can begin.

_ **Emergencies and injuries needing immediate attention go directly to**:

St. Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, CO 81501

_ Injuries that are not emergencies, an appointment may be made by calling the Designated Physician:
St. Mary's Occupational Medicine
1100 Patterson Road
Grand Junction, CO 81506
(970) 244-2001
Monday - Friday 8 a.m. to 5 p.m.

Holidays, Weekends, After Hours
St. Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, CO 81501

Exposures:

_ An employee exposed to blood, hepatitis, or TB (Tuberculosis) should go to the Designated Physician. A baseline test may be performed on the employee and a sample of blood from the infected person may need to be tested.

As a Supervisor, any time you have questions on a claim, or the course of treatment for your

employee, please feel free to call Risk Management at 244-1868.

Employer/Supervisor Responsibility:

What happens if a supervisor chooses not to report an injury? The employer can incur severe penalties that are not covered by CCIA, as well as having a high claim cost due to an unmanaged claim. The law requires a First Report of Injury within 10 days of notification by the employee, regardless if the notification is written or verbal. Employers who do not file within this 10-day time frame may be fined up to $500 per day for each day the report is late. Besides late reporting penalties, litigation becomes more possible and increased claims costs frequently occur. (C.R.S. 8-43-101)

Does the supervisor have to file an injury even if they do not believe an injury really took place or if they think the employee isn't really hurt? The answer is yes. The supervisor may express their reservations in writing of the injury when the claim is filed. This documentation will give the basis to begin an investigation.

What if the injured worker does not report the claim within 4 days, or doesn't report it in writing? The employer/supervisor is still required by law to file the First Report when you have any knowledge of the injury, **regardless of whether or not a written report was received from the worker**. (C.R.S. 8-43-102 and C.R.S. 8-43-103)

Employee Responsibility:

Filing Injury Reports: The injured employee has an obligation to report the injury to his supervisor/employer in writing within 4 days of its occurrence. Failure to do so can result in the ***loss of one day compensation for each day delay, except when the employee is physically or mentally unable to report the injury.*** (C.R.S. 8-43-102)

Compensation payments can be reduced by 50% in cases where the injury

1. Was caused by the willful failure of the employee to use safety devices provided by the employer;

2. Arose from willful failure by the employee to obey any reasonable rule adopted by the employer for the safety of the employee;

3. Resulted from the intoxication of the employee. (C.R.S. 8-42-112 II)

Safety Inspections

It shall be the responsibility of all supervisory personnel to conduct a daily appraisal of the project site or plant to certify that no unsafe conditions exist.

In the event that an unsafe condition is discovered, immediate measures shall be taken to correct the situation.

Safety inspections will be conducted in consideration of the standards of the various regulatory agencies that have jurisdiction over job site health and safety.

Results of the inspection will be submitted to the managerial staff with recommendations for corrections including pertinent information.

Safety Committee

Purpose:
To review accidents, incidents and damage to County property and to provide input on safety training and effective means for the communications of safety issues.

Policy:
The Division of Transportation shall hold Safety Committee meetings once monthly, or as needed. The following procedures shall be followed.

1. Committee representatives shall be appointed by the Road Supervisor and shall include representatives from Fleet, each maintenance district, the construction crews, office administrative staff, and the Construction Foreman. Members must have been employed by the department no less than one year to be eligible to serve. Members shall serve on the committee for a period of two years and may serve subsequent terms.

2. Safety Committee meetings shall be held monthly.

3 Any Accidents, incidents or damage to County equipment will be reviewed by the committee to determine if the accident was preventable. Preventable shall be defined as, "Were safety policies followed?" "Did the employee do everything he/she reasonably could have done to prevent the accident?" The Safety Committee will review the accident. The results of the review of the Committee will be passed on to the supervisor to determine if action is needed up to and including disciplinary action.

4. Employees have the right to present testimony either in writing or in person at any Safety Committee meeting. Employees shall coordinate with their foreman if they wish to attend. However, employees are not allowed to be

present while the committee is discussing or is in the process of preparing a recommendation.

5. Employees who disagree with recommendation of the Safety Committee, or have new or different information that could have affected the committee's decision or recommendation may request a review of the decision. The request will be made in writing to the Road supervisor no later than ten days after the committee's final decision.

Safety Equipment Checklist and Policy Acknowledgment

I have received and read the Division of Transportation's Safety Policy and Procedures Manual.

I have read, understand and agree that it is my responsibility as an employee Mesa County to perform my work in a safe, professional manner in accordance with the policies contained in this manual.

I further understand that my continued employment at Mesa County is dependent upon my compliance with established safety standards and policies and that failure to sign this form will result in disciplinary action.

Employee Signature: _____ **Date:**_____

The following equipment has been issued for your safety and protection. Failure to properly use it may result in disciplinary procedures and/or reduced Worker's Compensation benefits:

- Safety Vest
- Orange Cap
- Hard Hat
- Safety Glasses
- Hearing Protection (available in all trucks)

By signing this document, I acknowledge that I understand my responsibility to safety, not only to myself, but also to those around me. I will follow the policies and guidelines as established in these policies and procedures. I will take a pro-active approach to safety in my day to day job activities.

Employee Signature: _____ **Date:**_____

CITY OF Grand Junction COLORADO

Safety Manual

Updated 12/12/2016

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CITY OF Grand Junction COLORADO

POLICY STATEMENT

SAFETY AND WELLNESS: A CITY PRIORITY

Employees are our most valuable resource. You – your experience, education, knowledge, and most of all your health and safety – are more important than just quickly completing a task.

For this reason The City of Grand Junction will strive to provide the safest possible working conditions for our employees and will provide appropriate medical care to minimize the effect of injuries when they occur.

Department Heads and Managers: Occupational safety and health shall be given full consideration in the planning, development, and operation of every program and activity throughout the City. Support and assist supervisors in their safety efforts and reward them for attention to safety planning, equipping and training of staff.

Supervisors and Lead Workers: Encourage involvement of all employees in safety awareness, and make sure that each job activity is done safely. Plan ahead to anticipate safety and health hazards for each activity. Train and equip workers appropriately for the specific activities of their jobs. Inspect and update facilities and equipment as needed. Utilize the safety resources provided by the City, and communicate any safety needs. Promptly investigate and report accidents and "near-misses" that could contribute to future injuries. Finally, ensure that every employee is empowered and rewarded for participation in the Department's safety and health programs.

Employees: Take responsibility for your own safety. Report safety hazards that you encounter in your work. Make use of safety equipment that is needed for your job. Always be on the alert for the safety of your fellow workers, and work together to promote safe and healthy work practices. Make use of safety training opportunities that are offered in your work group, and communicate any safety needs that you see.

Accident prevention and efficient production go hand in hand. All employees, supervisors and managers must work together continuously to promote the safety and wellness of our workforce.

Greg Caton, City Manager

GENERAL SAFETY RULES

1. Use caution when lifting. Bend knees, and keep back straight. Leg muscles, not your back, should do the work. When lifting heavy loads, use lifting devices such as forklift, pallet truck, etc. or get help from other employees. Do not lift large objects in high winds. DO NOT ATTEMPT TO LIFT LARGE/HEAVY LOADS BY YOURSELF. Supervisors should provide appropriate equipment to assist employees in managing heavy loads.
2. Fighting or horseplay is strictly prohibited.
3. Smoking is permitted only in designated areas.
4. Personal protective equipment shall be worn at all times when required by your supervisor or safety regulations. All PPE must be maintained in good condition.
5. Tools and equipment shall be kept in proper working condition, and proper electrical grounding and guards in place before use.
6. Good housekeeping practices shall be maintained at all times in all City work areas and vehicles.
7. All employees should familiarize themselves with the nearest fire extinguisher and first aid kit and know the proper use of each.
8. Report missing or damaged equipment immediately to your supervisor.
9. All equipment used during the work day shall be de-energized and secured at the end of the day.
10. Hazardous wastes such as waste oils, hydraulic fluids, cleaning fluids etc. shall be disposed in a proper manner. Contact your supervisor for proper disposal procedures. Consult with the Fire Department Hazardous Materials Division for disposal problems.
11. All city speed limits and traffic signs shall be observed.
12. Report accidents immediately to your supervisor and complete accident forms promptly.
13. Report unsafe work situations to your supervisor.
14. Frequently review and be aware of the requirements of the emergency evacuation plan for your building.
15. Do not interfere with other employees while they are using power tools, motorized equipment, or when they are working near electrical lines and equipment.
16. Use equipment with safeguards that are adequately designed and intended for normal operations.
17. Wrist watches, metal wrist bands, rings, or other jewelry shall not be worn while working near moving parts of machines or energized circuits.
18. Clean clothes are essential in preventing skin irritations. Clothing saturated with solvents or other materials shall be removed and shall not be worn until properly cleaned. It is recommended that employees working in areas of high contamination keep an extra set of work clothes on the job.
19. When in doubt about safety regulations consult the appropriate OSHA standard.

FIRE FIGHTING EQUIPMENT

1. Use fire extinguishers for emergencies only, unless otherwise approved for training purposes. If used for training, make sure that extinguishers are recharged.
2. Report all fires immediately to your supervisor and call 911.
3. Personnel shall be trained in the proper use of fire extinguishers.
4. Keep fire equipment and exit routes free from obstructions.
5. Inspect fire extinguishers on a monthly basis.
6. Inspect buildings at least annually for presence of fire hazards, and review emergency evacuation routes and procedures.
7. For further guidance on fire protection, consult OSHA standard 29 CFR 1910 subpart L.

PERSONAL PROTECTIVE EQUIPMENT

1. Personnel shall wear personal protective equipment that is consistent with the type of work conducted. This may include but is not limited to eye protection, hand protection, head protection, skin protection, hearing protection or respiratory protection. Use appropriate Material Safety Data Sheets, and contact your supervisor to determine what personal protective equipment is required.
2. Approved clothing (including city issue clothing, caps, etc.) shall be worn and maintained in good repair. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can become entangled shall not be worn. Working without shirts is not permitted. See Page 17 for work zone apparel requirements.
3. Any employee not using the personal protective equipment required by the City, who is injured on the job and whose injury was caused by failure to use prescribed personal protective equipment, shall forfeit 50% of his/her workers' compensation benefits, pursuant to the Colorado Workers' Compensation Act, section 8-52-104.
4. Employees will wear hearing protection when working in areas marked with appropriate warning signs or upon instructions to do so by their supervisor.
5. Welders and their assistants shall wear approved eye protection during cutting, welding or brazing operations. See page 21 for welding & cutting requirements.
6. Respirators shall be worn as necessary. Supervisors shall ensure that employees are properly fitted and trained in the use of respiratory equipment.
7. Per the OSHA construction standard 29 CFR 1926.502, each employee on a walking/working surface with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems. Some City operations may fall under the OSHA general industry standard 29 CFR 1910.23, which requires open-sided floors or platforms 4 feet or more above adjacent floor or ground level to be guarded by a standard railing (guardrail) or equivalent.

8. Hard Hats:

A. OSHA approved hard hats that meet the ANSI Z89.1 Standard, along with proper Class and Type are required as minimum standards for the following jobs:
   1. On all contractor construction sites where there is danger of overhead impact or where contractor employees are required to wear hard hats.
   2. All job sites with heavy equipment in use or present on the job, such as backhoe, loaders, skid Steers, dump trucks, etc.
   3. By all employees working in or near excavations 4' deep or greater.
   4. Where danger from electrical hazards exist, such as working out of a bucket on boom truck or working in an electrical panel.
      a. Class G hard hat is required up to 2200 volts
      b. Class E hard hat is required up to 20000 volts
   5. Where there is a risk of an overhead impact.
   6. A class II type hardhat is required where there is a risk of a side impact.
   7. Where workers are working in or underneath vertical lift devices such as bucket trucks, man lifts and personnel baskets for forklifts.
   8. Supervisors and Crew Leaders in charge of a work site will be responsible for wearing of personal protective equipment in the work zone.

B. Requirements
   1. Hard hats must be in good condition and free of physical defects.
   2. Hard hats should be worn and maintained according to manufacturer recommendations.
   3. Bump caps are not acceptable head protection.
   4. Hard hats should be inspected before each use. Damaged hats or those that have sustained a heavy impact should be removed from service and replaced.
   5. Hard hats should be identified with a City of Grand Junction logo.

C. Remember the goal of wearing a hard hat is to provide a safe working environment and reduce injuries to employees and job site visitors. It also provides recognition that you are a City of Grand Junction employee and demonstrates safety consciousness.

9. Footwear:

A. Sturdy work boots are required and safety toed boots are encouraged. No open toed or tennis type shoes are allowed except when special operations specify non-hard soled footwear.

B. Safety toed boots are required when working with equipment or material that could pose a risk of foot injury.

C. Metatarsal foot protectors or safety toed boots are required when operating jackhammer or compaction equipment.

D. Each Division should create a list of safety shoe required and safety shoe exempted routine tasks. For non-routine tasks supervisory discretion should be exercised according to the above guidelines.

10. Gloves shall be worn during any work where there is danger of hand injury.

11. High Visibility Safety Apparel: See page 12 for safety apparel requirements in work zones exposed to traffic hazards.
12. All personal protective equipment shall be kept clean, in good repair, and ready for use.
13. If in doubt, wear protective equipment for your safety!

VEHICLE AND EQUIPMENT OPERATION

1. Employees operating motor vehicles will carry a current driver's license that is valid for the type of vehicle driven.
2. Personnel operating motorized equipment will be adequately trained in its use and operation. Equipment operation should not be assigned to an untrained member of a crew.
3. All employees operating forklifts shall maintain proof of training.
4. Lift trucks will be attended at all times when running.
5. Pedestrians will be given right-of-way in all cases.
6. Equipment operators shall obey all speed limit and warning signs, drive at reasonable speeds for the type of equipment driven with due regard for weather, traffic conditions, and intersections.
7. Tank trucks and semi trucks will be braked and the engine turned off during loading or unloading operations unless otherwise required for specific equipment operation.
8. All safety and emergency equipment will be in proper working order on vehicles or moving equipment currently in use.
9. Vehicles must meet all DOT requirements before use. Deficiencies must be reported immediately to your supervisor.
10. The brakes and other safety systems shall be tested by the operator before leaving on the first trip of the day and any deficiencies noted and corrected. When required, DOT inspection logs shall be properly filled out and kept in the vehicle.
11. Employees will have their entire body inside the moving equipment at all times and shall not enter or exit a vehicle while it is moving.
12. Drivers shall make certain that all loads are properly loaded and secure. Employees must position themselves properly to avoid being exposed to loads shifting or falling from the sides or end of the vehicle.
13. Employees will not ride in buckets, Hi-Ranger lift baskets, forks (of lift trucks), etc. not designed to transport personnel while the vehicle or equipment is in motion.
14. Seat belts will be used in all vehicles except as permitted by Colorado law for emergency vehicles, sanitation vehicles, and meter reading operations.
15. The driver shall inspect their footwear before driving a vehicle to ensure their footwear is free of mud, excessive water, oil or grease to prevent a slippery contact with brake and/or clutch pedals.
16. Vehicles shall not be operated with dirty or damaged windshields, mirrors, inadequate brakes, faulty steering gear, horn or lights.
17. The severe application of brakes, especially booster brakes, shall be avoided except in an emergency. The operator must at all times have the vehicle under control so as to be able to bring it to a complete stop within the assured clear distance ahead.

18. No vehicle shall be parked on a hill or grade unless the front wheels are turned into the curb or the wheels securely chocked.
19. No vehicle shall be driven on a downgrade with gears in neutral or clutch disengaged.
20. Employee drivers shall not permit more employees to ride in the vehicle than the number of seat belts provided.
21. All tools and equipment shall be properly guarded, stowed, and securely fastened when transported.
22. All doors of cabinets, lockers, and tail gates must be latched before moving the vehicle.
23. All trucks except those equipped with closed circuit camera systems shall have someone directing during backing. See "Vehicle Backing" below for specifics.
24. When possible do not load and unload a vehicle from the street side of the load.
25. Special regulations and instructions governing the loading and unloading of poles, pipes, etc., shall be strictly observed in every case.
26. The vehicle hood shall be secure at all times when it is raised. When it has been lowered into position it shall be checked to determine that it is completely latched.

VEHICLE BACKING OPERATIONS

Driving large trucks, in general, is a challenge to any professional driver -- but backing is the toughest and most hazardous operation. Backing accidents are the source of some of the most costly and heartbreaking accidents in the workplace. City employees consequently should use extra care and precaution in backing.

Backing

1. Prior to backing, check the path of your truck to make sure the way is clear. If you can't see where you are going, get out and look. Check all clearances, on the right side, left side, front, back, and top of your truck. Do this as often as is necessary to do a safe job of backing.
2. Back your vehicle slowly and cautiously. Make sure you have absolute control of your vehicle at all times.
3. Alert other drivers or pedestrians who may be in, or about to cross your path of travel by blowing your horn. Be careful, though. They may not understand your intentions.
4. If you have a loader or helper working on your crew, always have the helper direct you in the backing up operation. Only one person, however, should be giving the backing signals.
5. It is both the Driver and the Helper's responsibility to have a clear understanding of the signals that will be used for direction. Even though there is someone directing, drivers are not relieved of their responsibility. It is still up to them to see that the backing operation is done safely.
6. If there is any other way of driving to your objective, do it rather than by backing. Plan or help management to plan your route to eliminate all unnecessary backing.

1. The helper must be on the ground in a position that gives them an unobstructed view of the ground over which the truck is about to be moved, with their body facing the driver, and visible to the driver at all times either directly or through rear or side mirrors.
2. Wherever possible, the helper should station himself at the point where the backing maneuver is to end, so that he avoids the hazards of walking backward over the surfaces he does not see. This may require stopping the truck and changing positions several times.

Final Note: Bad weather can reduce visibility, or cause a slippery road surface from rain, snow, or ice, presenting a greater hazard in backing operations.

MATERIAL HANDLING AND STORAGE

1. Store and stack material so that the load is stable.
2. Floors and platforms supporting loads must be properly constructed to support the weight of the load, particularly on upper level floors.
3. When moving material with a lift truck, make sure the load is balanced and stable.
4. Do not exceed load carrying capacity of vehicles being used.
5. Store and stack material in approved locations. Make sure all aisle widths conform to Fire and Building Codes.
6. Keep aisles, stairways, exits, fire equipment, water heaters, boilers, electric panels and switch boxes well marked.
7. Do not store materials where exits, firefighting equipment, emergency equipment, ladders, walkways or roadways may be obstructed.
8. Do not store materials near sources of combustion or electrical equipment.
9. Maintain a clear view when moving loads.
10. Use caution to prevent contact of sharp or pointy materials with other items or people. Remove packing nails and/or wire if they are not necessary for storage.
11. Flammables must be stored a safe distance from regularly occupied office areas.
12. Materials hauled in a dump truck must be secured with a tarp in accordance with Colorado law to prevent materials from falling or blowing off the truck.
13. Consult OSHA Construction standard 26 CFR 1926.953 for material handling safety issues on jobsites.

HOUSEKEEPING

1. Keep all work areas orderly and clean. (See OSHA Standard 26 CFR 1910.22)
2. Keep aisles, passageways and stairways clear and accessible.
3. Clean up all spills and/or leaks.
4. Place rags and other materials in approved containers.

5. At the end of the work day or upon completion of a job, remove all tools and excess materials and barricade the area if necessary.

HAND TOOLS

1. Select the proper tool for the job.
2. Use tools that are in good repair. Replace any broken tools immediately.
3. Tools should be inspected before each use.
4. Secure tools when transporting them in vehicles.

POWER TOOLS

1. Carefully read instructions before using power tools.
2. Ground all tools before using them, and do not alter three prong grounding plugs.
3. Powered electrical tools are required to have a grounding plug or be double insulated.
4. All tools must have a "dead man" switch.
5. Use the correct tool for the job.
6. Do not disconnect tools by pulling on the cord.
7. Do not use equipment with frayed or damaged cords.
8. Avoid using power tools in wet situations whenever possible; otherwise be sure GFI (Ground Fault Interrupter) protection is in place and functioning properly.
9. Do not change bits, blades, etc. when the tool is energized. Unplug the tool before making changes.
10. Do not operate power tools without guards.
11. Wear eye protection when using power tools.
12. Breakers, fuses and other over-current protection shall be maintained in all circuits. Power tools should not be used on circuits exceeding 20 amperes rating unless otherwise approved in the Uniform Building Code.
13. Extension cords shall not be used as a substitute for fixed wiring of a structure or building. Electrical outlets should be installed where needed.
14. Do not leave cords of portable electric tools where cars or trucks will run over them.
15. Consult OSHA standard 26 CFR 1910 subpart P for hand and power tool safety.

LADDERS

1. Ladders shall be in good repair and used in their intended manner.
2. Wooden ladders shall not be painted.
3. Ladders shall be placed so that the base is one (1) foot out for every four (4) feet of height.
4. Ladders shall be properly secured and equipped with shoes at the bottom to prevent slippage.
5. Always climb and descend facing the ladder. Ladders are not to be used as scaffolds.

6. Only one (1) person shall work on a ladder at a time.
7. Metal ladders shall not be used near electrical lines, electrical cabinets, or energized equipment.
8. Benches, boxes and other materials shall not be used in place of a ladder.
9. Damaged ladders will be repaired or discarded.
10. Ladders should be inspected prior to each use, and repaired or taken out of service if not up to standards. Weight limits should be observed for each ladder used.
11. Ladders should not be placed in front of doors unless the door can be and is secured.
12. Materials should not be carried by hand when ascending and descending a ladder.
13. Use 3 points of contact when going up or down a ladder.
14. When using a ladder to gain access and dismount onto a higher surface, be sure the top of the ladder extends 3 ft above top surface and the ladder is firmly anchored.
15. Consult OSHA Ladder Safety E-Tool for guidance regarding ladder safety.

SCAFFOLDS

1. All scaffolding shall be installed by qualified individuals.
2. All scaffolding shall be constructed of approved materials in an approved manner, in accordance with applicable OSHA Standards.
3. Scaffolding shall be equipped with toe boards and guardrails in locations greater than ten (10) feet.
4. A personal fall arrest system per OSHA Standard 29 CFR 1926.502 shall be used if scaffolding cannot be provided with guardrails.
5. Scaffolding shall be equipped with a ladder to facilitate access.
6. Scaffold boards shall not be painted.
7. Mobile scaffolds shall not be moved while personnel are located on them.
8. Metal scaffolds shall not be used in or near electrical lines or equipment.
9. Consult OSHA standard 26 CFR 1910.28 for guidance on scaffold safety.

BARRICADES AND WORK AREA PROTECTION

1. Working in traffic exposes employees to extreme danger. Construction, maintenance, utility and incident zones on streets and roadways can result in hazards to workers, motorists, and citizens alike. Since the risk of injury or death in such work is significant, certain safeguards must be instituted to minimize the risks. Temporary traffic control can compensate for the unusual or unexpected situations faced by road users.

Manual on Uniform Traffic Control Devices (MUTCD)

2. All City temporary traffic control work zone set-ups must conform to the current Manual on Uniform Traffic Control Devices, MUTCD 2009 Edition (Published by the Federal Highway Administration).

Planning

3. It is very important to pay special attention to the safety and accessibility of all pedestrians, bicyclists, motorists, and workers during each step of the planning process. Coordinate with transit, other highway agencies, law enforcement and other emergency units, utilities, schools and railroad companies to reduce unexpected and unusual road user operation situations. Commercial vehicles may need to follow a different route than passenger vehicles because of bridge, weight, clearance or geometric restrictions. Follow the fundamental principles of the Temporary Traffic Control chapter in the MUTCD to assist road users and protect workers.

Training

4. Temporary traffic control work zones shall be designed and set up under the supervision of a person possessing an American Traffic Safety Services Association (ATSSA) certification as a traffic control supervisor. The traffic control design and set up may be accomplished in-house by qualified City personnel or by contracting with a traffic control company.

   Prior to their assignment, all workers will be trained on how to work next to motor vehicle traffic in a way that minimizes their vulnerability. Workers having specific temporary traffic control responsibilities will be trained in temporary traffic control techniques, device usage and placement.

Personal Protective Equipment in Traffic Zones

High Visibility Safety Apparel:

1. Night Hours: When working at night on streets, roads, or highways employees are required to wear class III ANSI #107 approved apparel.

2. Daytime:
   A. On State and Federal Highways, or roads with posted speed limit of 50 mph or higher, employees are required to wear class III ANSI #107 approved apparel.
   B. Employees shall also wear class III ANSI #107 approved apparel on traffic arterials with high traffic volume. Examples: 1st, 7th & 12th Streets and 28 Road.

C. Class II apparel is required for streets and roads with posted speed limits between 26 mph and 49 mph.
D. Low traffic side streets with speed limits marked 25 mph or less will only require the employee to wear the standard City-issued lime green upper attire.

To keep costs down for the city, class III apparel should be worn by all employees who have already been issued such attire, even when working in lower speed limit or traffic volume areas. Class II ANSI #107 approved apparel may be used in areas indicated by 2 C above if Class III is not available. It is always acceptable to wear a higher class than specified for conditions.

3. Hard Hats: See Hard Hat guidelines under Personal Protective Equipment on page 7. Hats shall conform to ANSI Z89.1 and be of the appropriate type and class for the hazard that may potentially be encountered in the work zone.

4. Other personal protective equipment may be required depending on the type of work being done, including but not limited to hearing, eye, and respiratory protection.

WORKING OVERHEAD

1. When working overhead, take precautions to protect personnel working below. Loose materials, tools and the like must not be left in places where they can be knocked, blown or vibrated off balance and fall.
2. Rope off or barricade the area below the overhead work to prevent access to non-working personnel.
3. Do not drop or throw material, tools or supplies from overhead work areas.
4. Use a tag line to lift heavy or awkward loads.

CRANES, HOISTS, ETC.

1. Inspect the hoist or crane before work begins.
2. Inspect chains, chocks, etc. before securing to load.
3. Fasten chains, chocks, etc. securely to the load.
4. Use tag lines for heavy or awkward loads.
5. Keep all personnel away from the area below the boom or load and barricade off the area.
6. Only one person shall give directions to the equipment operator.
7. When equipment is left unattended, its block and load shall be secured and the equipment de-energized.
8. Personnel shall be adequately trained in the use of hoists, cranes, etc.
9. Repair and/or maintenance of chains, chokers, hoists, etc. shall be conducted by a qualified individual.

10. Personnel shall not be lifted or lowered with a crane unless proper equipment is utilized. Contact your supervisor for additional instructions.
11. For Safety guidance, consult OSHA Construction standard 26 CFR 1926.550 or General Industry standard 26 CFR 1910.175.

MANUAL LIFTING

1. Inspect the path to be traveled prior to lifting and carrying heavy objects. Where possible, remove obstacles from path.
2. Back support belts will be made available to employees and should be used when lifting. In certain situations, belt use is mandatory: consult your supervisor.
3. Use powered equipment whenever possible to avoid unnecessary back strain.
4. When you must lift heavy materials, use the following procedures:
   A. Separate and place both feet close to the object lifted.
   B. Bend knees and squat down to the object to be lifted.
   C. Grip the object with the palms of the hands.
   D. Position the arms and elbows close to the body.
   E. Draw the chin towards the chest to straighten the back and lift with the back in a vertical position.
   F. When shifting a load, turn the feet but do not twist the trunk.
5. When two or more individuals are lifting a load, use signals to coordinate the lift so that an injury does not result.

LOCKOUT / TAGOUT

1. Review the specific **Lockout/Tagout Procedure** of your specific facility before beginning work. Consult OSHA Standard 29 CFR 1910.147.
2. All types of electrical wiring and equipment regardless of voltage shall be handled properly and safely.
3. Only qualified individuals will work on live or energized equipment.
4. When working on live equipment, work on only one (1) wire at a time and insulate all conductors which may come in contact with the live circuit.
5. Adequate personal protective equipment must be used when working on live circuits.
6. Use only **nonconductive** ladders and hard hats when working near energized circuits.
7. Treat all electrical equipment as though it is live.
8. Shut off power before removing guards from motor driven equipment.
9. Keep the work area as dry as possible.
10. Fuses shall be replaced with fuses of the same capacity as the ones removed.
11. Finger rings, bracelets or metal watch bands shall not be worn when working with electrical equipment.
12. When opening disconnects, wear proper eye protection to shield the eyes from the flash or sparks and approved hand protection, such as linesman gloves.
13. After repairs, replace cover plates on lighting and power cabinets or electrical enclosures.

14. All portable tools and equipment shall be grounded by means of a three wire cord and polarized plug or wire leading from the frame of a machine to a good return ground, or OSHA approved insulated portable power tools may be used. Grounding plugs shall not be altered.
15. Consult OSHA Lockout/Tagout E-Tool and section on Power Tools Pg 11 for further training and guidance.

COMPRESSED GAS CYLINDERS

1. Store all cylinders in upright and fastened positions. (Except 1 ton cylinders designed for horizontal storage.)
2. Place the protective cap on cylinders when they are not being used.
3. Keep stored oxygen cylinders at least twenty (20) feet from acetylene cylinders and other flammables.
4. Always check the label or stencil on the cylinder to make certain you have the proper gas.
5. Never use oil or grease as a lubricant on valves or attachments of oxygen cylinders.
6. Do not store cylinders next to heat sources.
7. Always transport cylinders in a secured, upright manner.
8. Tag or label all cylinders that are empty and remove them from the workplace.
9. Unless cylinders are firmly secured on a special carrier intended for this purpose, regulators shall be removed and valve protection caps put in place before cylinders are moved or transported.
10. Consult OSHA Standard 26 CFR 1926.153 and Safety Manual Page 66 LPG for safety information on handling of Liquefied Petroleum Gases. (Propane)

WELDING, CUTTING OR BRAZING

1. Inspect the area to ensure that flammable or combustible materials are not present.
2. Inspect the equipment to be worked upon before the work begins. Drums, barrels or small containers shall be thoroughly cleaned before the work begins.
3. All storage tanks or vessels must be clean, gas free, and blinded before the work begins. Mechanical ventilation shall be provided in any space less than 10 cubic feet per welder or any other confined space where natural cross ventilation is restricted. Ventilation shall be at a rate of at least 2,000 cubic feet per minute.
4. When working inside a vessel, welding gases which are not in current use shall be turned off both at the nozzles and the cylinders to prevent leakage and gas buildup.
5. Test the area for flammable or combustible materials before re-entering after taking any breaks.
6. Test the area for flammable or combustible materials at the beginning of each shift if work is going on continuously.
7. A firewatcher shall be assigned to all cutting or welding operations that are conducted outdoors or in the vicinity of any flammables.

8. A fire extinguisher shall be made readily available during all cutting or welding operations. The firewatcher and employees doing welding or cutting shall be familiar with the operation of a fire extinguisher.
9. Report any fire that results during a cutting or welding operation.
10. Welding shields shall be used if the work is conducted in a high activity area, for protection of passersby. Avoid looking at an electric arc without eye protection; serious eye injury could result.
11. Personnel will wear appropriate eye and skin protection, including gloves, and approved helmet or goggles for the type of operation performed.
12. Welding and/or cutting cylinders will be operated in a standing position, with cylinders properly secured.
13. Keep grease and oil away from oxygen cylinders. Also be cautious of grease or oil your hands when turning on or off cylinders; the combination forms a highly explosive mixture.
14. Open valves on welding and/or cutting cylinders slowly. Before connecting a regulator to a cylinder valve, the valve should be opened slightly and closed immediately. (This is termed "cracking" and is done to purge the valve of dust or dirt that might enter the regulator.) Stand to one side of the outlet, not in front of it, when cracking the valve.
15. When an oxygen cylinder is in use, valves shall always be opened completely. Valves shall be turned "OFF" when not in use.
16. Replace caps and properly store empty welding and/or cutting cylinders. Oxygen cylinders in storage shall be separated from fuel gas cylinders (and other combustibles) by at least 20 feet or separated by a 30 minute fire resistive barrier of at least 5 feet high.
17. Practice good housekeeping techniques at all times in welding and cutting areas.
18. Properly ventilate any welding area. Check ventilation equipment annually to make sure air flow is adequate.
19. Use Acetylene only at pressures below 15 pounds per square inch. At higher pressures the gas is unstable and may explode.
20. Do not use copper tubing to repair acetylene hose. Acetylene will attack pure, unalloyed copper, forming a very explosive powder, copper acetylene.
21. Never strike an arc or tap an electrode against a cylinder.
22. Always use a spark lighter to light a torch. Never use matches.
23. Never use oxygen to dust off clothing and the work area. Use fuel gases only for intended purpose.
24. All arc welding ground connections shall be mechanically strong and adequate for the required current.
25. When not in use, electrode holders shall be placed so that they cannot make electrical contact with people, objects, fuel or compressed gas tanks.
26. Cables with splices within 10 feet of electrodes are prohibited from being used.
27. Cables with damaged insulation or exposed bare conductors shall be replaced.
28. The welder shall not coil or loop the electrode cable around parts of his body.
29. Do not leave welding rod stubs on the ground or floor where they may cause an accident.
30. See applicable OSHA Welding Cutting and Brazing Standards.

CONFINED SPACE WORK

INTRODUCTION

The term "confined space" is often misunderstood. The following introductory section is designed to be educational: it explains confined spaces and outlines their characteristics and hazards, with an explanation of the City confined space program. Actual City safety rules regarding confined spaces begin on page 22.

What is a confined space?

Unlike a trench or excavation, 'confined space' is not something easily visualized by the mind. Part of the reason for this is that a confined space can be almost anything. However, it does have some common components that we can define.

1. It is not designed for continuous human occupancy.
2. It has restricted or limited entry and exit...hence, **confined**.

What are some typical confined spaces?

In a municipality, sewer lines and manholes are among the most commonly encountered confined spaces. However, other common confined spaces found in municipal operations might include:

- storage tanks and trash containers
- utility pits
- tank trucks and trash trucks
- storm sewers
- lift stations
- trenches
- water vaults

Again, however, a confined space may be any space meeting the above three criteria, and failing to recognize or identify a confined space can be a hazard in itself.

Why are confined spaces hazardous?

The word that best describes the hazardous nature of a confined space is: "uncertainty." Often the conditions within a confined space appear benign. Workers enter such spaces routinely to make repairs, perform maintenance work, check readings of gauges or meters, clean, etc. At such times, the conditions within the confined space may have been harmless. In many instances the worker has performed the task within the confined space repeatedly without incident. Thus, the worker is lulled into a false sense of security that the space will always be harmless, or that any necessary escape from the space will be quick and easy.

However, because the space is **confined**, toxic or flammable atmospheres may become contained and concentrated. Mechanical or electrical hazards may be in direct

proximity to the worker where they can be mangled or electrocuted. The worker can become entrapped or engulfed by material within the space. Because, by definition, a confined space has restricted entry and exit, escape becomes difficult or impossible. The worker thus may be seriously or fatally injured.

Another reason confined spaces can be hazardous is that workers fail to recognize a confined space as being such. It is important for the municipality to first identify every confined space that it has as the first step in a confined space safety program.

What are some of the common hazards?

Atmospheric Hazards

Atmospheric hazards can vary depending on the type of confined space. However, one potential atmospheric hazard common to most confined spaces is oxygen deficiency. There are numerous conditions that can cause oxygen deficiency. Furthermore, insufficient oxygen is a condition that cannot be sensed by the worker. The end result may be that the worker enters the space, gradually becomes faint, passes out, and perhaps dies from this lack of adequate oxygen.

A common toxic hazard in sewers and manholes is sewer gas or hydrogen sulfide. Because it is heavier than air, this gas settles near the bottom of the confined space. In small concentrations, its typical 'rotten egg' smell is easily recognized for a short time, until it dulls the senses. In higher concentrations it may not be smelled and can immediately cause unconsciousness and/or death in a matter of a few seconds.

Flammable atmospheres are another risk. Methane can reach levels of explosive concentration. Petroleum products fumes can often be encountered in many confined spaces, as well as fumes of other flammable chemicals. A match, a spark from a hammer, static electricity, lighting a welding torch... all can easily cause an immediate explosion. Gases such as hydrogen sulfide and carbon monoxide are also very toxic and can cause death in relatively low concentrations.

Mechanical Hazards

Some confined spaces may contain mechanical equipment with sharp blades or other moving parts that can become accidentally energized and mangle a worker. Stored energy from springs or counterweights, for example, can be accidentally triggered causing the mechanical equipment to move suddenly and injure the worker.

Electrical Hazards

Like mechanical hazards, a confined space may also contain electrical equipment that can accidentally become energized and electrocute the worker.

Entrapment

Workers can become trapped within a confined space and die from exposure. The space can unknowingly close, trapping a worker inside. Workers can drown inside a water line when an upstream valve is unknowingly opened. Some substances, such as asphalt, can cause entrapment due to their viscosity or "stickiness."

Engulfment

An example of this type of hazard would be a salt or sand bin where a worker walking on the surface of the substance in the bin can literally be swallowed by the motion of the material and suffocate.

In addition to these possible hazards, confined spaces may contain excessive heat causing heat exhaustion or can contain excessive noise requiring hearing protection. Dim or inadequate lighting may increase the likelihood of accident and injury.

Identify All Confined Spaces

You should begin by identifying every confined space that workers may be required to enter within the scope of their work. Applicable employees then need to be informed of the existence, locations and dangers of these spaces by posting danger signs or other equally effective means.

Permit Entry System

Many injuries and deaths occur in confined spaces because a worker enters a confined space without telling anyone or because management fails to alert the worker to a known hazard that the worker may be unaware of. To prevent these tragic occurrences, a permit entry system needs to be developed. Such a system requires that a permit be completed for any worker to enter into a confined space. The permit forces both the worker(s) and management to recognize the confined space as being a hazard, identify the hazards that may be encountered upon entry, require any testing of the atmosphere, safety equipment, attendants, rescue equipment, etc. OSHA regulations and the City Safety Regulations (provided at the end of this section) require the use of a permit entry system when entering confined spaces.

Testing

Testing for atmospheric hazards is also an OSHA requirement. Many hazardous atmospheres cannot be detected by our sense of smell. These include carbon monoxide, oxygen deficiency, methane, and large concentrations of hydrogen sulfide. Without testing, the worker's first clue to the presence of the hazard might be sudden collapse and subsequent death. Testing of a confined space thus becomes critical. Furthermore, since such hazardous substances tend to be heavier than air and displace air, testing of the confined space must be done **at the bottom** of the confined space especially, although the rest of the space also needs to be tested.

Safety Equipment

The permit entry system needs to address individual items of safety equipment needed for each confined space. This might include respirators, hard hats, safety harnesses, etc. This would also include emergency equipment necessary for any rescue such as a rescue tripod, winch, first aid kit, etc.

Monitoring

For prolonged periods of work in a confined space, provision for continued monitoring of the space may be necessary. Portable monitoring devices may be needed to detect and warn workers of changing atmospheric hazards.

Ventilation

One of easiest methods of reducing or eliminating hazardous atmospheres, particularly in manholes and sewer lines, is through ventilation. Mechanical blowers can eliminate many hazardous atmospheres if properly set up and used.

Observation

No worker should enter a confined space without a trained attendant standing by to summon help or operate a man-lift in the event of an emergency. The attendant is part of the permit entry system.

As with any hazardous activity, training is essential to prevent accidents and fatalities. Equally important is the periodic use of emergency drills. Such drills help ensure that employees respond properly in emergency situations. Training should be documented and records maintained. Contact Risk Management or the insurance loss control representative for confined space training.

Below are listed the safety regulations that apply to all City operations when a confined space must be entered. However, some City locations may have their own specific confined space entry program. If you are working in one of these areas, consult this program for more detailed instruction.

CONFINED SPACE SAFETY REGULATIONS

1. Review the specific **Confined Space Program** of the department or facility before beginning work.
2. Any vessel entered shall be properly blinded and/or isolated before work begins.
3. The vessel will be clean, gas free and contain adequate oxygen concentration before entry is permitted.
4. An **Entry Permit** shall be issued before anyone enters a permit-required confined space.
5. A **Confined Space Attendant** shall be assigned to the work area. The attendant will be adequately trained in the duties of a **Confined Space Attendant** as defined in OSHA regulations.
6. A **Confined Space Attendant** shall not leave the area when personnel are working inside a confined space.
7. The potential hazards of a confined space will be determined prior to entering the confined space.
8. All personnel entering the **confined space** will be adequately trained.
9. Personnel entering the confined space will be briefed by their supervisor as to the risks of the operation.
10. The confined space atmosphere shall be monitored on a regular basis. The area should be retested after breaks or lunch periods.
11. Do not enter a confined space unless you are properly attired to do so.
12. Contact a supervisor if assistance is required. **Never enter a confined space when unsure of the hazards.**
13. Rescue involving a confined space **shall not be attempted** unless the rescuers are qualified and properly trained and equipped for confined space rescue.
14. Do not attempt rescue without appropriate personal protective equipment.
15. Immediately report any confined space incident and/or accident to your **supervisor**.
16. Consult OSHA Standard 29 CFR 1910.146 for guidance on Confined Space entry procedures.

MAINTENANCE SHOP SAFETY

Maintenance shop personnel, in addition to the areas outlined below, should pay particular attention to Safety Manual sections on Welding Cutting & Brazing, Cranes, Power Tools, Hand Tools, and Lockout/Tagout procedures.

Radiator Service

Be careful when checking the radiator since automotive cooling systems work under pressure. The coolant may be in the boiling range and therefore too hot to check safely. Always observe the following precautions when checking the radiator.

1. Place wiping cloth over cap and turn it 1/4 turn counter-clockwise. This will permit the escape of pressure.
2. Caution: If a rumbling noise is heard coming from the radiator, or if coolant spews out from under the cap, close the cap immediately because the coolant is too hot and will boil over violently if pressure is released. The coolant will have to cool down before it can be checked safely.
3. Remove the cap by turning it counter-clockwise until stop is reached, and then lift it off.
4. Operate the engine at idle speed when adding water or anti-freeze while the engine is hot. This will allow it to circulate quickly without damage to the engine block. If water is very low or engine is extremely hot, wait for it to cool before adding coolant.

Tire Service

1. Check pressure and inspect tires before inflating them.
2. Protect yourself against blowout when inflating tires. Never squat facing the tire. Stand at one side, so that the fender is between you and the tire, if possible. Use chuck gauge with clip and extension hose.
3. Never leave jack handles or other tools where they can be a tripping hazard.
4. A protective cage or equivalent protection shall be provided for the inflating of truck tires.

Battery Service

1. Do not smoke or permit open flames or sparks near batteries that are being recharged, as they emit hydrogen gas, which is explosive. Recharge batteries only in a well ventilated area.
2. When disconnecting a battery always remove the ground cable first in order to prevent sparks if the wrench is accidentally grounded.
3. When installing a battery always attach the ground cable last.
4. Wash acid and corroded particles from hands immediately after performing battery service. Be sure that clothing is free of acid and corroded particles.

5. Face shields or other eye protection shall be worn when handling batteries. If acid gets into the eye, promptly rinse the eye thoroughly with water until chemical is completely removed. After a thorough rinsing, cover the eye with a sterile gauze compress and take the injured person to a doctor.
6. Use great care in the storing and handling of electrolyte for dry charge batteries.
7. Follow safe lifting practices when handling batteries. Use only an approved carrier. When lifting batteries in and out of under hood mountings, you can sometimes gain additional leverage by resting your elbows on the fenders.

Lubrication and Maintenance Service

1. To prevent slipping, promptly clean up oil and grease from floors. Never discharge a high pressure grease gun at any part of the body, as grease may penetrate the skin, causing injury.
2. Do not rock cars while they are on a twin post or free wheel lift, as movement may cause enough shifting of the car on the supports to fall off the lift.
3. Do not stand in front of a vehicle when guiding onto a lift or pit. If you do, you may be injured if it does not stop in time.
4. When using floor lift jacks, be sure they are resting on a firm base and make good contact with the car. When chain hoists or jacks are used, vehicles shall be securely blocked before employees go under them.
5. Do not allow anyone to remain in a vehicle being raised on a lift.
6. Do not overload the lift.
7. Keep your hand on the control valve when the lift is being raised or lowered. Do not prop it open.
8. Do not allow anyone to walk under the lift when it is being raised or lowered.
9. Report immediately to your supervisor any faulty operation of the lift. Do not use the lift until the defect has been corrected. A jumpy lift usually means low oil -- have it filled or repaired. Tag lift until repaired to warn others.
10. When using the lift, observe the following precautions:
    A. Center the vehicle over the lift.
    B. Adjust the adapters to make proper contact with the vehicle.
    C. Raise the lift slightly off the floor almost making contact with the vehicle.
    D. Look under the vehicle, making sure that the gas line, muffler, tail pipe, or other parts of the car will not be damaged by contact with the lift.
    E. Raise the lift until contact is made and vehicle begins to rise slightly.
    F. Look under the vehicle, checking that proper contact is being made, and if satisfactory, continue raising the lift to the proper height.
    G. When fully raised, inspect contact points to make certain that the vehicle is firmly positioned.
    H. Do not open the doors of vehicle that is raised on a frame contact lift.
    I. After lowering, check to ensure that there is adequate clearance under the vehicle before moving it off the lift.
    J. When not in use, the lift shall be lowered completely to avoid accidents.
    K. Lift areas shall be cleared of objects from prior jobs. Oil absorbent material shall be used to remove excess oil and grease before a new job is started.
11. Vehicles shall be properly positioned and automatic chocks shall be operative on all lifts.
12. Safety legs or pins shall be operative to prevent dropping of lifts in event of pressure failure.

13. Do not work under vehicles or other equipment supported by jacks or chain hoists without protective blocking or stands that will prevent injury if jacks or hoists should fail.
14. Hoods, dump sections of dump trucks and similar movable parts shall be blocked to keep them stationary during repairs. (See Lockout/Tagout section of Safety Manual.)

Air Compressors

1. Turn off the main switch before oiling, wiping, or working on the air compressor.
2. Test safety valve weekly to be sure that it operates properly.
3. Never tamper with the safety valve or controls. All adjustments and repairs should be made by qualified mechanics.
4. Do not pile objects near the compressor, nor hang them above it in such a way that they could fall into the mechanism.
5. See OSHA compressed air standard 29 CFR 1917.154.

Special Fire Prevention - Protection

1. No petroleum products or solutions containing petroleum shall be poured into any drain or sewer.
2. Never use gasoline for cleaning purposes under any circumstances.
3. Put all oily waste in covered metal containers. Approved and properly marked storage containers shall be provided for waste, oily rags, etc. Empty them frequently to prevent spontaneous combustion.
4. Welding and brazing shall be done away from flammable or explosive substances. Appropriate fire extinguisher shall be located nearby.
5. Smoking shall not be permitted in any maintenance shop area in the vicinity of flammables.
6. The correct type, proper size and adequate number of clearly marked and easily accessible extinguisher shall be provided.
7. Fire exits shall be properly marked and kept clear at all times. During working hours all exit doors must be kept unlocked.
8. Employees shall be instructed in the safe handling of flammables. (See Hazard Communication Section)
9. Only approved and properly marked cans shall be used for flammable liquids.
10. Fire authorities should be given information about the premises to enable them to respond to an emergency.
11. Employees shall be instructed in evacuation procedures.

What to Do In Case of Fire

1. Know the location of firefighting equipment and how to use it.
2. Call 911 to contact the Fire Department.
3. When a fire starts, lose no time in using firefighting equipment at hand to try to control the fire before it spreads. Call, or have someone call the Fire Department immediately.

4. When a gasoline spill catches fire, attack the flame at its base. When using a dry chemical or carbon dioxide extinguisher, use a rapid side-to-side motion. Be sure that all of the fire is put out or it will reflash.
5. Notify your supervisor and the Risk Manager as soon as possible after a fire has occurred.
6. Consult Fire Fighting Equipment Section of Safety Manual pg 6.

Closing of Vehicular Service Building

1. Turn off air compressor at main control switch and air valves at the tanks.
2. Check control setting of heating equipment, and be sure it is working properly
3. Lock all windows and doors.
4. Disconnect all coffee makers and appliances except refrigerators.

FUEL DISPENSING SAFETY

General

1. Good housekeeping shall be maintained in the entire service area.
2. Gasoline, diesel and other fuel dispensing pumps shall be properly labeled.
3. Shut off the pump immediately if a fire occurs while the nozzle is still in the tank. Do not remove the nozzle until the fire has been put out.
4. Report unsafe gasoline nozzle i.e. faulty automatic shut-off.
5. Smoking is not permitted in any fuel dispensing area.
6. Stand in a safe position at the pump. Do not cross in front of moving vehicles.
7. Before delivering fuel into the fuel tank, make certain the engine is off.
8. Good metallic contact shall be made between the nozzle and tank before filling the tank. Use particular care when topping off, so as to avoid spillage of gasoline.
9. Always replace fuel tank cap immediately after delivery.
10. Be sure hose nozzle is hung securely on the pump after delivery.
11. Keep pump hose exactly placed within island limits so it will not catch on bumpers or fenders.
12. Keep hose, nozzles, and connections in good condition.
13. Report immediately any leakage near a fuel pump. Do not use the pump until the leak is fixed. This work shall be done only by a qualified mechanic.
14. Fuel spillage on driveways should be reported immediately. If the spill is large enough to create a risk of the fuel reaching drains, immediate measures should be taken to stop the flow of the fuel. Dumping sand on and in the way of the flow is recommended.
16. Remove clothing wet with gasoline immediately and be sure that it is cleaned before it is worn again. Do not go near a heater or open flame wearing gasoline soaked clothing. When the skin has been wet with gasoline, wash the affected part thoroughly with soap and water to prevent skin inflammation.
17. Deliver gasoline into fuel tanks of properly labeled metal containers only. Never deliver gasoline into glass bottles, open containers, or food, drug, or cosmetic containers. The Federal Hazardous

Substances Labeling Act requires that any container that is filled with gasoline, kerosene or other hazardous substances must be labeled in an approved manner. (In private service stations, if the container does not have such a label, the dealer must apply one before filling it.)

18. Employees shall not siphon gas with a hose or tube, particularly where the mouth is used to create suction.
19. The location of shut-off switch should be clearly marked, and all employees should know where it is and how to use it.

Automatic Nozzles

1. Use only automatic nozzles which have been approved by Underwriters Laboratories, Inc. and the City Fire Department.
2. In situations where the nozzle cannot be secured to prevent it from falling out, remain by the nozzle and fill the tank on manual control.
3. Observe the nozzle frequently while gasoline is being delivered so any mechanical failure will be noticed immediately.
4. Check the automatic nozzle regularly and keep it in good repair.

Receiving and Storing Gasoline

1. Fill pipes of underground tanks shall be plainly marked by color code, tags, or other methods on the installation to show the contents of the tank. Always take precautions to prevent the mixing of products as a result of delivery into the wrong tank.
2. Keep fill caps tight between deliveries to keep water or dirt from entering. The use of grease on threads will aid in keeping fill caps watertight.
3. Gauge tanks with calibrated sticks in gallons or inches, before ordering, and again before receiving deliveries to be sure the quantity being delivered will not overflow. Be sure also that the correct tank chart is used.
4. Clear fill pipe areas of parked cars prior to the time of delivery of gasoline. Do not allow parking in those areas where it will interfere with absentee deliveries. A car parked near or over a fill pipe may be a serious fire hazard.
5. Make sure that gasoline vapor discharged from vent pipes does not enter buildings. Do not strike matches or permit other sources of ignition near vent openings. (It is especially important when tanks are being filled because an equal volume of flammable vapor is being discharged into the air through the vents.)
6. Report to the immediate supervisor on duty at once if liquid gasoline should discharge from vents at any time.
7. Consult OSHA standard 29 CFR 1917.156 Fuel Handling and Storage.

REFUSE COLLECTION

Introduction

1. Drive your vehicle on the right hand side of street unless operating on one-way streets or specifically directed otherwise by supervisor.
2. Never activate packing mechanism on rear loaders unless turn-buckles are properly fastened, except when unloading packer.
3. Collection crews shall haul only the type of refuse they have been assigned.
4. Crew members shall handle refuse in such a manner as not to increase the hazard to themselves from broken or flying glass.
5. Never manipulate anything in or near the hopper while packer is in operation.
6. Do not manually push refuse into hopper while packer is in motion.
7. Never put any part of your body in the hopper area while the packer blade is in motion.
8. Never activate packing controls while any portion of the body is in the hopper area.
9. Make sure there are no objects on the edge of the hopper, such as lumber or pieces of glass, which would fly out and injure someone when packer is in motion.
10. No one will ride in the hopper. Ride only in prescribed locations. At no time shall any part of the body extend into the hopper.
11. Never put refuse in hopper when truck is full.
12. Use caution when moving heavy wheeled containers.
13. Each rear load truck should carry a broom and shovel to clean up rubbish spills.
14. Containers used in carry out service, when left unattended, should be out of driveways and walkways, off sidewalks, and near curb.

Unloading Operations

1. All refuse collected shall be delivered to the designated disposal point where the complete load must be discharged.
2. Directions from disposal site attendants shall be followed.
3. Be alert at the disposal site and watch out for sharp objects and wire that may puncture tires or tangle drive line.
4. Wait until vehicle is completely stopped at the disposal area before unfastening turnbuckles or latches.
5. Use caution when manually operating rear doors on trucks.
6. Employees not operating the dumping controls shall stand clear of the vehicle until the load is completely discharged.
7. Never raise the tailgate or operate the push plate in a jerking manner.
8. When tailgate is in raised position, never have any part of body between vehicle body and raised tailgate unless proper blockage is installed.
9. Stop all engines and remove the key before getting into the packer body to clean it.
10. While at the disposal site blades shall be cleaned of loose refuse in accordance with the guidelines of the truck.
11. Drivers of refuse collection vehicles shall inspect their vehicles for cracks, broken welds, etc., while at the disposal site.

Hazardous Materials

If refuse personnel come in contact with or identify suspected hazardous material, radio supervisor, City shops or 911. Advise them of your location and situation. If possible, do not touch, handle or remove the material from the original location where it was found.

Vehicle Breakdowns

1. Call your supervisor or City Shops to report breakdown. Give truck number, location and description of trouble.
2. If a vehicle stalls on roadway, warning triangles (reflectors) are to be placed in a manner conforming to D.O.T. vehicle code.
3. Stalled vehicles are not to be left unattended.

Injuries

1. Report all injuries, regardless of how minor, on the same day they occur.
2. Any serious injury shall be reported to supervisor immediately.
3. Any employee witnessing an accident shall immediately assist the injured and arrange for medical treatment if required.
4. In the event an employee is caught in hopper or packer: Stop operation of vehicle packer immediately. Check extent of injury. If help cannot be administered, summon help.
5. Use appropriate forms on the Intranet website to report injuries.

Vehicle Fires

1. For fires in the packer body of the truck, radio your supervisor, City shops or 911. Advise them of the fire and location of truck. Attempt to locate an isolated but accessible area to dump the load. Move truck away from burning refuse pile, and maintain radio contact if possible.
2. For fires in the engine or cab compartments, contact supervisor, City Shops, or 911. Advise them of the fire and location of the truck. If possible to do so without endangering yourself, move truck away from any structures and attempt to put out the fire with the fire extinguisher. Maintain radio contact if possible.

OFFICE SAFETY

1. Practice good housekeeping at all times in office areas.
2. Keep cords and other wiring covered so they do not become tripping hazards. Do not overload outlets by connecting too many items.
3. Keep equipment in good repair.
4. Do not block stairs, steps or doorways.
5. Clean up all spills immediately.
6. Use the proper ladder or stool for reaching high places do not stand on chairs or furniture.
7. Portable electric heaters should not be used in office spaces.
8. Follow proper lifting techniques when carrying large or awkward materials.
9. Practice sound electrical safety techniques when working with computers, typewriter, photocopiers, etc.
10. Report unsafe situations to your supervisor immediately.
11. Report accidents and injuries immediately to your supervisor.
12. Do not store food in desks, cabinets or other similar areas.
13. Know the **Emergency Evacuation Plan** for your particular office area.
14. Know the location of the nearest fire extinguisher, fire alarm, and first aid kit.

TREE TRIMMING OPPERATIONS

Tools and Equipment

1. All tools and equipment shall be properly maintained.
2. Employees shall make daily inspections of all equipment, tools, etc. before using them.
3. Hand saws shall be kept sharp and properly set so they will not jump out of the cut and cause injury.
4. Ramp boards (used to load equipment into trucks) shall be kept smooth sanded and varnished to prevent splintering of boards. (Hinged ramps are recommended.)
5. Proper care of safety lines shall be taken at all times.
    A. Safety line shall be protected against wetting or dampness. Completely dry and clean before storing.
    B. Safety lines and hand lines shall be kept in a clean box by themselves. Do not store lines and tools together.
    C. All ropes and lines shall be kept coiled when not in use and hung in a clean, dry, dark, well ventilated area.

Chipper blades shall be kept sharp. (Dull blades cause extra strain on the engine and may cause chippings to clog in the chute.)

Fuels

1. Fuels shall be dispensed and stored safely.
2. Stop gasoline powered equipment before fueling and wipe away spills before starting it.
3. Fuels shall be stored in approved flammable liquid containers only.
4. Fuel containers shall never be stored or carried in crew compartments.

Personal Protective Equipment

1. Appropriate personal protective equipment shall be used and maintained properly.
2. Safety goggles or face shield and hearing protection shall be worn when feeding a chipper.
3. Work gloves shall be worn when roping or handling equipment and tools.
4. Work boots should have ankle support and non-slip soles.
5. Safety equipment such as goggles, hard hats and gloves should be stored where they are readily available. Goggles and face shields should be kept clean, and should be replaced when cloudy or scratched.
6. First aid kits shall be carried on all trucks and kept well supplied.

Work Area Protection

1. Traffic cones, barricades, high level warning devices, etc., shall be properly placed in the street after the truck stops at the work location. Flashing warning signals should be observed for a few minutes to assure they are working correctly. (See Safety Manual section on Barricades and Work Area Protection for further guidance.)

Tree Trimming Operation - General Rules

1. Safe procedures shall be observed when climbing and working trees. Never use a bull rope for climbing.
2. A climber should position themselves above the limb they are cutting off to prevent being struck by the limb as it falls.
3. All limbs shall be tested before the full weight of the body is allowed to rest on them. Keep one arm around the trunk or keep the hands on separate limbs. Branches are more apt to snap off on a cold day than on a warm day.
4. Only one person shall work in a tree at a time unless an additional person can work in the same tree safely.
5. Trees shall not be climbed or worked in when wet unless in an emergency. Use extreme caution when doing so.
6. Climbers shall keep hands and feet free from tight or binding positions where they can become entrapped where limbs meet the trunk of a tree.
7. Safety lines shall be used when climbing as well as in performance of work. Use safety line with a saddle and have the climber assisted up the tree by ground person when necessary.

8. The climber shall tie himself in with his safety tag-line while changing his safety line or re-crotching.
9. Knots tied to lines for prolonged periods or knots tied repeatedly at the same point in a line will cause kinking and excessive wear of the line. Avoid this practice.
10. The safety line should be crotched around the main trunk and only at a height that the trunk would support the climbers' weight.
11. Safety lines shall be examined for cuts and wear and tested before each day's use. Questionable lines shall be taken out of service at once.
12. Safety lines shall be at least 1/2" 3-strand Esterion, safety blue, polyester or nylon and from 120-150 feet in length when used in larger trees.
13. The working load of a line shall not exceed 1/5 the breaking strength of the line.
14. The climber should stay in his safety saddle until he is again safely on the ground.
15. When using a ladder, lashing or other tie lines should pass over side rails and the end of the rungs (not over the center of the rungs).
16. Ladders must be placed on sound footing (and not in the bed of a truck).
17. When using straight ladders at trees, to establish proper angle, the foot of the ladder should be moved out of the perpendicular by 1/4 the length of the ladder. If the ladder is 12 feet long, the foot should be 3 feet out from the base of the tree. Estimate the length of the ladder by counting rungs which are usually 1 foot apart.
18. Tools shall be raised or lowered by means of a hand line or the free end of the safety line.
19. Hand saws should be carried in a scabbard and securely fastened to the climber's belt.
20. Tree spurs shall be put on at the base of the tree and removed when reaching the ground.
21. A large tree limb that cannot be controlled by hand should have a line or lines attached for controlled lowering before the limb is cut off.
22. The trimmer shall place themselves in the tree so that the saw cannot fall against them if it is suddenly released.
23. When using the chain saw from the bucket, always have it attached by a safety line to the bucket.
24. Safety goggles or face shield and ear plugs or muffs shall be worn when operating chain saw.
25. Always give proper warning when about to drop something out of a tree, such as: "Timber"; "Heads up"; and "Look out below".
26. Not more than two people at a time should be allowed to work near the base of a tree which is being felled.
27. When trees must be cut flush to the ground, it is safest to make the first cut at stump height above the swell of the roots and cut the stump flush with the ground after the tree is down.
28. When felling trees on hillsides, try to drop the tree up the slope (and not down slope nor across the slope).
29. Make sure the area around you is clear before turning to the side with a chain running in your hands.
30. Never leave a saw or any other machine running unattended.
31. When bucking fallen logs on hillsides, wedge logs firmly first and then buck only from the high side.
32. Pruner poles must be made of non-conductive material and have a non-conductive pull line between the lever arm and the handle. This is a safeguard against electrical shock.
33. Only one person shall feed a chipper at a time. If other employees are available - they should prepare the bush for the person feeding the chipper. Stand to the side when feeding the chipper.
34. Safety goggles or a face shield and hearing protection shall be worn when feeding the chipper. No loose clothing or gloves with holes shall be worn when chipping or stump grinding.

35. The bush shall be cut small enough so that, if it is drawn into the chipper, it will not cause injury to the operator.
36. Under no circumstances shall tools such as scoops or forks be used to push brush and debris into the chipper. Such practice is extremely dangerous to the operator and the machine.
37. Pneumatic tools must be handled with care so that they will not be activated unexpectedly. Disconnect a pneumatic tool from the air hose before handing it to another person and before leaving it unattended.
38. When edging, a safety shield shall be worn by the operator to prevent rocks from striking themselves in the face. A face shield and shin guards shall always be worn when operating a lawn renovator.
39. To prevent head injuries, low hanging limbs shall be trimmed and hard hats shall be worn.
40. Safety goggles or a face shield shall be worn when operating the stump cutter.

TRENCHING AND SHORING OPERATIONS

All City trenching and shoring operations are to be conducted according to OSHA standard 29 CFR 1926 Subpart P, including 1926.650, 1926.651, and 1926.652 and Appendices B through F. These standards are contained in a separate more manageable size field manual titled "Construction Standards for Excavations". This handbook should be available and in use by all work groups whose employees are required to enter excavations, even for short periods of time.

CELLULAR PHONE USE IN VEHICLES

Distracted drivers are more likely to make a driving error or react too slowly. As more City drivers are using cellular phones, it is important that they be used safely and courteously. Currently, there is no law or City policy against using a cellular phone while driving, but you could be charged with dangerous or careless driving if you cause an accident while using one, and cellular phone use is frequently cited by other drivers as an annoyance or hazard because distracted cell phone users often behave more erratically. It is important both for safety and for the image of City drivers that common sense and courtesy be followed in using Cellular phones while in City of Grand Junction vehicles.

Guidelines for Cellular Phone Use in Vehicles

1. Whenever possible, use your cellular phone when parked, or have a passenger use the phone.
2. If your position requires frequent cell phone use in a vehicle, you should have voice mail service and hands-free equipment for your phone, and use both to avoid distractions.
3. If your phone rings when you are driving – especially during hazardous conditions -- let your cellular voice mail service take the call and listen to the message later when you are parked, or pull over before answering, if traffic conditions permit.

4. Make sure the phone is easy to see and reach: Place your cellular phone in your vehicle where you can grab it without removing your eyes from the road.
5. Suspend conversations during hazardous driving conditions or situations.
6. Let the person you are speaking to know you are driving and that the call may need to be suspended at any time.
7. Do not take notes or look up phone numbers while driving. As a driver, your first responsibility is to pay attention to the road. Common sense dictates you do not read, look up an address or attempt to write or take notes while driving.
8. Attempt to dial and place all calls when you are not moving.
9. When possible, plan your calls before you begin your trip, or call when your vehicle is parked at a stop sign or red light. If you absolutely need to dial while driving, assess the traffic and dial only a few numbers at a time.
10. Learn and use the pre-programmed number dial features of your phone. Practice using this feature for commonly dialed numbers *before* driving so you are familiar with the procedures.
11. Do not engage in stressful or emotional conversations while driving. A stressful or emotional phone conversation while driving is distracting and potentially dangerous. If necessary, suspend the phone conversation.
12. Use your cellular phone to call for help or to help others in emergencies. Your cellular phone lets you be a "good Samaritan" in the community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 and give the exact location and information to fire, police or ambulance personnel.

LPG - LIQUID PETROLEUM GAS (Propane)

Mixtures of Propane, Methane, and Butane comprise Liquid Petroleum Gas (LPG), often referred to as simply Propane. It is used in a wide variety of operations, including fueling vehicles, as heat source for heating or melting materials, weed burning operations, cutting, soldering, and heating buildings or equipment.

Applicable OSHA standards for handling and storage of LPG are contained at 29 CFR 1910.110.

Basic Precautions

1. The material is extremely flammable. DO NOT smoke while using LPG.
2. Operate in only well ventilated areas.
3. Never puncture the container.
4. Keep the container away from sources of flame or heat.
5. Never incinerate the container.
6. Keep the container away from exposure to heat sources.
7. When changing propane cylinders, make sure that tank valves are closed before breaking connections. Check for leaks after change is complete using a soapy water solution.
8. Have a fire extinguisher or other firefighting equipment nearby when using propane.

9. Have a first aid kit nearby when using propane.
10. Use chemical goggles and leather gloves and cover extremities when working with propane, especially when lighting a pilot or burner on a propane system or changing system connections. Use of a Face shield is recommended while lighting pilot lights, especially when re-lighting after a pilot light has gone out.
11. Store excess cylinders securely and in a manner that protects the valve assembly from accidental blows. (Storage of liquefied petroleum gases shall be stored and handled in compliance with NFPA No. 58.[12] Taken from the "Handbook of COMPRESSED GASES second edition, Compressed Gas Association, Inc.)
12. NFPA hazard labels should be placed on all cylinders. (Part of 29 CFR 1910.1200)
13. Never store excess cylinders near walkways, exits, and general path of travel.
14. Never store excess cylinders under stairs, decks, ramps, etc.
15. Never store cylinders together with oxygen sources or strong oxidants.
16. Always secure the valve opening with a cap or similar device when storing excess cylinders.
17. Prior to each use, inspect cylinders for signs of damage and/or wear.
18. Damaged cylinders must be taken out of service and replaced or repaired.
19. Periodically check cylinders to assure that they are inspected and approved for use. This inspection should also be performed each time a cylinder is brought on-site from an outside source.
20. Never attempt to repair a propane cylinder. Refer all repairs to qualified propane service personnel.
21. Never refill a cylinder that has exceeded the certification date. (5 years)
22. Never improperly dispose of cylinders. Return them to an authorized propane dealership for proper disposal.
23. Immediately report unsafe conditions to your Supervisor or the Risk Manager.

General Safe Work Practices

These work practices shall be observed when using propane fired equipment:

1. All employees using propane equipment must be adequately trained, and must carefully read and understand the Operator's Manual before using the equipment:
   A. Read the igniting procedure before initiating the firing operation.
   B. Learn the warning steps if the equipment does not ignite properly.
   C. Be familiar with the specific purge cycles for each pilot light system.
2. Inspect the equipment before use.
3. Be sure that the equipment is adequately maintained.
4. Become familiar with the MSDS that applies to propane.
5. Stay alert for the smell of propane.
6. Never work on propane powered equipment near energized electrical equipment.
7. Never refuel or re-charge propane cylinders near flames or excessive heat.
8. If you have problems with a pilot light, immediately shut off the equipment and refer to the operator's manual or contact your Supervisor.
9. Never force any gas controls.

10. If you cannot operate knobs, switches, valves, etc. on a propane system, contact your fleet maintenance or your Supervisor for assistance.
11. Do not tamper with and/or alter any controls, valves, switches, etc.
12. Never use tools to turn valves, knobs, switches, etc. on a propane system.
13. Faulty propane equipment must be serviced immediately by qualified service personnel.
14. Be sure that NFPA hazard labels are attached to all cylinders.

Health Considerations

1. Propane can be both a heat and cold hazard to employees. Note that escaping propane gas can cause sudden freezing of exposed skin.
2. Know the basic first aid procedures for coming in contact with propane.
3. Be sure that an MSDS on propane is available in the area of operation.
4. Wear chemical goggles when working with propane.
5. Wear leather gloves and other protective clothing to cover extremities when working with propane.
6. Report injuries immediately.
7. Use propane in adequately ventilated work areas.

Personal Protective Equipment (PPE)

1. Wear chemical goggles when working with propane gas.
2. Wear leather gloves when working with propane gas.
3. Cover extremities with long sleeves when working with propane gas.
4. Wear a face shield if re-lighting a unit which has recently gone out.

Emergency Gas Procedures

If you smell gas or see escaping propane gas:

1. Shut off the main fuel supply.
2. Call 911, secure the area from approach by the public or other workers, and contact your supervisor.
3. Never touch electrical switches, light matches or use electrical or electronic equipment.
4. Be cautious about creating sparks from static or ferrous metals.

HAZARD COMMUNICATION PROGRAM

Introduction

The following introduction describes the purpose and scope of Hazard Communication programs as defined by OSHA standard 1910.1200. It is intended to assist in educating safety representatives and employees concerning hazardous substances, and provide guidance in implementing facility-specific Hazard Communication Programs. Each facility which deals with hazardous substances must have a Hazard Communication Program conforming to these general guidelines. Following the Introduction is the section which includes the hazard communication safety regulations for use throughout the City, and in facilities without a facility-specific program.

The basic goal of a Hazard Communication Program is to provide information to City employees about the chemical hazards they work with and how to protect themselves. This knowledge, in turn, should help to reduce the incidence of chemical source illnesses and injuries.

About 32 million workers are potentially exposed to one or more chemical hazards. There are an estimated 575,000 existing chemical products, and hundreds of new ones are being produced annually. Chemical exposure may cause or contribute to many serious health effects. Also, chemicals may present safety hazards and have the potential to cause fires, explosions and other serious accidents. Due to these hazards the Occupational Safety and Health Administration (OSHA) issued a rule in 1983 called Hazard Communication. The scope of this rule was expanded in 1987 to include employers in the non-manufacturing sector. To underscore the pertinence of Hazard Communication for municipalities, a partial list of hazardous chemicals often associated with municipal operations includes:

Formaldehyde	Hydrochloric acid	Nitric acid	Sulfuric acid	Stoddard Solvent
Mercury	Sodium hydroxide	Acetone	Toluene	Isopropanol
Trichloroethane	Lead	Hydrazine	Ammonia	Ethylene glycol
Phenol	Ethyl acetate	Pesticides	Crystalline Chlorine	Sulphur
Carbon monoxide	Asbestos	Freon	Hydrogen sulfide	
Nitrous oxides	Asphalt	Mineral Spirits	Portland cement	
Sulphur Dioxide	Ferrous Sulfide	Silica	Ferric Chloride	

Please note that the above is only a **partial** listing.

Given that cities such as Grand Junction have exposure to these or other hazardous chemicals, it is prudent for all facilities using chemicals to have a program based on the Hazard Communication rule CFR 1910.1200. The following outlines the requirements of such a program and explains the various elements.

There are five basic requirements under the OSHA Hazard Communication Standard:

1. A written plan must be established explaining how the Hazard Communication Program works for the facility and who is responsible for various items in the implementation of the program.
2. An inventory of on-site chemicals must be assembled on a list that identifies each one of them consistently with the label.
3. A procedure must be developed for inspecting, creating, and maintaining container labels.

4. Safety Data Sheets (SDS) must be collected for all products containing more than one percent of a hazardous chemical. These sheets must be accessible to employees, contractors and medical personnel. The designation "Safety Data Sheet" is replacing the older designation "Material Safety Data Sheet" and the terms may be used interchangeably.
5. Employees must be trained regarding the possible chemical hazards specific to their worksite. This training should also include procedures for safe handling of chemicals and protective devices that should be worn to limit exposure in the event of a spill or release.

Written Program

The Hazard Communication Standard requires a **written program**, whether or not the City introduced the hazard in the workplace. The written program must address the following items:

Labeling

1. The designation of the person(s) responsible for ensuring labeling of containers within the facility.
2. Designation of person(s) responsible for ensuring labeling on shipped containers. For the City, this responsibility generally relates to DOT regulations with regard to hazardous waste which is not a part of the Hazard Communication Standard. The City seldom ships hazardous products that are not in the form of waste.
3. Description of the labeling system used.
4. Description of written alternatives to labeling of facility containers, where applicable.
5. Procedures to review and update label information when necessary.

Material Safety Data Sheets (MSDS) (or just SDS)

1. Designation of person responsible for obtaining/maintaining the MSDS.
3. How such sheets are to be maintained (e.g., in notebooks in the work area, via a computer terminal, in a pick-up truck at the jobsite, via telefax) and how employees obtain access to them.
4. Procedures to follow when the MSDS is not received at the time of the first shipment from the supplier.

Training

1. Designation of the person(s) responsible for conducting training.
2. Format of the program to be used (audiovisuals, classroom instruction, etc.).
3. Elements of the training program - (discussed in the following).
4. Procedures to train new employees at the time of their initial assignment and when a new **hazard** is introduced into the workplace.
5. Procedures to train employees of new hazards they may be exposed to when working on or near another employer's worksite (i.e., hazards introduced by other employees).

Other Items of Discussion

1. Does a list of the hazardous chemicals exist, and if so, is it compiled for each work area or for the entire worksite and kept in a central location?
2. Are methods the employer will use to inform employees of the hazards on **non-routine** tasks outlined?
3. Are employees informed of the hazards associated with chemicals contained in unlabeled pipes in their work areas?
4. Does the plan include the methods the employer will use at multi-employer worksites to inform other employers of any precautionary measures that need to be taken to protect their employees?
5. For multi-employer workplaces, are the methods the employer will use to inform the other employer(s) of the labeling system used described?
6. Is the written program made available to employees?

The Chemical Inventory

An inventory of the **hazardous chemicals** present at the facility should be assembled. It is prudent to keep this list near the front of every book of MSDS with product names as they appear on the MSDS. This can be used as a cross reference which allows the user of a chemical to readily find needed information.

A hazardous chemical is any chemical that presents a physical and/or health hazard as shown by at least one study where the hazard was recognized at a level showing statistical significance. If OSHA has published a Permissible Exposure Limit (PEL), or the American Conference of Governmental Industrial Hygienists (ACGIH) has established a Threshold Limit Value (TLV) for the chemical, the chemical is automatically deemed hazardous. With the exception of highly toxic or cancer-causing chemicals, all chemicals present in quantities greater than one percent in a product must be listed in the inventory. Chemicals that are more toxic (e.g., benzene) must be listed if in a product at greater than 0.1 percent.

The chemical inventory should include the manufacturer's product name, location, and telephone number, and the work area where the product is used. Hazardous chemicals that may be generated in the work operation by the municipality must also be listed (e.g., welding fumes). After the inventory is assembled, a central coordinating department, such as Purchasing, should be consulted to determine whether all hazardous chemicals purchased are on the list. A procedure should be developed to keep the list current when new substances are purchased and used. It is very helpful to use the Purchasing Department to approve all purchases of hazardous chemicals and track the inventory in a data base. If any product containing a hazardous chemical is used in greater frequency or quantity than typical consumer use, the product or chemical should be included on the chemical inventory.

A helpful way to organize the chemical inventory is to separate the chemicals and/or products into various classifications (e.g., flammable, highly toxic, carcinogenic, etc.). The National Fire Protection Association (NFPA) has a system that classifies chemicals having acute effects into certain groups in accordance with similar characteristics. These classifications are helpful to train workers on the types of hazards in the workplace. However, the classifications are based on how the chemicals react in the event of a fire. This may or may not be indicative of how the chemicals behave at room temperature.

Until a standardized labeling and classification system is developed, a combination of communication measures may be appropriate.

Labeling

The standard requires that any container, bag, barrel, box, bottle, etc. be labeled if it contains hazardous materials and is not used merely by one person during one work shift. Given these criteria, a pail or beaker of hazardous material must be labeled if used to transfer material from a larger receptacle such as a 55 gallon drum. The labels on both the larger receptacle and the container used for transfer must have the same information. The chemical or trade name and the labels should be the same as that on the Safety Data Sheet.

Labels must include the following:

1. The chemical or mixture's trade name.
2. The name and address of the manufacturer.
3. A warning with regard to the potential health effect or hazard - NFPA labels can be used for this in most cases.

Optional information – which may be helpful

4. The Personal Protective Equipment (PPE) appropriately worn during the product's use.
5. The organ(s) affected by exposure to the chemical or mixture (e.g., blood, liver, kidneys, etc.) This is referred to as the target organ.

Material Safety Data Sheets

Note: Under the new Globally Harmonized System, these sheets will be called "Safety Data Sheets or "SDS". In this manual, most references are to MSDS. Both designations convey the same chemical information. Regardless of designation as SDS or MSDS, the sheets may be kept together in the same location.

If a product is purchased containing more than one percent of a hazardous chemical, an MSDS should accompany the shipment of the product. If an MSDS is not attached, a system to ensure that the appropriate MSDS is received should be put in place. The purchasing department also has the option to implement a policy which will refuse all shipments of hazardous materials not accompanied by an MSDS. Hazardous products bought at the hardware store that are used with greater frequency or amounts than typical consumer use must also have an MSDS. However, these items will not typically be bought with an MSDS. Therefore, the hardware store should be contacted to determine the supplier who sold the product. This supplier should then send an MSDS upon request.

After obtaining the MSDS, the data sheet should be checked to determine whether all the necessary items are included. The following is a list of required items:

1. Product or chemical identity used on the label.
2. Manufacturer's name and address.
3. Chemical and common names of each hazardous ingredient (including CAS numbers).

4. Name, address, and phone number for hazard and emergency information.
5. Preparation or revision date of the MSDS.
6. The hazardous chemical's physical and chemical characteristics, such as vapor pressure and flashpoint.
7. Physical hazards, including the potential for fire, explosion, and reactivity.
8. Known health hazards, including signs and symptoms of exposure or any medical conditions aggravated.
9. OSHA Permissible Exposure Limit (PEL), ACGIH Threshold Limit Value (TLV), or other exposure limits.
10. Emergency and first aid procedures.
11. Whether OSHA, NTP or IARC lists the ingredient as a carcinogen.
12. Precautions for safe handling and use.
13. Control measures such as engineering controls, work practices, hygienic practices or personal protective equipment required.
14. Primary routes of entry.
15. Procedures for spills, leaks, and clean-up.

One quick way to check the MSDS is to see if all blocks/spaces are filled out as is required by the standard. The MSDS can be in any format as long as it has the above information. If the MSDS does not give adequate information, it may be best to contact the supplier for a more complete MSDS or to send the product back and refuse to use that vendor unless an adequate MSDS can be obtained.

The MSDS must be available to employees, their designated representatives, emergency personnel such as fire departments, and to appropriate government agencies.

The purpose of the MSDS is to communicate the chemical hazards, safe handling and emergency procedures, and contact information for further assistance if needed; for routine use as well as emergencies.

All the chemical ingredients of the product will be listed if in a percentage greater than one percent. Many times, manufacturers and suppliers will not disclose the ingredient for proprietary reasons. This is permissible for ingredients that are not considered hazardous.

The Chemical Abstract System (CAS) number, which is a unique number assigned to each chemical, should be included on the MSDS next to that chemical. The CAS number relates to a chemical registry which allows one to find a particular chemical and information regarding it in a computer data base. Chemicals can be known under a number of different synonyms so the number is assigned to ensure the chemical's accurate identity.

Some products during normal use or during heating may give off hazardous by-products even though they may not be hazardous in their original form. This information is important to protect against potential hazardous exposures. An MSDS must be made available for any material which may emit hazardous components when being formed, welded, sawed, etc. For example, bricks may require an MSDS if the bricks are sawed and present an exposure to silica dust (sand).

Interpretation of the Standard Regarding MSDS

MSDS must be written in English, but can be translated into other languages for the purposes of training.

Hazardous chemicals need not be reported on the MSDS if it can be demonstrated that the hazardous components are bound in such a way that there is no potential for exposure to it. The standard defines exposure as potential as well as measurable exposure by any route of entry, either under normal conditions of use or in a foreseeable emergency. If there is no potential exposure given this definition, the chemical is not covered under the standard.

Computer generated MSDS do not have to include the fields that do not apply to the chemicals for which they are being used. In "standardized" forms where the information does not apply, this should be noted appropriately (e.g., N/A).

Where evidence indicates that a class or family of chemicals presents similar health hazards, it is appropriate to report those findings on the MSDS with respect to the entire class or family. NFPA classes of chemicals can be used in such a way.

The standard requires readable MSDS or electronically accessible MSDS to be maintained on site. This may be accomplished by the use of computers with printers, and/or fax machines. The key issue in compliance is that no barriers to access needed information exist during the work shift. For highly toxic chemicals, it may be helpful to have MSDS (available within 15 minutes) at each job site. For less hazardous chemicals, accessibility during the work shift is appropriate.

Communication of the hazard information via telephone does not satisfy the requirements of the standard. However, if employees are working at remote stations (trucks, construction trailers, etc.), vital information related to an emergency can be communicated via telephone, CB radio, etc. with subsequent sending of hard copy MSDS via mail, fax or delivery. In this scenario, a person must be stationed whenever appropriate at the central location to disseminate information to those at remote locations.

A system for retrieval of MSDS should not require that a supervisor be contacted. The locations where the MSDS books or computer terminals having the same information are kept should not be locked up preventing access. If computers or fax systems are used exclusively to communicate hazard information, all employees must be trained on their proper use. On multi-employer jobsites with contractors, municipalities must provide contract personnel foremen/supervisors with MSDS of products or chemicals that they may contact either routinely or in a foreseeable emergency in the scope of their work. If the contract employer(s) bring hazards to the municipality's worksite, they must submit MSDS to the appropriate City personnel and any other contractor's foreman if their employees were subject to exposure.

Arrangement of MSDS Books

Although there is no prescribed system for arranging the MSDS books, some suggestions are appropriate:

1. A comprehensive book having all the MSDS will be kept in one department such as Purchasing. This book shall be updated by one person. Copies of the new/revised MSDS should then be sent to the departments that are using that product or chemical. This is one reason why Purchasing or a central coordinator must be advised of any new hazardous chemical which enters the system.
2. Books for MSDS of chemicals/products that are used at a particular worksite should be kept within that worksite. These smaller MSDS books will more readily allow an employee to find the MSDS of concern.
3. A chemical inventory for that particular department should be kept at the front of each MSDS book, with an exhaustive inventory kept in the book discussed in suggestion (1).

4. The books should be divided in a logical manner. One way to separate the books is by class of chemical (e.g., acids, bases, flammables, carcinogens). Another way to separate the book is by type of use (e.g., lubricants, cleaning products, compressed gases, welding products, adhesives, paints). After these divisions are made, it is most helpful to compile the products/chemicals alphabetically by trade name.
5. After organizing the book, it is helpful to use the chemical inventory as an index, noting the page number or section in which the MSDS for the chemical resides. There should be some method to update the index as new MSDS are placed in the book.
6. It is highly recommended that the Hazard Communications Written Program be placed near the front of each MSDS book.
7. The MSDS books at each location must be periodically updated by a designated person.

CITY-WIDE HAZARD COMMUNICATION REGULATIONS

1. Review the site-specific **Hazard Communication Program** of your department or facility before working with any chemicals. Check material safety data sheets of chemicals prior to use.
2. Wear appropriate personal protective equipment as recommended by material safety data sheets when working with chemicals.
3. All personnel working with chemicals shall be adequately trained in potential hazards of the chemicals they are using.
4. Report all injuries or accidents immediately.
5. Clean up all minor spills.
6. If a major spill of hazardous materials occurs, evacuate and cordon off the area, call 911, and contact **your supervisor** DO NOT attempt to clean up a hazardous materials spill alone.
7. Properly store chemicals in such a way that chemical incidents do not result.
8. Properly label all containers containing flammable, poisonous, toxic, or otherwise dangerous materials.
9. Store insecticides, pesticides, herbicides, flammables, and strong acids in storage that is locked from public access.
10. Post signs informing personnel that hazardous chemicals are located in cabinets, lockers, closets, etc.
11. Employees required to wear respiratory equipment must be qualified to do so. This includes but is not limited to training, medical qualifications, and fit testing of respirators.
12. Only approved solvents will be used to clean parts and materials.
13. Gasoline, kerosene and other potentially dangerous materials will not be used as cleaning solvents.
14. Employees will wear gloves and safety goggles when working with cleaning solvents.
15. Maintain adequate ventilation when working with chemicals.
16. Employees should know the location of the nearest fire extinguisher, first aid kit, emergency eyewash, emergency shower and telephone when working with chemicals.
17. For guidance on Hazard Communication, consult OSHA Standard 29 CFR 1910.1200.

HEARING CONSERVATION PROGRAM

1. Check to see if elevated noise levels are present, and as appropriate, review the **Hearing Conservation Program** of a department or facility before working in those areas.
2. Certain areas may be identified as "**High Noise Areas.**" Personnel working in these areas will wear approved hearing protection.
3. When requested by supervisors, employees shall wear approved hearing protectors even if the area is not marked. Employees who are concerned about noise levels should request hearing protection be provided.
4. Personnel will be adequately trained in the use of hearing protection and will be familiar with the hazards related to elevated noise levels.
5. Hearing protection will be made available to anyone working in areas where elevated noise levels exist.
6. Personnel routinely exposed to elevated noise levels above 85 decibels shall be included in a Hearing Conservation Program. Contact your supervisor if you have questions regarding such a program.
7. Remember- people do not get accustomed to loud noises - **THEY LOSE THEIR HEARING!**
8. For guidance on hearing safety, consult OSHA Noise and Hearing Conservation Standards.

RESPIRATORY PROTECTION PROGRAM

INTRODUCTION

This program will provide City of Grand Junction employees with the criteria for compliance with the OSHA Respiratory Protection Standard 29 CFR 1910.134.

SCOPE

David L Roper, Risk Manager, has been designated as the person responsible for coordinating this program. Each supervisor will ensure that their employees will meet governmental requirements and all elements of the Respiratory Protection Program.

PURPOSE

It is the responsibility of the City to provide a safe and healthful workplace for its employees. In an effort to meet these requirements, all departments will conduct various surveys to determine whether the need for a Respiratory Protection Program exists. The employees who work in selected areas will be covered by this program. This program will dictate what steps must be taken to reduce employees exposure to nuisance dust, respirable dust, toxic chemicals, etc.

COVERED EMPLOYEES

The following employee job classifications will be covered by the **Grand Junction Respiratory Protection Program.** These employees were selected based upon workplace observations, total dust, respirable dust, and other known workplace chemical evaluations. Covered employees will be evaluated annually.

The following job classifications have been identified:

1. **Fire Department personnel**
2. **Parks and Recreation Pesticide/Herbicide Applicators**
3. **Persigo Wastewater Treatment personnel**
4. **Maintenance personnel who weld periodically**
5. **Maintenance personnel who paint periodically**
6. **Water treatment personnel working with chlorine in emergency situations.**
7. **Street Sweeper department personnel**

A list of covered employees will be maintained by the respective department.

PERSONAL PROTECTIVE EQUIPMENT

The selection of respirators is based upon several factors. These factors include but are not limited to workplace air contaminants, employee fit test results, employee comfort and ease of use in the workplace. Employees are fit tested using the "Rainbow Passage". This passage is discussed in Section on Fit Testing Procedure and Results. It has been determined through site inspections and surveys that the primary type of respirator required is either Air-Purifying Respirators or Air Supplied Respirators.

Each department will list the types and models of respiratory equipment available at their respective facilities. That pertinent information will be found in this section of the **Grand Junction Respiratory Protection program**

RESPIRATOR CARE AND MAINTENANCE

Respirators containing filters will be changed on a daily or shift basis. Employees will be furnished these types of respirators if they desire. These employees will be responsible for the care and maintenance of these respirators. Employees using respirators will use the following procedure to adequately clean their respirators.

1. Remove used or spent filter.
2. Examine all parts of the respirator (ie. straps, inhalation valve, exhalation valve, etc.)
3. Wash the entire respirator in warm soapy water. The use of a mild disinfectant is recommended.
4. Shake or gently wipe all excess water from the respirator. Allow the respirator to air dry.
5. Re-examine the respirator when installing the new cartridges.
6. Report any damage or defects to your immediate Supervisor.
7. Do not make repairs on respirators.

Additional respirators will be available upon request. These respirators will be inspected monthly. These respirators will be stored in clean, dry locations. These respirators will be stored in their original

containers or clean containers. Disposable dust respirators will be discarded at the end of the day or sooner if necessary.

Supervisors will periodically inspect the condition of respirators.

Air supplied respirators will be inspected periodically by qualified individuals. The air used in these systems shall meet "Grade D" specifications. Compressors used to fill tanks will be tested every six (6) months. Guidelines developed by the Compressed Gas Association for "Grade D" specified air shall be met.

EMPLOYEE TRAINING

City of Grand Junction employees will be adequately trained in the use of Air-Purifying Respirators or Air-Supplied Respirators. These employees will be trained in all aspects of these respirators. During this training session employees will also be fitted with an approved respirator. The results of fit testing are included in the Fit Testing Procedure and Results section. Records of employee training will be kept in this section of the **Grand Junction Respiratory Protection Program.**

A training outline used to discuss Respirators is given below, it may be used as a suggested guideline for air purifying and air supplied respirators. It is strongly recommended that a training outline be prepared that is specific for each respective department.

Suggested Outline

I. INTRODUCTION
- A. Uses
- B. Advantages
- C. Disadvantages
- D. Limitations
- E. Fit Testing
- F. OSHA Eleven Point Program
- G. Employee Qualitative Fit Test

II. TYPES OF RESPIRATORS
- A. Dust
- B. Mist
- C. Fume
- D. Organic Vapor
- E. Supplied Air

III. APPLICATION
- A. Nuisance Dust
- B. Total Dust
- C. Respirable Dust
- D. Silica
- E. Welding Fumes
- F. Degreasing Vapors
- G. Acids/Bases
- H. Toxic Chemicals

IV. ADVANTAGES

V. DISADVANTAGES

VI. LIMITATIONS
- A. Air Purifying
- B. Air Supplied

VII. FIT TESTING
- A. Negative Test
- B. Positive Test
- C. Banana Oil Test
- D. Irritant Smoke Test

VIII. OSHA ELEVEN POINT PROGRAM
- A. Written Program
- B. Equipment Selection
- C. Care and Maintenance
- D. Medically Fit
- E. Knowledge of Hazards
- F. Recordkeeping

IX. EMPLOYEE FIT TEST EXERCISE
- A. Irritant Smoke Test
  1. Fit Mask
  2. Close Eyes
  3. Negative Test
  4. Positive Test
  5. Read "Rainbow Passage"

X. QUESTIONS AND ANSWERS
- A. Equipment
- B. Fit tests
- C. Applications
- D. Advantages/Disadvantages

FIT TESTING PROCEDURE AND RESULTS

During the training phase of the **Grand Junction Respiratory Protection Program,** employees will receive fit testing of their respective respirators. Employees will be assured of a positive fit.

The following procedure will be used:

1. Properly don an air purifying respirator.
2. Conduct a Negative Pressure Test.
3. Conduct a Positive Pressure Test.
4. Close their eyes.
5. Irritant smoke will be passed over the respirator.
6. Employees will read the "Rainbow Passage."
7. If a leak is found, the test will be repeated.
8. After the test, a form will be completed describing the test and the type of respirator that was used for the test.

The "Rainbow Passage" is a phrase that is used to show that an adequate seal can be maintained when wearing a respirator. The passage requires the jaw to move various positions that could result in a leak. The employee will repeat the "Rainbow Passage" while wearing a respirator during the test. The "Rainbow Passage" reads as follows:

> When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long, round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

Copies of each employee's fit test results will be kept in this section of the **Grand Junction Respiratory Protection Program.** A sample form has been included at the end of this section.

GRAND JUNCTION RESPIRATOR FIT TEST

1. DATE: _____
2. EMPLOYEE TESTED: _____
3. EMPLOYEE SSN: _____
4. SIGNATURE: _____
5. TYPE OF RESPIRATOR: _____
6. RESPIRATOR MODEL: _____
7. POSITIVE FIT TEST: _____
8. NEGATIVE FIT TEST: _____
9. QUALITATIVE FIT TEST: _____
   (IRRITANT SMOKE)
10. TEST CONDUCTED BY: _____
11. SIGNATURE: _____

RECORDKEEPING REQUIREMENTS

There a several records that shall be maintained in accordance with 29 CFR 1910.134, OSHA Respiratory Protection Standard. Those records are listed below:

1. Documentation to demonstrate employee medical fitness to wear a respirator.
2. Care and maintenance schedule of all air purifying and air supplied respirators.
3. Proof of training.
4. Employee fit test results.
5. Documentation to show that annual reviews have been made on the Grand Junction Respiratory Protection Program.

The **Grand Junction Respiratory Protection Program** was written by W-H Interscience of Colorado. This program shall be reviewed on an annual basis. The following individuals endorse the **Grand Junction Respiratory Protection Program:**

Mr. Greg Lanning_____ Public Works Director

Mr. Bob Kelley _____ Safety Coordinator

EMPLOYEE RESPIRATORY PROTECTION PROGRAM ACKNOWLEDGEMENT

It has been shown that on this day you have received the following information regarding the **Grand Junction Respiratory Protection Program:**

1. Respirator Training
2. Respirator Fit Test
3. Respirator Examination
4. Personal copy of the **Grand Junction Respiratory Protection Program**

It is understood that employees covered by this program will comply with all aspects of the **Grand Junction Respiratory Protection Program.** Covered employees shall maintain a personal copy of this program and use it when necessary. Failure to follow all sections of the **Grand Junction Respiratory Protection Program** may lead to disciplinary action up to and including termination. This form shall be maintained in your training records.

EMPLOYEE RESPIRATORY PROTECTION PROGRAM ACKNOWLEDGEMENT

Employees Signature _____ Date_____

STATEMENT OF EMPLOYEE RESPONSIBILITY

As an employee of the City of Grand Junction, it is your responsibility to be aware of all safety rules and regulations that apply to your job. You are encouraged to ask your supervisor if you are not sure how to complete a task safely. City of Grand Junction Management wants to provide you with a safe and healthy workplace. It is your responsibility to work safely, use equipment and training provided, and to comply with these safe work practices.

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Behind-The-Wheel: **Table of Contents**

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Classroom Lessons

LEARN @transdev | Micro-Learning Modules Schedule

PROFESSIONAL OPERATOR DEVELOPMENT PROGRAM

The following schedule lists all Micro-Learning-Modules (MLMs) and on which day they are supposed to be shown to the trainees. These MLMs are to be shown in or around the bus on your issued tablets during Get to Know the Bus, Closed Course and BTW instruction. Of course you should never show any MLM while the trainees are on the road or the bus is in motion.

A more detailed MLM schedule is also found in your BTW Instructor Guide with a breakdown of which MLMs to show according to the exercise or standard you're demonstrating to your trainees.

Please do your best to follow the schedule that's in your BTW Instructor Guide. It is very important to show the MLMs and complete the exercises and performance standards in the order they appear.

DAY 1

1. Injury Prevention 1 - Slips, Trips and Falls
2. Injury Prevention 2 - Avoiding Back Injuries
3. Pre-Trip Inspection: Steps 1 - 3
4. Pre-Trip Inspection: Steps 4 - 5
5. Pre-Trip Inspection: Step 6 - Check Brake Systems (Paratransit Only)
6. Pre-Trip Inspection: Step 6 - Air Brakes Test (Transit Only)
7. Seat Adjustment
8. Mirror Adjustment
9. Reference Points - Centering
10. Reference Points - Six Inch
11. Reference Points - Four Foot
12. Reference Points - Backing
13. Reference Points - Intersection
14. Use of Signals and Horn
15. Use of Accelerator
16. Use of Brakes and Anticipated Stops

DAY 3

17. Diminishing Lane
18. Right Turns
19. Left Turns
20. GOAL
21. Using A Spotter
22. Parallel Parking
23. Railroad Crossing
24. Service Stops
25. Serpentine

DAY 4

26. Properly Securing Your Passengers
27. Safe Lift Operations
28. 4 Point Anchor System
29. 3 Point Passenger Securement System
30. Dropping off Your Passengers
31. Back Safety

DAY 5

32. Understanding Safety & Risk 1 - What is Safety?
33. Understanding Safety & Risk 2 - What is Risk?
34. Understanding Safety & Risk 3 - What are Accidents?
35. Understanding Safety & Risk 4 - Why do Accidents Happen?
36. Understanding Safety & Risk 5 - 300:29:1
37. Look Ahead
38. Look Around
39. Leave Room
40. Communicate
41. Commentary Driving

DAYS 6-10

GET TO KNOW THE BUS

42. Use of Signals & Horn
43. How to Calculate Following Distance
44. Minimum Safe Following Distance
45. Vehicle Dynamics 1 - Centrifugal Force
46. Vehicle Dynamics 2 - Kinetic Energy
47. Vehicle Dynamics 3 - Inertia
48. Vehicle Dynamics 4 - Friction
49. GOAL
50. Using a Spotter
51. Intersections & Turns 1 - LLLC at Intersections
52. Intersections & Turns 2 - Left Turns
53. Intersections & Turns 3 - Right Turns
54. Intersections & Turns 4 - Pedestrians & Cyclists at Intersections
55. Attentive Driving

CLOSED COURSE

56. Preventing Pedestrian & Cyclist Collisions 1 - Driving Through an Intersection
57. Preventing Pedestrian & Cyclist Collisions 2 - Turns
58. Preventing Pedestrian & Cyclist Collisions 3 - Service Stops
59. Preventing Pedestrian & Cyclist Collisions 4 - Passing Cyclists
60. Look Ahead
61. Look Around
62. Changing Lanes, Merging and Passing 1 - Proper Vehicle Positioning
63. Changing Lanes, Merging and Passing 2 - Changing Lanes
64. Changing Lanes, Merging and Passing 3 - Passing
65. Changing Lanes, Merging and Passing 4 - Merging Onto a Highway
66. Changing Lanes, Merging and Passing 5 - Exiting a Highway
67. Railroad Crossing
68. Leave Room
69. Adverse Conditions 1 - Rain

GET TO KNOW THE BUS

70. Adverse Conditions 2 - Snow
71. Adverse Conditions 3 - Ice & Sleet
72. Adverse Conditions 4 - Limited Visibility
73. Emergency Procedures 1 - Breakdowns
74. Emergency Procedures 2 - Emergencies Inside the Bus
75. Emergency Procedures 3 - Accidents
76. Emergency Procedures 4 - Evacuations

LLLC - BTW

BTW : The following are the MLMs that should be shown during the 20 hour minimum BTW training. You should show each MLM before you have your trainees practice the corresponding Performance Standard. Try to follow the BTW Guide as close as possible. You will show some MLMs more than once and please feel free to show other MLMs as you see fit.

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Course Syllabus

PROFESSIONAL OPERATOR DEVELOPMENT PROGRAM

DAY 1

	Minutes
CRW	
1. HR Orientation	60
2. Welcome to Transdev	20
3. How to Succeed	30
4. EAP	20
5. Fire Prevention & Evacuation	20
6. Local Issues	60
7. Bus Orientation	25
8. Vehicle Inspections	20
Get to Know the Bus	
Bus Systems	30
Vehicle Inspections	30
Mirror & Seat Adjustments	20
Reference Points & Blind Spots	20
Use of Signals & Horn	5
Use of Accelerator	10
Braking	30
Forward-Backward Judgement Stop	20
Air-Brakes *(Transit only)*	60
SDS Homework	
9. EAP	10
10. Fire Protection and prevention	5
11. Hazards Communication	15
12. Blood-borne Pathogens/PPE	15
13. LO/TO	10
14. Whistleblower	10
TOTAL MINUTES DAY 1	545

DAY 2

	Minutes
Review Day 1	10
CRW	
15. Understanding Safety & Risk	45
16. LLLC For Drivers	30
17. Commentary Driving	10
18. Vehicle Dynamics	45
19. Attentive Driving	45
20. Following Distance	35
21. Safe Backing	15
22. Intersections & Turns	45
23. Drugs & Alcohol	60
24. Injury Prevention	25
SDS Homework	
25. The Transdev Professional	20
26. Sexual Harassment	15
27. Railroad Crossings	20
28. Federal Regulations	20
29. Event Video Recorder	15
30. Wellness/Fatigue	30
TOTAL MINUTES DAY 2	485

DAY 3

	Minutes
Review Day 2	10
Closed Course	
Diminishing Lane	50
Right Turns	60
Left Turns	60
Backing	50
Parallel Parking	30
Railroad Crossing	15
Service Stops	45
Serpentine	60
Proficiency documented for every exercise	**N/A**
SDS Homework	
31. Pedestrian & Cyclist Awareness	15
32. ADA	25
33. TSS EPP	15
34. NTI Warning Signs	30
TOTAL MINUTES DAY 3	455

DAY 4

	Minutes
Review Day 3	10
CRW	
35. Changing Lanes, Merging & Passing	45
36. Preventing Pedestrians & Cyclist Accidents	45
37. Adverse Conditions	55
38. Customer Service	45
39. Passenger Sensitivity	45
40. Emergency Procedures	45
41. Active Shooter	30
42. Paddles & Fare Boxes	30
43. FINAL TEST	45
Get to Know the Bus	Minutes:
Lift Operations	30
Mobility Device Securement	45
Mirror & Seat Adjustments	10
Reference Points	10
Air-Brakes *(Transit only)*	60
Proficiency documented for every exercise	**N/A**
TOTAL MINUTES DAY 4	550

DAY 5

	Minutes
BTW	90
OBS	90
BTW&OBS (LLLC BTW 1 hour BTW, 2 Hours OBS)	**180**
TOTAL MINUTES DAY 5	360

DAY 6

	Minutes
BTW	240
OBS	240
TOTAL MINUTES DAY 6	480

DAY 7

	Minutes
BTW	240
OBS	240
TOTAL MINUTES DAY 7	480

DAY 8

	Minutes
BTW	240
OBS	240
TOTAL MINUTES DAY 8	480

DAY 9

	Minutes
BTW	240
OBS	240
TOTAL MINUTES DAY 5	480

DAY 10

	Minutes
BTW	90
OBS	90
Proficiency Test *(Included as part of BTW)*	60
TOTAL MINUTES DAY 10	180

DAY 11

	Minutes
Cadetting	480
TOTAL MINUTES DAY 11	480

DAY 12

	Minutes
Cadetting	480
Proficiency Test *(Included as part of Cadetting)*	60
TOTAL MINUTES DAY 12	480

COURSE LENGTH BY CATERGORY

SDS Homework	270	min or	4.5 hrs
CRW	1025	min or	17 hrs
Get to know the bus	380	min or	6.5 hrs
Closed course	360	min or	6 hrs
BTW	1200	min or	20 hrs
OBS	1260	min or	21 hrs
Cadetting	960	min or	16 hrs

TOTAL LENGTH
5455 min *or* **91 hrs**

NOTE: The BTW training follows a 2:1 operator to instructor ratio. If training more than 2 operators at a time, instructor must ensure each operator receives a minimum 20 hours of BTW training.

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Appendix E1- Transdev Accident Investigation Procedure

Transdev Services Inc

970 Grand Junction, CO

Accident Investigation Procedures

September 2020

Managing Accidents and Incidents

As an organization committed to safety, we aim to prevent accidents from happening in the first place. But when they do happen, we have protocols that help us handle them in the right way. Above all, we want to make sure everyone involved stays safe and, if anyone is injured, that they get the medical attention needed. We also want to minimize inconvenience for passengers.

From beginning to end, we manage accidents and incidents thoughtfully and thoroughly, focusing on four things:

- **Responding** quickly and appropriately
- **Investigating** to learn what happened, which includes documenting everything carefully
- **Reporting** the details to everyone who needs to know
- **Analyzing** what happened to determine if it was preventable, if employee retraining is necessary, and what can be done to prevent recurrence.

Each member of the team has a distinct set of responsibilities when an accident or incident happens. The Operations, Safety, and Maintenance Departments work together to ensure we coordinate our response with GVT and emergency personnel and minimize passenger disruption.

Operator Responsibilities

- In the event of an accident or incident, the Operator will stop the vehicle and notify Dispatch immediately. They must do this if the vehicle collides or comes in contact with any type of object or pedestrian, no matter how slight or minor the accident, and whether or not damage occurs. The Operator will also place emergency triangles out to protect the accident scene where physically able.
- Operators are instructed to never admit fault or make statements to the media.
- Operators are not permitted to leave the scene of an accident or move the vehicle until released by the proper authority. Operators must take action to keep passengers and other involved parties protected from further injury and cooperate with law enforcement.
- Operators will pass out contact cards to all passengers /witnesses and later collect them.
- Operators involved in an FTA reportable accident must undergo post-accident drug and alcohol testing.

Dispatcher Responsibilities

- Dispatch staff will determine the severity of the accident, number of injuries and location of accident in order to notify the appropriate emergency, fire, and police authorities.
- Dispatch staff will immediately notify the appropriate Road Supervisor, Safety Supervisor and/or General Manager. Depending on the severity, the Safety Supervisor and/or General Manager may also respond to the scene.
- Dispatchers will then track the progress of the response by noting in the dispatch log all actions and information available (time, location, who notified, actions taken to recover route)

Road Supervisor Responsibilities

- Travel to the scene and conduct a thorough investigation of the accident
- Road Supervisors are issued a Critical Incident Protocol card defining a critical incident and offering handling advice and telephone contacts
- Complete a written report.
- Speak to Operator / Passengers -take statements
- Taking photos of the scene (All vehicles involved and surrounding scene).
- Sending Accident information to the Safety Supervisor and/or General Manager.

All vehicles are equipped with accident investigation materials. At a minimum, this includes:

- Reflective vest
- First aid kit
- Body fluids spill kit
- Accident forms
- Customer comment cards.
- Emergency triangles
- Fire extinguisher

Mesa County Regional Transportation Planning Office (RTPO) Notification

In the event of a major accident and/or one where injuries are involved, we will notify RTPO Director immediately and provide all the details available at that time. As we learn more details and take appropriate actions, we will provide updates. <u>All accident documentation will be provided to RTPO for their records.</u>

Critical Incident Reporting

An event involving a TDNA (Transdev North America) employee, contractor, passenger or vehicle or occurring on TDNA property involving one or more of the following:

- Fatality
- Any incident resulting in serious bodily injury or medical transport of one(1) or more persons.
- Pedestrian or Bicyclist incident
- Passenger incident/injury involving improper wheelchair securement
- Environmental spills (any quantity)
- Vehicle roll-over/lay-over
- Vehicle roll-away
- Vehicle fire
- Events with potential for negative public relations and/or news media coverage

- Events causing interruption of operations (e.g.: fires, cyber, strikes, riots, severe weather)
- Incidents where vehicle Operator drug and/or alcohol use may be involved
- Estimated property damage equal to or exceeding $25,000

First Supervisor on site secures scene and calls GM and Safety Supervisor.

- General Manager calls Risk Management- Call the numbers below in order until one person in Risk Management/Safety is reached.
  - 1. Richard Freed (Dir. of Claims) 630-361-3687 (cell), 630-230-2636 (office)
- General Manager calls Safety Dept
  - Oscar Figueroa (Regional Safety Director) 504-252-2198 (cell). RSD will notify VP of Safety
  - Julie Peel (VP, Safety & Security) 301-404-4435 (cell)
  - Jack Neel (Legal) 312-961-2915 (cell)
- General Manager notifies Region Vice President as soon as possible. Initial notification should be made via phone call if possible.
- General Manager or Designated Senior Team Member directs Media Inquiries to:
  - Mitun Seguin (VP Marketing) 301-674-3733 (cell) 240-485-2117 (office)

A quick response is critical because evidence is perishable.

Accident Investigation

The responding Supervisor will complete a thorough Vehicle Accident Report. This report will:

- Include the necessary forms, photographs, and statements–all of which will be submitted to the Safety Supervisor so that it can be uploaded to Transdev's WebRisk database.
- Be completed and submitted as soon as possible, but no more than 24 hours after the accident occurs
- Include comprehensive information about the accident and Operator involved, other vehicle(s), passenger conditions, and witnesses to the accident.

The investigating supervisor should evaluate the condition of the Operator. Not only to determine if he/she is chemically impaired but also to check the emotional effect the accident may have had on the individual.

- If the Operator appears to be impaired or states he/she is too "upset" to continue on the route, a replacement operator will be arranged. **THE OPERATOR WILL NOT BE ALLOWED TO CONTINUE ON THE ROUTE!**
- Using the Decision Maker form the supervisor will determine whether the Operator should be transported for a Drug and Alcohol test. Operator will not be allowed to drive until a confirmed negative result is received.

Analyzing the Data

Post-Accident Training
Our Manager reviews the accident details to determine if the accident was preventable. We complete this review as quickly as possible. We provide post-accident training to employees involved in a preventable accident, tailoring the training to address the root cause of the accident. This training includes, at a minimum, one hour of Behind The Wheel (BTW) instruction. Employees must complete post-accident training prior to returning to driving duties.

There are 3 classifications of Accidents

- Preventable- Operator failed to do everything he or she could have done, within reason, to avoid a collision. An error or oversight causing passenger injury is preventable.
- Non Preventable- No operator error
- Damage or injury- No operator error (Alleged injury, vandalism etc.)

Don't confuse "Fault" with "Preventability". Accidents are classified based on evidence collected at the scene and through review of onboard video.

All accident data regardless of severity is entered into the Transdev electronic file system (Webrisk). Transdev regularly analyzes accident data to spot trends, which may lead to specific accident reduction campaigns. The campaigns may include training materials for monthly safety meetings, videos for focus boards, analysis of particular routes, and increased Driver Evaluations.

In addition, on a monthly basis Corporate staff review accident data with the Regional Vice President. In the event of unacceptable accident trending the General Manager would be required to prepare and discuss action plans designed to reduce accidents.

Appendix E2-Mesa County Accident Investigation Procedures

The following checklists(most recent version on Mesawave or obtained from Risk Management) shall be used in the case of an accident involving Mesa County employees:

Automobile Physical Damage- only involving a County vehicle, no third-party's vehicle or property is involved:

- Notify the law enforcement office which has jurisdiction
- Notify Fleet Management of the incident as soon as possible at 244-1820
- Notify Risk Management of the incident as soon as possible at 244-1868
- Have the employee in charge of the vehicle complete a Vehicle Accident/Incident Report (Attachment A)
- Supervisor to review report and comment in the Director's and Supervisors Review area
- Send Vehicle Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document.

Automobile Liability- Vehicle involved in an incident involving another party:

- Notify the law enforcement office which has jurisdiction
- Notify Fleet Management of the incident as soon as possible at 244-1820
- Notify Risk Management of the incident as soon as possible at 244-1868
- Have the employee in charge of the vehicle complete a Vehicle Accident/Incident Report (Attachment A). This report will open both the auto liability claim and auto physical damage claim.
- Supervisor to review report and comment in the Director's and Supervisors Review area
- Send Vehicle Incident Report and any other paper work (tow invoices, police reports, etc.) to Risk Management for processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document.

Property Damage- Any loss or destruction of County equipment or property while performing job as a County employee. County property is covered under the County's property insurance. This does not include personal property which is generally insured through personal home owners insurance.

- Notify Risk Management of the incident within 48 hours if possible at 244-1868
- Employee involved with the incident to complete a Vehicle Accident/Incident Report (Attachment A) and send to Risk Management for Processing
- If employee was injured in the incident, turn to the Worker's Compensation section of this document (Attachment B and MesaWave).

MESA COUNTY

Vehicle Accident/Incident Report

Risk Management (970) 244-1868
Fax (970) 255-5054

544 Rood Avenue
P.O. Box 20,000-5063
Grand Junction, CO 81502-5001

(To be completed by the driver involved in an accident)

Employee's Name | Department/Division

Job Classification | Date of Accident | Time of Accident am / pm

Location | Unit # | Date of Last Driver Training

1. What happened?

Describe what took place or what caused you to make this accident investigation.

2. What was the cause of the accident?

(Answer the questions ***Why, What, Who, How?***)

3. What could *you* have reasonably done to *prevent* this accident?

(Consider all aspects of Defensive Driving, i.e. Did you: make no errors yourself; make adequate allowance for the road conditions and weather; make allowances for the errors of other drivers?)

Vehicle Accident/Incident Report

4. What else could be done to prevent similar accidents in the future?

(Consider routing, scheduling, vehicle type, loading, training or any other factors not within your control.)

Additional Narrative Space

Director's and Supervisor's Accident Review

I have reviewed this accident with the supervisor and employee involved and have the following comments

Date | Name | Position

Review Committee Decision

The Committee has reviewed this accident in accordance with Mesa County's Loss Control Program and has found that it should be judged:

○ **Preventable** ○ **Un-Preventable**

Consideration of the facts indicates the following action should be taken

Date _____ Chairperson _____

E-Mail Print Form

Please complete the form, save it, and then e-mail the completed form to Risk.Management@mesacounty.us

Attachment B- Workers Compensation – Employee's Packet

You have notified your supervisor that you have been injured on the job.

1. Your Supervisor will give you a Preliminary Accident Report to complete and return to them so the process of your claim can begin. This form is included in this packet

2 HB1176, the **Employee Choice of Physician law, requires Colorado Employers to designate more than one medical provider to treat employees who are injured on the job.**
Mesa County has designated these three for you to choose from.
Please select a physician from the following list of Designated Providers. Once your selection is made, please call their office for an appointment. You will be given a form to acknowledge that you were given the list of authorized physicians. Please sign and return to your supervisor along with the Preliminary accident report.

If an employee wishes to switch designated physicians, they must notify Tristar/Risk Management in writing. This request must follow Division of Workers Compensation guidelines. Information on this can be obtained from Tristar Risk Management. Upon approval of their request, the employee must choose from the remaining providers on the list.

3 You will be given copy of the Sick Pay Policy Election form. Please sign it and return to your supervisor with the rest of your completed, signed forms.

4 If you need to have a prescription filled, you will be given a pamphlet from the designated physician to be used to fill your initial prescription.

St. Mary's Occupational Medicine
2686 Patterson Road
Grand Junction, CO 81506
(970) 298-2001
Monday-Friday 8 a.m. to 5 p.m.

Grand Valley Occupational Medicine
2004 N 12th Street
Grand Junction, CO 81501
970) 256-6490
Monday-Friday 8 a.m. to 5 p.m

Work Partners
2646 Patterson Rd Suite A
Grand Junction, CO 81506
(970) 241-5585
Monday-Friday 8 a.m. to 5 p.m

Holidays, Weekends, & After Hours
Community Hospital
2351 G Road
Grand Junction, Co 81505
(970) 644-3100 M-F 5 p.m.-8 a.m

Holidays, Weekends, & After Hours
St Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, Colorado 81501
(970) 298-2551 M – F 5 p.m. and 8 a.m.

For emergencies and injuries needing immediate attention, go directly to either:

St Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, CO 81501

or

Community Hospital Emergency Room
2151 G Road
Grand Junction, CO 81505

Other than extreme emergency situations, if an employee chooses a medical provider other than those listed above, the cost will be at the employee's expense.

Mesa County is self insured for their workers comp coverage. For any questions, please contact Jean Boothe in Risk Management at 244-1868 or Norie Mayne at Tristar Risk Mgmt, at 888-538-9847.

Mesa County

Preliminary Accident Report for Workers' Compensation Injury

This is not a First Report of Injury form.

Please Print!

Employee Information

Last First M.I.	Date of Injury / /	Time of Injury
Address	Social Security Number	Circle Male Female
City State Zip Code	Work Ext: Home Phone:	Date of Birth: / /
Years of Education (Circle One) 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Hours/Day	Days/Week
Date Hired / / | Title/Position	Hourly Rate	
Department	Supervisor	

Incident Description

What were you doing when the incident occurred?	
Where (location) did the incident occur?	Injury Description (Include Body Part(s))
How did the accident/exposure occur?	
Witness Names:	
Incident Reported to:	
Supervisor's Name:	Telephone #:
Employee Signature:	Date of Report:

Did the accident occur because of:

☐ Failure to use safety device?	☐ Failure to obey safety rule/protocol?
☐ Intoxication or Drug Abuse?	☐ Other (explain below)?
Give details:	

Describe any Third Party Liability:

The above-signed employee declares that this is a true and correct statement of how the accident occurred and the extent of his/her injury.

Workers Compensation – Employee's

You have notified your supervisor that you have been injured on the job.

1. Your Supervisor will give you a Workers Compensation Employee's packet. It will contain any form you need to complete and return to your supervisor.

2. **HB1176, the Employee Choice of Physician law, requires Colorado Employers to designate more than one medical provider to treat employees who are injured on the job. Mesa County has designated these three for you to choose from.** Please select a physician from the following list of Designated Providers. Once your selection is made, please call their office for an appointment.

Mesa County's designated medical providers are:

St. Mary's Occupational Medicine
2686 Patterson Road
Grand Junction, CO 81506
(970) 298-2001
Monday-Friday 8 a.m. to 5 p.m.

Grand Valley Occupational Medicine
2004 N 12th Street
Grand Junction, CO 81501
970) 256-6490
Monday-Friday 8 a.m. to 5 p.m

WorkPartners
2646 Patterson Road Suite A
Grand Junction, CO 81506
(970) 241-5585
Monday-Friday 8 a.m. to 5 p.m

Holidays, Weekends, & After Hours
Community Hospital
2351 G Road
Grand Junction, Co 81505
(970) 644-3100 M-F 5 p.m.-8 a.m

Holidays, Weekends, & After Hours
St Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, Colorado 81501
(970) 298-2551 M – F 4 p.m. and 8 a.m.

For emergencies and injuries needing immediate attention, go directly to either:

St Mary's Hospital Emergency Room
2635 North 7th Street
Grand Junction, CO 81501

or

Community Hospital Emergency Room
2351 G Road
Grand Junction, CO 81505

Other than extreme emergency situations, if an employee chooses a medical provider other than those listed above, the cost will be at the employee's expense.

I have received the Employee's packet.

Name_____ Date_____

Print Name_____ Department_____

Effective October 10, 2016 the Board of County Commissioners approved the following policy.

Section 5.07 (E): Job related Injury or Illness

(E) When an employee gets sick or is injured on the job, and is unable to perform the essential functions of his/her job as a result of such injury or illness, as determined by State law, the first three days of such absences will be charged to the employee's sick leave. If the employee is eligible for worker's compensation benefits, and the employee's inability to work extends beyond the three day period, the employee will be eligible for sixty-six and two thirds percent (66 2/3%) of the employee's regular pay from the County, with no state or federal tax withheld, for a period of up to six (6) consecutive months per injury. **Employees receiving payments as a result of a work-related injury or illness may utilize their sick leave to subsidize their income up to 100% of their salary and benefits**. The employee's eligibility, and the length of such eligibility for pay continuation, is determined by State law through the worker's compensation authority.
If an employee has not been able to perform the essential functions of his/her job, with or without reasonable accommodation, for a period of six (6) consecutive months per injury due to work-related illness, injuries and/or disability, the employee's employment will cease. Nothing in this subsection prevents the employee from applying for other advertised Mesa County job vacancies.
This decision is not disciplinary and therefore not appealable under Section 7.08 nor is it subject to the problem solving process under Section 7.11.

_____ Yes I would like to use my accrued sick hours to supplement my work comp wages

_____No I do not wish to use my accrued sick hours to supplement my work comp wages.

I understand that if I choose to make a change, I must submit that change in writing to HR. No changes will be retroactive.

Signature_____ Date_____

Print Name_____

Appendix E3- City of Grand Junction- Fleet Services Safety Event Investigation Process

City of Grand Junction Fleet Services maintains all CNG buses under an MOU between Mesa County and City of Grand Junction.

In the case of a safety event at City of Grand Junction Fleet associated with transit, the attached forms must be filled out if there is an injury (Detailed Supervisor Investigation of Injury and Workman's Compensation form) and/or if there is Property Damage(Supervisor Investigation of Property Damage or Injury form) and submitted to Risk Management who will further investigate necessary actions to avoid future events.

Safety events are also reported and discussed at Fleet Services safety meetings.

City of Grand Junction Colorado
DESIGNATED WORKERS' COMPENSATION PROVIDER LIST

You are receiving this notice because you are reporting a work-related injury that may require professional medical attention. Treatment must be arranged with one of the designated medical providers listed below. If you are now being treated by one of the Designated Providers, this notice is still required to comply with Rule 8 of Colorado statute.

Contact Risk Management (970.256.4024) if you have any questions about the City's Designated Providers, which are listed below. You are only authorized to see these Designated Providers for initial treatment related to Workers' Compensation, except for emergency situations.

Clinics: with evening and weekend hours – call ahead to confirm hours

Community Care of the Grand Valley, 1060 Orchard, Suite N. Phone: (970) 256-6345
Western Valley Family Practice, 2237 Redlands Parkway. Phone (970) 243-1707

Other Clinics: Monday – Friday, 8am – 5pm only

Grand Valley Occupational Health, 2004 N 12th St. Phone: (970) 256-6490 **Ted Sofish MD MPH**
St. Mary's Occupational Health, 2686 Patterson Rd, Entrance #41. Phone (970) 244-2001 **Craig Stagg MD, Jim McLaughlin MD MPH, Erika Woodyard MD**

The City of Grand Junction Risk Management contact and the administrator responsible for Workers' Compensation claims management (CIRSA) is listed here:

Erin Waite, Workers' Compensation & Benefits Specialist
250 North 5th Street
Grand Junction, CO
Phone: 970-256-4024 and Fax: 970-256-4007

CIRSA
3665 Cherry Creek North Drive
Denver, CO 80209
Phone: 303-757-5475

The Employee Report of Injury Form must be provided to Risk Management in order for your medical bills to be authorized under Workers' Compensation insurance. City policy requires all work related incidents to be reported within 24 hours regardless of severity. By signing below, you confirm receipt of the Designated Provider List.

Employee Name: (print) _____

Employee Signature: _____ Date: _____

Read, sign and return this form to Risk Management. Please note that this form must be submitted for both Medical and Non-Medical reports of injury.

You must also read, sign and date the next two pages to complete this form!

EMPLOYEE REPORT OF INJURY

COMPLETE WITHIN 24 HOURS OF INJURY/EXPOSURE, AND SUBMIT TO RISK MANAGEMENT

NOTE: You MUST ALSO SIGN a copy of the Designated Provider List (located on the 1st page).

CHECK ONE: ☐ **NON-MEDICAL** ☐ **MEDICAL REQUIRED**

Employee Full Name: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Alt. Phone: _____ Date of Birth: _____

Email Address: _____

Department: _____ Division: _____

Job Classification: _____ Supervisor Name: _____

Job assignment when injured/exposed: _____

Regular Work Schedule Days: _____ Regular Hours: _____

Date of Injury/Exposure: _____ Time of Injury/Exposure: _____

Body Part(s) Injured: _____

Name of Witness(es): _____

Exact Place of Accident/Exposure: _____

Did you seek medical treatment? ☐ Yes ☐ No

If so, name of Medical Facility and/or Doctor: _____

How did the accident/exposure occur? Describe your activities causing the injury/exposure and include machinery, tools, substance, and/or object:

Supervisor Investigation and Comments:

I hereby declare that the above information is true and accurate and that the injuries claimed resulted from an accident while performing my assigned duties as an employee of the City of Grand Junction, Colorado.

Workers' Compensation and the Family and Medical Leave Act (FMLA), when applicable, run concurrently. Absences resulting from illnesses or injuries covered by workers' compensation will be designated as FMLA leave when the absence qualifies for coverage under the FMLA.

*IMPORTANT Notice for **Sworn Firefighters**: If this on-the-job injury/condition is due to a **cardiac event** or related to **cancer**, you may qualify to file a claim with the Colorado Firefighter Heart and Cancer Trust. The City of Grand Junction joined the Trust on January 1, 2020. Please go to: http://www.cfhtrust.com/ to get more information and to file a Claim (http://www.cfhtrust.com/claims).*

Employee Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

DETAILED SUPERVISOR INVESTIGATION OF INJURY

Employee Full Name: _____

Department: _____ Division: _____

Date and time accident was reported to you: _____

Did employee leave work due to injury/exposure? ☐ Yes ☐ No

If yes, date employee left work: _____

Did employee go to a non-designated medical facility? ☐ Yes ☐ No

If yes, why?

Has employee returned to work? ☐ Yes ☐ No

If yes, date employee returned to work: _____

If no, probable length of disability: _____

Describe any act or condition which may have contributed to the injury/exposure:

(a) Failure to use safety device: ☐ Yes ☐ No

(b) Was a reasonable suspicion drug/alcohol test completed? ☐ Yes ☐ No

(c) Failure to obey safety rules: ☐ Yes ☐ No

(d) Willful misconduct: ☐ Yes ☐ No

Other human or mechanical factors that may have contributed to the injury; List corrective action expected:

Supervisor Signature: _____ Date: _____

NOTE: This Investigation Report must be completed if medical care is required.

'ESTIGATION OF PROPERTY DAMAGE OR INJURY

Reported By: Name **Phone:**

DEPARTMENT: _____ **DIVISION:** _____

Exact location where accident occurred	Date of Occurrence	Time	Date Reported

NON-EMPLOYEE INJURY	PROPERTY DAMAGE	
Name	**Property/vehicle damaged (include unit and license number)**	
Occupation	**Estimated Costs**	**Actual Costs**
Nature of Injury/exposure	**Nature of damage**	
Object/equipment/substance inflicting injury	**Object/equipment/substance inflicting damage**	
Person with most control of object/equipment/substance	**Person with most control of object/equipment/substance**	

DESCRIPTION: Describe clearly how the accident occurred. Attach accident diagram for all motor vehicle accidents; include police report number if applicable. (Note if actions were taken to mitigate damages and/or insure prompt reporting)

ANALYSIS: What human and or mechanical factors or conditions contributed most directly to this accident?

Was employee using cell phone when the accident occurred? ☐ **Yes** ☐ **No**

Loss Severity Potential: ☐ **Major** ☐ **Serious** ☐ **Minor**

Probable Recurrence Rate: ☐ **Frequent** ☐ **Occasional** ☐ **Rare**

PREVENTION: What action has or will be taken to prevent recurrence? Place a check by items completed.

Date preventative action(s) completed

Projected completion date for preventative actions:

Investigated By: **Date:** **Reviewed by:** **Date:**

***Distribution**: Risk Management, Fleet Management, Department Files*

Appendix F- Resolution Adopting the PTASP

RESOLUTION # 2020-008

A RESOLUTION OF THE GRAND VALLEY REGIONAL TRANSPORTATION COMMITTEE FOR ADOPTION OF THE GRAND VALLEY TRANSIT PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule July 19, 2018, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, the rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307); and

WHEREAS, Mesa County receives funds from the FTA under 49 U.S.C. § 5307, § 5310, and § 5339 and is therefore required to comply with the PTASP Final Rule; and

WHEREAS, Mesa County Regional Transportation Planning Office (RTPO) staff worked with Mesa County, City of Grand Junction and the operations contractor to develop the PTASP for facilities, fleet maintenance and operations;

THEREFORE, be it resolved that the Grand Valley Regional Transportation Committee does hereby adopt the Public Transportation Agency Safety Plan as its official plan until superceded by a subsequent updated or amended plan and names the Grand Valley Regional Transportation Committee chair as the Accountable Executive;

Passed and adopted at the regular meeting of the Grand Valley Regional Transportation Committee held this 24th day of August 2020.

Grand Valley Regional Transportation Committee

Scott McInnis, Chair

Attest:

Kathy Young

Recorder to the Committee

County Of Mesa | MESA | 1139

Certifications & Assurances | FY 2020 C&A Affirmations

Recipient Details

Recipient ID
1139

Recipient Name
County Of Mesa

Certification and Assurance Information

Fiscal Year 2020
Assigned Date 2/28/2020
Due Date 5/28/2020

Original Certification Date 3/10/2020
Latest Certification Date 11/9/2020

Published Certifications and Assurances

FTA CERTIFICATIONS AND ASSURANCES

Public Transportation Agency Safety Plan (PTASP)

On or before December 31, 2020, applicants and recipients of Section 5307 grants and rail transit agencies that are subject to the State Safety Oversight Program must certify to Category 2: Public Transportation Agency Safety Plans. Due to the Coronavirus Disease 2019 (COVID-19) public health emergency, FTA has issued a Notice of Enforcement Discretion stating that FTA will refrain from taking enforcement action related to the PTASP regulation until January 1, 2021. While applicants and recipients are encouraged to certify by the original deadline of July 20, 2020, to the extent practical, those who do not certify compliance until December 31, 2020, remain eligible for Chapter 53 grant funds.

List of All Applicable Agencies

PTASP Technical Assistance Center

Certifications and Assurances

Certification History

Certification Date: 11/9/2020 | Official: Dana Brosig | Attorney: Patrick Coleman

Category	Title	Certified
01	Certifications and Assurances Required of Every Applicant	✓
02	Public Transportation Agency Safety Plans	✓
03	Tax Liability and Felony Convictions	✓
04	Lobbying	✓
05	Private Sector Protections	✓
06	Transit Asset Management Plan	✓
07	Rolling Stock Buy America Reviews and Bus Testing	✓
08	Urbanized Area Formula Grants Program	✓
09	Formula Grants for Rural Areas	✓
10	Fixed Guideway Capital Investment Grants and the Expedited Project Delivery for Capital Investment Grants Pilot Program	✓

Category	Title	Certified
11	Grants for Buses and Bus Facilities and Low or No Emission Vehicle Deployment Grant Programs	✓
12	Enhanced Mobility of Seniors and Individuals with Disabilities Programs	✓
13	State of Good Repair Grants	✓
14	Infrastructure Finance Programs	✓
15	Alcohol and Controlled Substances Testing	✓
16	Rail Safety Training and Oversight	✓
17	Demand Responsive Service	✓
18	Interest and Financing Costs	✓
19	Construction Hiring Preferences	✓
20	Cybersecurity Certification for Rail Rolling Stock and Operations	✓

1 - 20 of 20

Documents

Existing Documents

Document	Description	Uploaded By	Date
PTASP-FINAL-10.27.20	Mesa County-PTASP	Dana Brosig	10/27/2020

Affirmation of Applicant

Affirmation of Applicant BY SIGNING BELOW, on behalf of the Applicant, I declare that it has duly authorized me to make these Certifications and Assurances and bind its compliance. Thus, it agrees to comply with all federal laws, regulations, and requirements, follow applicable federal guidance, and comply with the Certifications and Assurances as indicated on the foregoing page applicable to each application its Authorized Representative makes to the Federal Transit Administration (FTA) in federal fiscal year 2020, irrespective of whether the individual that acted on his or her Applicant's behalf continues to represent it.

FTA intends that the Certifications and Assurances the Applicant selects on the other side of this document should apply to each Award for which it now seeks, or may later seek federal assistance to be awarded during federal fiscal year 2020.

The Applicant affirms the truthfulness and accuracy of the Certifications and Assurances it has selected in the statements submitted with this document and any other submission made to FTA, and acknowledges that the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq., and implementing U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR part 31, apply to any certification, assurance or submission made to FTA. The criminal provisions of 18 U.S.C. § 1001 apply to any certification, assurance, or submission made in connection with a federal public transportation program authorized by 49 U.S.C. chapter 53 or any other statute.

In signing this document, I declare under penalties of perjury that the foregoing Certifications and Assurances, and any other statements made by me on behalf of the Applicant are true and accurate.

Official's Name Dana Brosig

☐ I accept the above

Certification Date Oct 27, 2020

Affirmation of Attorney

Affirmation of Applicant's Attorney As the undersigned Attorney for the above-named Applicant, I hereby affirm to the Applicant that it has authority under state, local, or tribal government law, as applicable, to make and comply with the Certifications and Assurances as indicated on the foregoing pages. I further affirm that, in my opinion, the Certifications and Assurances have been legally made and constitute legal and binding obligations on it.

I further affirm that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these Certifications and Assurances, or of the performance of its FTA assisted Award.

Attorney's Name	Patrick Coleman
	☐ I accept the above
Certification Date	Nov 09, 2020

CANCEL

BEGIN RECERTIFICATION

Exhibit F
Insurance Requirements

EXHIBIT F

MESA COUNTY
PROFESSIONAL SERVICES AGREEMENT
INSURANCE REQUIREMENTS

1. Contractor agrees to procure and maintain, at its own cost, a policy or policies of insurance/bonds sufficient to insure against all obligations assumed by Contractor pursuant to this agreement and shall not start work under this agreement until such insurance coverage has been obtained and approved in writing by County's Contract Administrator.

2. Contractor shall require all subcontractors and sub-subcontractors to maintain during the term of this agreement, Commercial General Liability insurance, Comprehensive Automobile Liability insurance, and Workers' Compensation and Employers' Liability insurance, in the same manner as specified for Contractor. Contractor shall furnish subcontractors' certificates of insurance to County, with a copy to County's Contract Administrator, immediately upon request.

3. All insurance policies required hereunder shall include a written thirty (30) day notification of cancellation. In that notice, County and County's Contract Administrator will be notified of any material changes in the insurance policy(s) such as; cancellation, non-renewal, or reduction in coverage or alteration of coverage.

4. Nothing herein shall be deemed or construed as a waiver of any of the protections to which Mesa County shall be entitled pursuant to the Colorado Government Immunity Act, sections 24-10-101, *et seq.*, C.R.S., as amended.

5. All required insurance coverages must be acquired from insurers authorized to conduct business in the State of Colorado and acceptable to County. The insurers must also have policyholders' rating of "A-" or better, and financial class size of "Class VII" or better in the latest edition of Best's Insurance Reports, unless County grants specific approval for an exception.

6. Contractor shall procure and continuously maintain the minimum insurance coverage listed below, and additional coverage as may apply, with forms and insurers acceptable to County. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

   A. Workers' Compensation and Employer's Liability Including Occupations Disease Coverage in accordance with scope and limits as required by the State of Colorado.

   B. Commercial General Liability, "occurrence form," with minimum limits of ONE MILLION ($1,000,000) combined single limit, per occurrence for bodily injury, personal injury and property damage. In addition Contractor must either:

1) Agree to provide certificates of insurance evidencing the above coverage for a period of two years after the final payment for the contract.

OR

2) Purchase an extended (minimum two years) reporting period endorsement for the policy or policies in force during the term of this contract and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.

C. Comprehensive Automobile Liability insurance with minimum limits for bodily injury and property damage of not less than ONE MILLION ($1,000,000) combined single limit per accident.

D. PROFESSIONAL LIABILITY INSURANCE with an endorsement for work under this Agreement, and coverage of no less than ONE MILLION ($1,000,000) per claim, and ONE MILLION ($1,000,000) aggregate.

7. The policies required by paragraph (B) above shall be endorsed to specify; "Mesa County, their officers, officials, employees and volunteers as INSUREDS, as respects liability, on behalf of Contractor, arising out of this Contract." All certificates of insurance are to be submitted on standard "ACORD 25-S" form.

8. Depending on the nature and scope of the services to be provided under this Contract, additional insurance requirements may be specified by County. Items listed below, which have been marked with an "X" are required of Contractor by County as a condition of this Contract. Contractor initial, placed by the corresponding "X", shall acknowledge the Contractor compliance in meeting the specific insurance requirement(s).

Your Initial	X (if applicable)	
_____	__	EXCESS LIABILITY/UMBRELLA INSURANCE with a limit no less than ONE MILLION ($1,000,000) per occurrence/ONE MILLION ($1,000,000) aggregate, and coverage at least as broad as the primary Commercial General Liability policy.
____	__	BUILDERS RISK INSURANCE must be in an amount equal to the aggregate total of the initial contract prices in the contracts, as well as any subsequent modifications. The policy must be in Completed Value Form, insuring the entire project for, at least Broad Form coverage including theft. Such Insurance shall remain in effect until 12:00 noon on the day following the date of final acceptance of the entire project, whether or not the building or some part thereof is occupied in any manner prior to final acceptance of the project.
____	__	BID BONDS AND/OR PERFORMANCE BONDS. Bid bond coverage to be determined as a percentage of the total bid. Performance Bond in the amount of 100% of the project contract.
____	__	Other insurance as required. If other insurance is required it will be included and referred to as "EXHIBIT E."

Exhibit G
Transdev Amendment 5

Fifth Addendum

An Agreement between Mesa County and Transdev Services, Inc.

WHEREAS, Mesa County (hereinafter "County") entered into a three year Agreement, starting January 1, 2017, as amended (the "Contract") for Professional Services with Transdev Services, Inc (hereinafter "Contractor") for the operation of the Grand Valley Transit System (hereinafter "GVT"). The Contract includes the First Addendum dated December 16, 2019, the Second Addendum dated December 7, 2020, the Third Addendum dated April 5, 2021 and the Forth Addendum dated July 19, 2021 (the "Addendums")

WHEREAS, the parties have agreed to provide for the elderly and disabled, welfare-to-work, and public transit services with the private and/or non-profit sector as agreed; and

WHEREAS, the Agreement provided for a seven (7) Yearly Extensions to this Agreement, as stated in Section 20.1, Contractor grants to County the right to extend the term of this Agreement for Seven, Consecutive, one-year periods; and

WHEREAS, the amount for the Third Extension (Sixth Year) of the Agreement will be $3,202,861 (Three Million, Two Hundred and Two Thousand, Eight Hundred and Sixty One Dollars) for 64,000 Vehicle Service Hours with an annual fixed rate of $1,367,810 and hourly rather of $28.67 as shown in Attachment A- Pricing Schedule; and

WHEREAS, the Contractor has proven to be and has set a professional, efficient, safe standard in the community and has met all specified requirements of the Agreement, and it is beneficial to renew with this Contractor; and

~~WHEREAS, the County entered into a Lease Agreement, starting January 1, 2017, to lease office space located at 525 S. 6th Street to the Contractor for a term beginning January 1, 2017 and ending December 31, 2019 at a cost not to exceed $2,400 per year; and~~

WHEREAS, the Contractor has agreed to continue to lease office space located at 525 S. 6th Street for a term beginning January 1, 2022 and ending December 31, 2022 at a cost not to exceed $2,400.00 which will be deducted at a monthly rate of $200.00 from the payments owed by Mesa County on the monthly billing for the operations of GVT; and

WHEREAS, the Contractor has agreed to increase drivers starting salaries to a minimum of $15.50/hour with all other hourly employees' wages increasing by an equivalent incremental amount; and,

WHEREAS, the Contractor agrees to add a full-time Utility Maintenance Supervisor to the Utility Maintenance Staff. With the additional staff, Transdev agrees to amend section 2.21.2 of Contract Exhibit A- RFP-4246-16-SH to include the following:

F. Utility Maintenance Supervisor
The Utility Maintenance Supervisor will supervise the Utility Maintenance Workers as well as perform, and/or train and supervise Utility Maintenance Workers on more complicated tasks including farebox inspections, preventative maintenance (PMs) and repairs; programming, troubleshooting and maintenance of ITS, head signs, radios and camera systems; minor repairs including, but not limited to, wiper and headlight repair; and exchanging~~shifting~~ of buses due to breakdowns, PMs, and fueling issues. The Utility Maintenance Supervisor may need to perform Utility Maintenance Workers tasks and other duties as assigned and shall follow safety practices, and maintain Material Data Safety Sheet (MSDS) documentation. This position must have a CDL required for operations of all vehicles utilized in revenue service; and,

WHEREAS, the Contractor agrees to continue providing administrative services for Greyhound at the Downtown Operations Facility as described in Addendum Four and agrees to provide a full-time dispatcher to help with the additional work-load caused by Greyhound services; and

WHEREAS, the Contractor agrees to continue to assume the cost of complying with the Healthy Families and Workplaces Act, C.R.S. 8-13.3-401, et seq., as amended as stated in Amendment 3.

NOW, THEREFORE, such extension is hereby approved by the Mesa County Board of County Commissioners and the amount of the Agreement for this Third Extension and Sixth Year of the Agreement shall be $3,202,861 (Three Million, Two Hundred and Two Thousand, Eight Hundred and Sixty One Dollars) for continued service of Grand Valley Transit. All references to 2017 in the original contract shall now be to 2022 and all parts of the original Agreement not specifically changed herein in the Addendums remain the same, and are in full force and effect throughout the new term of this Fifth Addendum.

NOW, THEREFORE, such extension is hereby approved by the Mesa County Board of County Commissioners. ~~and the amount of the Lease Agreement for this Third Extension and Sixth Year of the Lease Agreement shall be $2,400.00 for continued lease of office space located at 525 S. 6th Street.~~ All references to 2017 in the original lease agreement shall now be to 2022 and all parts of the original Lease Agreement and not specifically changed herein in the Addendums remain the same, and are in full force and effect throughout the new term of this Fifth Addendum.

IN WITNESS WHEREOF, the Contractor, and Mesa County, Colorado have executed this Addendum as of _____, 2021.

Mesa County Board of County Commissioners

By: _____
Janet Rowland, Chair

Transdev Services, Inc.

By: _____ _____
Laura Hendricks Date
CEO, Transdev US

Attest: _____
Tina Peters, Clerk and Recorder