

CONTRACT FOR SERVICES

151400

between

CITY OF PORTLAND, HUMAN RESOURCES BUREAU, TRAINING AND EMPLOYMENT DIVISION (TED),
Yeon Building, 522 S. W. Fifth Avenue, 8th Floor, Portland, Oregon 97204

and

PORTLAND COMMUNITY COLLEGE (Contractor), 12000 S. W. 49th Avenue, Portland,
Oregon 97219

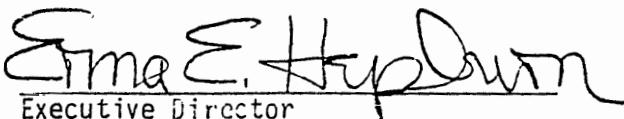
This contract will serve seventeen (17) Comprehensive Employment and Training Act
(CETA) participants at a total cost not to exceed \$23,629 funded by Title VII of
CETA. The purpose of the contract is to train CETA participants in automotive
tune-up.

Contract performance shall commence when this contract is approved by City Council
and signed by the parties but in no case earlier than April 20, 1981. Contract
costs must be incurred between the commencement date and September 30, 1981
to be payable under this contract.

The parties agree to all the terms of this contract, including the attached
exhibits, by signing below:

Approved:

PORTLAND COMMUNITY COLLEGE



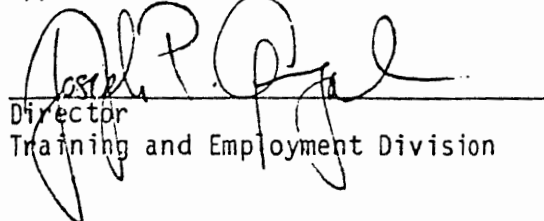
Executive Director
Human Resources Bureau

By _____

Title _____

Approved:

CITY OF PORTLAND



Director
Training and Employment Division

Commissioner-in-Charge

Approved as to Form:

City Auditor

City Attorney

Section I: Agreed ContractorA. General Provisions

Contractor shall:

1. operate the training project described in Exhibit "A";
2. comply with all CETA provisions, rules, regulations, and fiscal requirements;
3. comply with City of Portland and County of Multnomah ordinances and State statutes;
4. comply with TED policies and procedures;
5. deliver to the City Auditor prior to the commencement of this contract evidence satisfactory to the Auditor:
 - a. that all persons handling funds received or disbursed under this contract are covered by a \$9,500 Fidelity Bond effective before the contract commences and for at least six months after it terminates;
 - b. of a Standard Liability Insurance Policy including contractual liability coverage in the single limit amount of \$300,000, with an endorsement naming the City as an additional insured, which protects its agents and employees from claims for damages arising in whole or in part out of Contractor's performance under this contract; or, if Contractor is approved as self-insured by the City, satisfactory written evidence that Contractor agrees to hold harmless, defend, and indemnify the City, its agents and employees, from any and all claims for damages, including costs and attorney's fees, arising in whole or in part out of the performance of this contract, except such claims due to the negligence of the City alone;
 - c. that all property and equipment purchased or received by Contractor under this contract is insured against fire, theft, and destruction equal to the full replacement cost;
 - d. that these insurance policies are in force and will not be cancelled without thirty (30) days' prior written notice to the City;
 - e. that Contractor has qualified (a) as a direct responsibility employer under 656.407 (Workmen's Compensation), or (b) as a contributing employer under ORS 656.411, or (c) if the contract is to be performed without the assistance of others, that Contractor has signed a joint declaration with the City that the services are rendered as an independent contractor;

- f. if the Contractor enters into more than one (1) contract with the City, insurance and bonding shall be furnished, together with the proper endorsements for each separate contract. If the Contractor fails to maintain current insurance and bonding, including proper endorsements for each separate contract, the City may withhold payments to Contractor or terminate the contract;
6. file with TED's Fiscal Unit a list of names and signatures of persons authorized to act as Contractor's agents;
7. submit to TED's Fiscal Unit within five (5) working days after the end of each month a Monthly Performance Report for that month. A Final Performance Report shall be submitted within forty-five (45) calendar days after the conclusion of the projects covered by this contract. Both Monthly and Final Performance Reports shall contain, at a minimum, those items specified in Exhibit "C". Performance reports which are not received on time or are incomplete may result in delayed or reduced reimbursement or contract termination;

B. Fiscal Provisions

1. Contractor shall expend project funds within the limits established by the Project Budget, included as Exhibit "B". Advance funds not spent and accounted for in the Monthly and Final Reimbursement Reports shall be returned to TED within forty-five (45) calendar days after the end of the contract period. Any cost incurred by Contractor over and above the sums set out in the budget shall be at Contractor's sole risk and expense.
2. All contract payments are subject to audit. TED or its agents may perform spot audits at their discretion at any time during the contract period to provide additional controls. If Contractor violates or permits violation of contract terms or conditions and the Federal Government demands repayment of funds from TED as a result of those violations, Contractor shall repay TED the amount of funds directly related to the violation. If a contract cost is disallowed after reimbursement has occurred, Contractor shall repay TED within forty-five (45) calendar days or on a written alternative schedule assigned by TED Fiscal Unit.
3. An advance may be made to cover initial project costs upon receipt and approval by TED of a written Advance Justification. Advances will be recovered against program expenses based upon a written schedule furnished by TED's Fiscal Unit.
4. Allowable costs incurred by Contractor shall be reported using the "Accounting Report Forms" included in Exhibit "C". Expenses incurred during a given month must be reported to TED's Fiscal Unit by the fifth (5th) working day after the end of the month.

5. All allowable contract expenses incurred during the life of this contract must be reported to TED's Fiscal Unit within forty-five (45) calendar days following the end of the contract period. Monthly and Final Reimbursement reports and accompanying documentation received late may not be paid or processed unless the reporting deadline is extended in writing by the TED Director.
6. Contractor shall pay or set aside funds to pay all required Federal and State taxes prior to the submission of project reimbursement requests.
7. Contractor will use accrual accounting methods in tracking and recording payments under this contract.
8. If Contractor receives any income as a result of activities under this contract, the income must be promptly accounted for in the Monthly and Final Reimbursement Reports and cannot be spent without advance approval by TED. When program income is anticipated, the Contractor must promptly contact TED's Fiscal Unit to receive accounting guidance.

C. Personnel and CETA Participant Provisions

1. Contractor agrees that all CETA participant grievances initiated as a result of this contract shall be received and resolved in accordance with the TED Grievance Procedure.
2. Contractor agrees that all CETA participants trained under this contract shall:
 - a. be oriented by the instructor concerning training goals, curriculum and training site expectations;
 - b. not be engaged by Contractor in any political or religious activities or lobbying;
 - c. be adequately supervised during training hours and provided training conditions which, at a minimum, shall conform to the regulations established of the State of Oregon Bureau of Labor;
3. Contractor shall keep and ensure the accuracy of the daily time and attendance records for participants and shall make such records available to TED upon request.
4. Contractor shall not discriminate against, or deny employment or services to any person on the grounds of race, color, religion, sex, national origin, age (except as provided by CETA regulations), handicap, citizenship or political affiliation or belief.

D. Records and Property Control

1. Contractor shall maintain and safeguard participant files and records, project records and documents, and evidence of accounting procedures

- and practices. Records must be sufficient to justify all costs claimed to have been incurred during the performance of this contract. These records shall be preserved and made available to TED and/or its agents for a period of five (5) years. However, in the event of an audit, records shall be kept by Contractor until the audit is completely resolved.
2. All files and records maintained under this contract shall be open to inspection by designated TED staff.
 3. If disclosure of participant records is requested by the public, current TED confidentiality standards shall apply. If Contractor has more restrictive confidentiality provisions which are mandated by law, the more restrictive confidentiality provisions shall control.
 4. Contractor shall provide, at TED's request, sufficient staff or board time and reports necessary to a) perform project research; b) perform project evaluation; c) monitor the project; and d) complete fiscal reviews and audits.
 5. Contractor shall submit to TED copies of all requests for Federal, State or local grants that affect this contract prior to submitting the request to the funding source.
 6. Contractor shall submit to TED's Fiscal Unit one (1) copy of all formal documents produced under this contract.
 7. All purchases of nonexpendable property with contract funds shall be approved in writing in advance by TED. All nonexpendable property purchased with CETA funds is owned by TED and shall not be disposed of except in accordance with instructions furnished by TED. The provisions of this clause do not apply to equipment which will become the property of the participant as approved by TED.
 8. All items with a purchase price of one hundred (\$100) dollars or more and purchased under this contract shall be purchased in the name of TED. Such purchases shall be for cash, without credit terms, reported to TED within ten (10) days, tagged by TED, included in TED's Property Control, and shall be the property of TED. Contractor shall maintain an acceptable and current log of this property and property acquired under previous contracts with TED. All nonexpendable items shall be returned to TED within ten (10) days after the contract has terminated. Property is not transferrable, either geographically or between projects without approval by TED.

Section II. Agreed TED

A. TED shall:

1. provide copies of CETA related information listed in Section I, Paragraphs "B", "C", and "D", upon request;

2. supply required reporting forms;
 3. give Contractor written notice within a reasonable time after becoming aware of contract performance deficiencies.
- B. Payment for the services described in this contract will be made to Contractor after satisfactory performance and after receipt of billing with appropriate documentation by TED's Fiscal Unit, 522 SW Fifth Ave., 6th floor, Portland, Oregon 97204. Payment shall not be construed as a waiver of TED's right to challenge the level of Contractor's performance under this contract.

Section III. Contract Assignment, Modification, Termination, and Sanctions

- A. The term "approval by TED", as used throughout this contract, means written approval by the Director of the Training and Employment Division.
- B. Documents submitted to TED by Contractor shall be regarded as received when delivered to the Training and Employment Division.
- C. This contract is personal between the parties and Contractor shall not assign or subcontract in whole or part any contractual duties without approval by TED.
- D. In the event TED decides to assign its interest in this contract in whole or part, TED shall give written notice of the assignment to Contractor thirty (30) calendar days prior to the assignment.
- E. Any major change in the contract or its attached exhibits shall be submitted for approval by TED before becoming effective. A contract modification may be required when a line item amount is changed, when changes occur in Federal or State law, Rules or Regulations or allocations, or when a substantial change in program design or goals is planned.
- F. This contract may be terminated, in whole or in part, without limiting remedies, by either party to this agreement if the other party fails to perform in accordance with the terms of the contract, and fails to initiate remedial action within ten (10) days after receiving written notification specifying the failure of performance.
- G. Either party to this contract may elect to terminate the contract without cause, providing a thirty (30) day written notice of intent to terminate is delivered to the other party.
- H. TED may terminate this agreement at any time by written notification if its federal, state or local grants are suspended, reduced, or terminated before or during the contract period. In the event of termination, the Contractor shall be entitled to reimbursement for allowable costs incurred up to the date of termination indicated in the written notice.
- I. Nothing in this contract shall be construed to limit either parties' legal contract remedies, including but not limited to the right to sue for damages or specific performance, should either party materially violate any of the terms of this contract. Failure to act on any default shall not constitute waiver of rights on such default or on any subsequent default.

EXHIBIT "A"

PORTLAND COMMUNITY COLLEGE
12000 SW 49th Avenue

Portland, Oregon 97219

P R O P O S A L for Automotive Tune-up Repair Class

LOCATION: 2850 SE 82nd Avenue, Portland, Oregon 97266

STUDENTS: CETA sponsored and pretested to assure ability to benefit from the material presented.

Class Size:	Maximum seventeen (17)
Total Contact Hours:	630 hours
Total College Credits:	28 credits
Course Length:	21 weeks at 30 hours per week

PORTLAND COMMUNITY COLLEGE
AUTOMOTIVE DEPARTMENT

BASIC SHOP and SAFETY PROCEDURES

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools.

PERFORMANCE I

The student will know the basic function and/or use of the following safety related shop equipment.

1. Fire extinguisher
2. Ventilating systems as required near explosive and flammable liquids and materials.
3. Face guards as used on grinding equipment.
4. Floor cleaning methods.
 - a. Liquids
 - b. Dry debris

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE II

1. The student will demonstrate proper methods used in the removal of liquids and debris from the shop floor.
2. The student will take part in a demonstration of the proper use of a dry powder-type fire extinguisher.

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE III

1. The student will know the basic component layout and component nomenclature of a modern automobile.
2. The student will know the procedures and reasons for a predelivery inspection of a modern automobile.

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE IV

The student will demonstrate the proper safe use of the following standard shop equipment and skills.

1. Floor jack and jack stands
2. Creeper
3. Bench press and vise
4. Air hose and nozzle
5. Vehicle lift
6. Bench grinder
7. Maneuvering a vehicle into a small space
8. Work area organization
9. Clean up requirements

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE V

The student will demonstrate proper cleaning of automotive parts both before removal and after removal. Procedures could include the operation of the following equipment.

1. Solvent parts cleaner
2. Steam cleaner
3. Mild acid dip
4. High pressure hot water unit cleaner
5. Bench type rotating wire brush
6. Spray painting of parts, using pressurized can

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VI

The student will demonstrate the proper safe use of hand tools to include the following.

1. Fastener tightening tools such as sockets, box end wrenches, pliers, and screwdrivers.
2. Hacksaws, files and emery cloth
3. Electric hand drill and the sharpening of bits
4. Tapping threads and thread repair
5. Oxy-acetylene torch use in soldering, exhaust system repair and general heating of parts.

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VII

The student will know the functions and/or use of the following as related to fasteners as used in the automotive manufacture and repair industry.

1. National Fine Threads
2. National Course Threads
3. Metric Threads
4. Head sizes, and length (metric and inches)
5. Torque
6. Markings on bolt heads

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE VIII

The student will demonstrate skills in general vehicle maintenance to include the following:

1. Changing engine oil and filter
2. Lubrication of vehicle chassis
3. Visual inspection of the vehicle in general
4. Cleaning the interior and exterior of a vehicle

Student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE IX

The student will know the functions and/or the use of the following 'paper work' areas as used in the automotive repair industry.

1. Customer work orders
2. Parts requests
3. Time clock use
4. Parts suppliers invoice information

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PORTLAND COMMUNITY COLLEGE

AUTOMOTIVE DEPARTMENT

Unit 1

Engines (Dead)

Performance I

Student will determine engine (make) manufacture and model by combined use of manufacture's and National Service Data manuals. Student will determine by Visual Inspection the superficial condition of cylinder heads, and blocks, manifolds, oil pan, timing covers, and valve covers. The student will complete a self evaluation certificate to verify satisfactory achievement.

Performance II

Student will identify engine components (parts) that are part of the Internal Combustion Engine. A satisfactory level of student achievement. 100% competency.

Performance III

Student will remove engine external components (parts) from engine assembly following manufactures procedures and properly store them for inspection and evaluation. The student will complete a self evaluation certificate to verify satisfactory achievement.

Performance IV

Student will perform a cylinder head and related parts inspection to include measurements and correct evaluation of type of service necessary to return cylinder head and related parts to an acceptable automotive trades recondition. The student will complete a self evaluation certificate to verify satisfactory achievement.

Performance V

Student will remove pistons, camshaft, crankshaft and related parts. Student will measure and evaluate all major internal parts. Manufacturers specifications will be required as basis of evaluation to determine condition of internal parts. Student will complete a self evaluation certificate to verify satisfactory achievement.

(over)

Performance VI

Student will reassemble the engine assembly, check all oil clearances, use proper torque on all assemblies, and properly time camshaft to crankshaft as described by manufacturers and National Service Data Manuals. Student will complete a self evaluation certificate to verify satisfactory achievement.

Performance VII

Student will demonstrate an acceptable knowledge of the purpose/and or function of the internal combustion engine components as follows:

1. Cylinder head and block
2. Cylinder head and valves and valve assemblies
3. Piston and piston rings and piston pins
4. Crankshaft and crankshaft components
5. Connecting rod assemblies
6. Lubrication and cooling systems as related to the internal combustion engine
7. Measurement of the engine components

A satisfactory level of achievement 100%.

PORTLAND COMMUNITY COLLEGE
AUTOMOTIVE DEPARTMENT

UNIT II ELECTRICAL I

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools.

BASIC RELATED ELECTRICITY

PERFORMANCE I

The student will know basic function and/or use of the items listed below as necessary for job entry level.

1. Conductors and insulators
2. Resistance of conductors and connections
3. Series circuit
4. Parallel circuit
5. Series-Parallel circuit
6. Electrical terms
7. Magnetic field and its use
8. Voltage drop test
9. Continuity test
10. Amperage test
11. Basic concept of electric flow

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

BATTERY

PERFORMANCE II

The student will know basic function and/or use of the battery as necessary for job entry level. He will identify battery parts and components and know safety procedures.

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE III

The student will perform the following operations:

1. Service battery and cables
2. Remove and replace battery
3. Recharge battery
4. Test and diagnose batteries

He will complete a self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VI C

The student will "overhaul" a CHRYSLER starter performing the following operations:

1. Remove and replace starter brushes
2. Remove and replace starter drive
3. Remove inspect and replace solenoid
4. Remove inspect and replace reduction gears
5. Test and diagnose using starter no load test

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VII

The student will test and diagnose the starter system by performing the following tests:

1. Starter load test
2. Insulated circuit voltage drop test
3. Ground circuit voltage drop test

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

BASIC ELECTRICAL TERMINOLOGYPERFORMANCE VIII

The student will know the basic function and/or use of the items listed below as necessary for job entry level. He will be able to identify from schematic diagrams, drawings, mock-ups, or on automobiles all of the following:

1. Resistor
2. Battery
3. Circuit breaker
4. Disconnects
5. Common point connectors
6. Voltmeter
7. Ammeter
8. Relay
9. Switches
10. Ground
11. Fuses
12. Starting circuit

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

AUTOMOTIVE - UNIT 3 - FUNDAMENTAL TUNE-UP

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools.

FundamentalsPERFORMANCE 1

The student will know the basic function and/or use of the items listed below as necessary for job entry level:

1. 4 Cycle engine
2. Compression Gauge
3. Cylinder leakage tester
4. Purpose of the fuel system in General Terms
5. Cooling system in General Terms

Satisfactory level of students achievement will be determined by objective evaluation. A score of 100% correct will be required.

Ignition SystemPERFORMANCE II

The student will know basic function and/or use of the items listed below as necessary for job entry level.

1. Function of the primary and secondary circuits
2. Purpose of the ballast resistor in the primary circuit
3. Function of the coil
4. Construction of the coil - primary and secondary winding
5. Coil polarity
6. Coil saturation period
7. Function of breaker points and breaker plate
8. Cam angle or dwell
9. Effect of spring tension on breaker points
10. Causes and effect of pitted breaker points
11. Purpose and function of condenser
12. Purpose and function of the centrifugal advance mechanisms
13. Purpose and function of the vacuum advance mechanisms
14. Voltage drop in the circuit (primary)
15. Effect of excessive secondary resistance
16. Effects of excessive primary circuit resistance
17. Construction and function of spark plugs

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE III

The student will perform ignition tune-up operations on a laboratory engine according to manufacturer's specifications. The work in this unit will include the following:

1. Perform engine compression test and evaluate results
2. Test, diagnose and service spark plugs
3. Test, diagnose and service distributor points and condenser
4. Test, diagnose and service ignition primary wiring
5. Test, diagnose and service ignition switch
6. Test, diagnose and service ignition resistor or resistor wire
7. Test, diagnose and service distributor cap and/or rotor
8. Test, diagnose and service ignition secondary wire
9. Test, diagnose and service coil
10. Remove and replace distributor (include service and adjustment on distributor test bench)
11. Static adjust ignition timing
12. Adjust ignition timing (timing lite)

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

ELECTRONIC IGNITION SYSTEMPERFORMANCE IV

The student will know the basic functions and/or use of the items listed below as necessary for job entry level:

1. Transistor
2. Dual ballast resistor
3. Magnetic pick-up coil
4. Reluctor/armature
5. Electronic control module

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

Electronic CircuitryPERFORMANCE V

The student will test the various electronic ignition systems with the test instruments listed below:

1. Ohmmeter
2. Voltmeter
3. Electronic ignition systems tester
4. Ammeter

He will complete a self-evaluation certificate to verify satisfactory achievement.

PORTLAND COMMUNITY COLLEGE
AUTOMOTIVE DEPARTMENT

AUTOMOTIVE UNIT 10 - FUEL & INDUCTION SYSTEMS

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools.

PERFORMANCE I

The student will perform an objective evaluation to ascertain his command of the following knowledges:

1. Components of the fuel system
2. Air-Composition, density atmospheric pressure, vacuum, affect of pressure on vapor point of a liquid
3. Components of the gas tank
4. Features of tank ventilating system
5. Features of fuel line fittings and internal filters
6. Safety factors
7. Fuel pumps
8. Components of pumps
9. Methods of applying a volume test (fuel pump)
10. Methods of applying a vacuum test (fuel pump)
11. Methods of applying a pressure test (fuel pump)
12. Causes and effect of excessive fuel pump pressure
13. Replace fuel tank
14. Causes and effects of insufficient pump capacity
15. Causes and effect of vapor lock
16. Types of fuel pumps

The evaluation device may consist of matching, identification, and multiple choice items.

A score of 100% correct will be required for satisfactory achievement.

PERFORMANCE II

- A. The student will locate and diagnose mechanical fuel pump and fuel line malfunctions.
- B. The student will remove and replace a mechanical fuel pump.

On laboratory controlled equipment, using technical manual specifications, each student will demonstrate acceptable performance of:

1. Volume test
2. Pressure test
3. Vacuum test
4. Identify visually:
 - a. Oil and fuel leaks
 - b. Proper fuel pump to engine mountings
 - c. Correct fuel line assembly
5. Remove and replace a fuel pump

PERFORMANCE III

The student will perform ignition tune-up operations on a laboratory engine according to manufacturer's specifications. The work in this unit will include the following:

1. Perform engine compression test and evaluate results
2. Test, diagnose and service spark plugs
3. Test, diagnose and service distributor points and condenser
4. Test, diagnose and service ignition primary wiring
5. Test, diagnose and service ignition switch
6. Test, diagnose and service ignition resistor or resistor wire
7. Test, diagnose and service distributor cap and/or rotor
8. Test, diagnose and service ignition secondary wire
9. Test, diagnose and service coil
10. Remove and replace distributor (include service and adjustment on distributor test bench)
11. Static adjust ignition timing
12. Adjust ignition timing (timing lite)

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

ELECTRONIC IGNITION SYSTEMPERFORMANCE IV

The student will know the basic functions and/or use of the items listed below as necessary for job entry level:

1. Transistor
2. Dual ballast resistor
3. Magnetic pick-up coil
4. Reluctor/armature
5. Electronic control module

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

Electronic CircuitryPERFORMANCE V

The student will test the various electronic ignition systems with the test instruments listed below:

1. Ohmmeter
2. Voltmeter
3. Electronic ignition systems tester
4. Ammeter

He will complete a self-evaluation certificate to verify satisfactory achievement.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE III

The student will perform an objective evaluation to ascertain his command of the following knowledges:

1. Safety procedures
2. Purpose of the carburetor
3. Types of carburetors
4. Basic principle of carburetion (pressure differential)
5. Purpose of the venturi
6. The 6 carburetor systems:
 - a. float
 - b. idle and low speed
 - c. high speed
 - d. accelerator
 - e. power
 - f. choke
7. Component parts of each system and when each system comes into operation
8. Methods of atomizing and vaporizing
9. Types of automatic chokes and adjustments
10. Anti-percolator devices and compensating valves
11. Dashpot operation and adjustment
12. Carburetion problems, flooding, starting, poor acceleration
13. Purpose of multiple bore carburetors
14. Necessary adjustments
15. Cleaning procedures (acid dip)
16. Overhaul procedures

The evaluation device may consist of matching, identification, and multiple choice items.

A score of 100% will be required for satisfactory achievement.

PERFORMANCE IV

The student will identify all carburetor circuits on an objective matching test at a 100% level.

AUTOMOTIVE UNIT 10 (CONT'D)

PERFORMANCE V (Single Venturi Carburetor)

The student will disassemble, clean and reassemble a single venturi carburetor to factory specifications and diagnose carburetor problems. This procedure will include:

1. Clean and adjust automatic choke
2. Remove and replace carburetor float or needle and seat and adjust
3. Remove and replace carburetor pump plunger
4. Perform adjustments in accordance with manufacturer's specifications

The student will mount the reassembled carburetor on a laboratory engine and adjust to factory and current Department of Environmental Quality (DEQ) specifications so that the engine will operate correctly. He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VI (Dual Venturi Carburetor)

The student will disassemble, clean and reassemble a dual venturi carburetor to factory specifications and diagnose carburetor problems. This procedure will include:

1. Clean and adjust automatic choke
2. Remove and replace carburetor float or needle and seat and adjust
3. Remove and replace carburetor pump plunger
4. Perform adjustments in accordance with manufacturer's specifications

The student will mount the reassembled carburetor on a laboratory engine and adjust to factory and current Department of Environmental Quality (DEQ) specifications so that the engine will operate correctly. He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VII

The student will identify major carburetor parts as evidenced by completing an identification test at the 100% correct level.

PERFORMANCE VIII

The student will complete an objective evaluation to determine his command of the following:

1. Use of combustion analyzer (infra-red type)
2. Use of vacuum gauge
3. Use of tachometer
4. Causes and effect of high float setting
5. Causes and effect of low float setting
6. Poor acceleration
7. Poor fuel mileage
8. Effects of rich and lean mixtures

A score of 100% correct will be required for satisfactory achievement.

PERFORMANCE IX

The student will demonstrate acceptable performance by connecting and using the following test instruments on a laboratory engine. He will complete a performance self-evaluation certificate to verify satisfactory achievement:

1. Compression tester
2. Tachometer
3. Vacuum gauge
4. Exhaust analyzer (infra-red type)

PERFORMANCE X

The student will perform an objective evaluation to demonstrate his ability to identify fuel filter element materials and their service. He will also demonstrate his knowledge of air filter systems. A score of 100% correct will be required for satisfactory achievement.

PERFORMANCE XI

The student will inspect and service air filters and housings to factory specifications. He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PORTLAND COMMUNITY COLLEGE
AUTOMOTIVE DEPARTMENT

UNIT 12 ELECTRICAL II

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools.

CHARGING SYSTEM

PERFORMANCE I

The student will know basic function and/or use of items listed below as necessary for job entry level and will identify alternator/regulator parts from diagrams, drawings, mock-ups, or on automobiles.

1. Alternator/regulator component parts
2. Alternator/circuitry
3. Alternator/regulator testing
4. Alternator/regulator servicing

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

PERFORMANCE IIA

The student will disassemble, test internal circuits, reassemble and bench test a DELCO alternator.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE IIB

The student will disassemble, test internal circuits, reassemble and bench test a FORD alternator.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE IIC

The student will disassemble, test internal circuits, reassemble and bench test a CHRYSLER alternator.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

The student will adjust alternator regulator and test and diagnose alternator system problems on laboratory controlled equipment.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

BASIC RELATED ELECTRICITYPERFORMANCE IV

The student will know the basic function and/or use of the items listed below as necessary for job entry level. He will be able to identify from schematic diagrams, drawings, mock-ups, or on automobiles all of the following:

- | | |
|---------------------|-------------------------|
| 1. Switches | 9. Transistor |
| 2. Fuse | 10. Signal flasher |
| 3. Fuse link | 11. Diode |
| 4. Circuit breaker | 12. Zenor diode |
| 5. Rheostat | 13. Connector terminal |
| 6. Relay | 14. Bulkhead disconnect |
| 7. Pulse relay | 15. Printed circuit |
| 8. Time delay relay | |

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

LIGHTING SYSTEMS AND WIRING DIAGRAMSPERFORMANCE V

The student will know the basic function and/or use of items listed below as necessary for job entry level and will identify automobile lighting and accessory circuit parts, diagrams and trouble shooting procedures.

1. Safety lighting
 - a. headlights
 - b. stop lights
 - c. turn signal and hazard flasher
 - d. marker lights (tail, park and side)
2. Interior lights and controls

PERFORMANCE VI

The student will "construct" various auto lighting circuits using laboratory controlled equipment. The lighting circuits may include:

- | | |
|-------------------|-----------------------|
| 1. Head lights | 4. Stop lights |
| 2. Tail lights | 5. Turn signal lights |
| 3. Parking lights | |

The student will complete a self-evaluation certificate to verify satisfactory achievement.

GAUGES AND INDICATOR LIGHTSPERFORMANCE VII

The student will know the basic function and/or use of instrument panel gauges and indicator lights for job entry level. The student will be able to identify from schematic diagrams, drawings, mock-ups, or on automobiles all of the following:

1. Electromagnetic gauge circuitry
2. Thermo-electric gauge circuitry
3. Indicator light system circuitry
4. Charge system indicators
5. Use of thermistor
6. Constant voltage limiter
7. Bimetallic switches

Satisfactory level of student achievement will be determined by objective evaluation. A score of 100% will be required.

ACCESSORY MOTORSPERFORMANCE VIII

The student will know the basic function and/or use of the items listed below as necessary for job entry level. He will be able to identify from schematic diagrams, drawings, mock-ups, or on automobiles all of the following:

1. Permanent-magnet motors
 - a. one speed
 - b. two speed
 - c. reversible
2. Wire wound field motors
 - a. series
 - b. shunt
 - c. compound
 - d. split series
3. Switch to motor circuitry
 - a. depressed park wipers
 - b. washer pump
 - c. window switches
 - d. six way seat

PERFORMANCE IX

The student will identify manufacturer and type, (2 speed, 3 speed, depressed park, etc.) of wiper motor assemblies. Using laboratory controlled equipment, the student will disassemble, test internal circuits and bench test assembled assembly according to manufacturer's specifications.

He will complete a performance self-evaluation certificate to verify satisfactory achievement.

PORTLAND COMMUNITY COLLEGE
AUTOMOTIVE DEPARTMENT

DIAGNOSTIC TUNE UP - UNIT 22

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications as written by the vehicle manufacture and require the use of approved tools.

DIAGNOSING ENGINE PERFORMANCE COMPLAINTS

PERFORMANCE I

The student will demonstrate ability to operate properly and safely the following auto shop equipment:

1. Compression tester
2. Cylinder leakage tester
3. Induction timing light
4. Oscilloscope
5. Infa/red exhaust analyzer

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE II

The student will demonstrate skills required to bring vehicles into the manufacturers technical specifications as indicated in either a factory shop manual or approved equivalent. At least a portion of the customer-owned vehicles worked on will be of the modern electronic circuitry type.

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE III

The student will demonstrate ability to perform work on customer owned vehicles within at least 200% of the manufacturers flat rate time allowance.

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PORTLAND COMMUNITY COLLEGE
12000 S.W. 49th Avenue
Portland, Oregon 97219

Automotive Unit 28 - Automotive Emission Systems

NOTE: Work performed in this unit will be on school controlled equipment. All operations will follow safety standards, technical specifications, and require use of approved tools. The student will perform duties similar to those accomplished by a general automotive mechanic working in the trade. The student will maintain an accurate record of his work activities. All work will be set at manufacturer's specifications.

Prerequisites: Unit 1,2,3,10, 12

PERFORMANCE I (Combustion Process & Smog)

The student will know the basic purpose of the following subjects as they are related to the automotive engine:

1. Chemistry of air
2. Chemistry of gasoline
3. Chemistry of gasoline and air compounds combined with the internal combustion process of the automobile engine
4. Combustion temperatures
5. Compression and air/fuel ratios
6. Solar photochemical effects with combustion by-products

A demonstration of students' knowledge of the subject matter will be obtained by an objective evaluation. A correct score of 100% will be required.

PERFORMANCE II (Crankcase Ventilation Circuits & Components)

The student will know the purpose/function of the ventilation circuit and components of various crankcase systems. The types of systems to be presented will be the following:

1. Draft tube
2. Open
3. Closed
4. Sealed

Satisfactory level of student achievement will be determined by an objective evaluation. A score of 100% will be required.

Automotive Unit 28 (Cont'd)

PERFORMANCE III (Positive Crankcase Ventilation Testing & Service Procedures)

A student will demonstrate his/her skill by testing and servicing one of the following positive crankcase ventilation systems to manufacturer's specifications:

1. Open
2. Sealed
3. Closed

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE IV (Exhaust Emissions)

A. Exhaust Pollutants

The student will identify the exhaust pollutants and their causes. The contaminants of concern are:

1. Carbon monoxide
2. Hydrocarbons
3. Nitrogen oxides

A satisfactory level of student achievement will be determined by an objective evaluation. A score of 100% correct will be required.

B. Engine Modifications

The student will identify and know the functions and/or use of the types of engine modifications used to control exhaust emissions of hydrocarbons and carbon monoxide. The types to be covered in this unit will be as follows:

1. I.M.C.O. (improved combustion)
2. C.C.S (controlled combustion system)
3. C.A.P./C.A.S. (cleaner air package) (cleaner air system)

A satisfactory level of student achievement will be determined by an objective evaluation. A correct score of 100% will be required.

C. After Burners

The student will know the basic function and/or use of items listed below:

1. A.I.R. (air injection reactor)
2. Thermactor
3. Catalytic mufflers

A satisfactory level of student achievement will be determined by objective evaluation. A correct score of 100% will be required.

Automotive Unit 28 (Cont'd)

D. Controls for Nitrogen Oxides

The student will know the basic function and/or use of items listed below:

1. Transmission control spark
2. Electronic distributor modulator
3. NO_x Chrysler
4. Exhaust gas recirculation

A satisfactory level of student achievement will be determined by an objective evaluation. A correct score of 100% will be required

PERFORMANCE V (Testing and Servicing of Exhaust Emission Controls)

A. Student will test and service the components of the engine modification systems such as:

1. I.M.C.O. (improved combustion)
2. C.C.S. (controlled combustion)
3. C.A.P./C.A.S. (cleaner air package) (cleaner air system)

B. Student will test and service the components of the after burner systems such as:

1. A.I.R. (air injection reactor)
2. Thermactor

C. Student will test and service the components of controls for nitrogen oxides such as:

1. Transmission control spark
2. Electronic distributor modulator
3. NO_x Chrysler
4. Exhaust gas recirculation

The student will complete a performance self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VI (Vapor Control Systems)

The student will know the basic function and/or use of the vapor control systems. Those systems that will be presented are:

1. Crankcase vapor storage
2. Canister vapor storage

The student will demonstrate his skill by an objective evaluation. A score of 100% correct will be required.

PERFORMANCE VII (Vapor Control Systems Maintenance)

The student will perform testing and service if necessary on the vapor control systems of items listed below:

1. Visual inspection
2. Charcoal canister
3. Pressure/vacuum fuel filler cap

The student will complete a self-evaluation certificate to verify satisfactory achievement.

PERFORMANCE VIII (Automotive Emissions Legalities)

A. Laws and Regulations

The student will identify the automotive pollutants levels set forth by:

1. Federal regulations
2. Oregon regulations

- B. The student will also identify the Oregon State Laws and Regulations concerning removal and service of the emission control equipment on the automotive vehicle.

A satisfactory level of achievement will be determined by an objective evaluation. A score of 100% correct will be necessary.

PERFORMANCE IX (Engine Performance Evaluation)

The student will perform an engine evaluation for exhaust emissions using the following equipment:

1. Engine Oscilloscope
2. Infra-red Exhaust Gas Analyzer
3. Chassis Dynamometer

The student will record his findings and compare them to the vehicle manufacturer's specifications and summarize for record.

A self-evaluation certificate to verify satisfactory achievement will be completed by the student.

JB gsj
8/26/74

EXHIBIT "B"

~~SECRET~~
BUDGET SUMMARY

Exhibit B

151400

Contractor : Portland Community College
Name and : 12000 SW 49th
Address : Portland, OR 97219

Contract # _____
Modification # _____

	<u>Total Amount</u>	<u>% of total budget</u>
Participant wages and fringe benefits	<u>-0-</u>	<u>-0-</u>
R&E training costs	<u>18,529</u>	<u>78.42</u>
Services	<u>5,100</u>	<u>21.58</u>
Administration	<u>-0-</u>	<u>-0-</u>
 TOTAL BUDGET REQUESTED	 \$ <u><u>23,629</u></u>	 <u>100%</u>

151400

Budget: CLASSROOM TRAINING

Contractor : Portland Community College
 Name and : 12000 SW 49th
 Address : Portland, OR 97219

Contract # _____
 Modification # _____
 Contract dates 4/20/81
 to 9/30, 1981

ALLOWANCES

1. Total allowances \$ -0-

PARTICIPANT WAGES DURING CLASSROOM TRAINING

2. Total wages -0-

PARTICIPANT FRINGE BENEFITS DURING CLASSROOM TRAINING

3. FICA -0-

4. Medical and accident insurance -0-

SUBTOTAL \$ -0-

TRAINING COSTS

5. Instructors' wages (Itemize on TED 6) 9,114

6. Instructors' fringe benefits (Itemize on TED 6) 2,819

7. Instructors' travel to training -0-

8. Training supplies and materials _____

9. Authorized training equipment (Itemize _____)

10. Tuition and fees 6,596

11. Classroom space rental -0-

12. Other _____

13. Other _____

SUBTOTAL \$ 18,529

SERVICES COSTS

14. Staff salaries (Itemize on TED 7) _____

15. Staff fringe benefits (Itemize on TED 7) _____

16. Office supplies _____

17. Telephone _____

18. Printing _____

19. Other Participant tools (Support Svcs) 5,100

20. Other _____

SUBTOTAL \$ 5,100

TOTAL CLASSROOM TRAINING BUDGET \$ 23,629

PERSONNEL ITEMIZATION
for
INSTRUCTORS
(Training Staff)

Contractor : Portland Community College
Name and : 12000 SW 49th
Address : Portland, OR 97219

Contract # _____
Modification # _____
Contract dates 4/20/81
to 9/30, 1981

(A) No. of Positions	Position titles	(B) Salary Rate (monthly FT)	(C) % of time on project	(D) # of months on project	(AxBxCxD) TOTAL COST
1	Automotive Instructor	3,038	100	3	9,114

Fringe Benefits		Personnel Total	\$ <u>9,114</u>
FICA	\$ <u>608</u>	Fringe Benefits Total	<u>2,819</u>
Workers' compensation	<u>55</u>	TOTAL PERSONNEL COSTS	<u>11,933</u>
Retirement	<u>1,588</u>		
Life insurance	<u>-0-</u>		
Health insurance	<u>335</u>		
Unemployment insurance	<u>43</u>		
Other <u>Disability</u>	<u>126</u>		
Other <u>Dental - year</u>	<u>64</u>		
TOTAL	\$ <u>2,819</u>		

~~PSE-9~~
~~(8,900)~~

EXHIBIT C
EXPENDITURE REPORTS

CLASSROOM TRAINING
EXPENDITURE SUMMARY

Contractor:
Name and :
Address :

Contract # _____
Modification # _____
Cumulative through month of _____

	<u>Current Period Request</u>	<u>Year to Date Request</u>	<u>Current Budget (Mod # _____)</u>	<u>Balance</u>
Allowances	\$ _____	\$ _____	\$ _____	\$ _____
Participant wages	_____	_____	_____	_____
Participant Fringe Benefits	_____	_____	_____	_____
Training Costs	_____	_____	_____	_____
Service Costs	_____	_____	_____	_____
Administration	_____	_____	_____	_____
 TOTAL	 \$ _____	 \$ _____	 \$ _____	 \$ _____

- | | |
|--|----------|
| 1. Total payments received, contract year to date | \$ _____ |
| 2. Less: Actual cash disbursements contract year to date | - _____ |
| 3. Equals: Funds on hand at the time of this request | _____ |
| 4. Add: Unpaid requests for payments | + _____ |
| 5. Equals: TOTAL FUNDS AVAILABLE | \$ _____ |

Prepared by _____ Date _____

Approved by _____

Expenditure
Report: CLASSROOM TRAINING

Contractor :
Name and :
Address :

Contract # _____
Modification # _____
Cumulative through month of _____

ALLOWANCES

This month

Cumulative

1. Total allowances

\$ _____

\$ _____

PARTICIPANT WAGES DURING CLASSROOM TRAINING

2. Total wages

PARTICIPANT FRINGE BENEFITS DURING CLASSROOM TRAINING

3. FICA

4. Medical and accident insurance

SUBTOTAL

\$ _____

\$ _____

TRAINING COSTS

5. Instructors' wages

6. Instructors' fringe benefits

7. Instructors' travel to training

8. Training supplies and materials

9. Authorized training equipment

10. Tuition and fees

11. Classroom space rental

12. Other _____

13. Other _____

SUBTOTAL

\$ _____

\$ _____

SERVICES COSTS

14. Staff salaries

15. Staff fringe benefits

16. Office supplies

17. Telephone

18. Printing

19. Other _____

20. Other _____

SUBTOTAL

\$ _____

\$ _____

TOTAL CLASSROOM TRAINING EXPENDITURES

\$ _____

\$ _____

Submit the following with this report:

1. Monthly Invoice - Instructors/Services Staff
2. Copies of all invoices over \$100.00

MONTHLY INVOICE

INSTRUCTORS/SERVICES STAFF

Contractor :
Name and :
Address :

Telephone # _____

Contract # _____

Current Date _____

Report Period
From _____
To _____

SPONSOR
City of Portland
Human Resources Bureau
Training and Employment Division
522 SW 5th Avenue, 5th Floor
Portland, Oregon 97204

248-4541

Name	TOTAL PAID HOURS						Base Pay	FICA	SAIF	Hosp.	Life Ins.	Dental	Other (Specify)	TOTAL	TOTAL
	Reg	Trng	Vac	Sick	Hol	Total								F/S	PAY
INSTRUCTORS															
SERVICES STAFF															
PAGE TOTALS															

Prepared by _____ Contract Signator or Designee _____ Date _____
Title _____ Title _____

151400

ORDINANCE NO: 151400

An Ordinance authorizing a contract with Portland Community College to provide an automotive training program under the Human Resources Bureau, AU 682, Training and Employment Division for the period April 20, 1981 through September 30, 1981; authorizing an expenditure of \$23,629 within the CETA Fund and declaring an emergency.

The City of Portland ordains:

Section 1. The Council finds:

1. The City of Portland has been designated by the U. S. Department of Labor as Prime Sponsor for administering funds under the Comprehensive Employment and Training Act (CETA) to provide employment to the economically disadvantaged.
2. The Private Industry Council (PIC) has approved a program through Portland Community College (PCC) to train seventeen (17) CETA participants in the field of automotive tune-up and repair. This program will operate for 30 hours per week through September 11, 1981 with a start date of April 20, 1981.
3. Funds for this program have been budgeted and are available in the FY 80-81 City Budget through CETA Title VII.
4. The program curriculum and costs are set forth in Exhibit "A".
5. It is therefore appropriate that the Commissioner-in-Charge and the City Auditor execute, on behalf of the City, a contract with Portland Community College to provide an automotive training program under the Human Resources Bureau, AU 682, Training and Employment Division in the amount of \$23,629 for the period beginning April 20, 1981 through September 11, 1981, as set forth in Exhibit "A".

NOW, THEREFORE, the Council directs:

- a. The Commissioner-in-Charge and the City Auditor are hereby authorized to execute, on behalf of the City, a contract with Portland Community College to provide an automotive training program under the Human Resources Bureau, AU 682, Training and Employment Division in the amount of \$23,629 for the period beginning April 20, 1981 through September 11, 1981, as set forth in Exhibit "A".

ORDINANCE No.

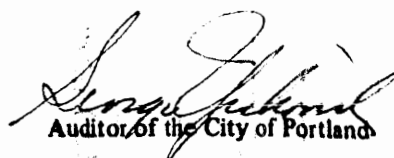
- b. The Mayor and the Auditor are hereby authorized to draw and deliver warrants chargeable to the FY 80-81 budget, CETA Title VII, Human Resources Bureau, Training and Employment Division, AU 682, when demand is presented, approved by the proper authorities.

Section 2. The Council declares that an emergency exists because delay in enactment of this Ordinance will cause unnecessary program interruption and administrative delay in the function of the CETA program; therefore, this Ordinance shall be in force and effect from and after its passage by the Council.

Passed by the Council, **APR 15 1981**

Commissioner Mike Lindberg
JPG:pj
4/7/81

Attest:


Auditor of the City of Portland

Calendar No. **1164**

ORDINANCE No. 151400

Title

An Ordinance authorizing a contract with Portland Community College to provide an automotive training program under the Human Resources Bureau, AU 682, Training and Employment Division for the period April 20, 1981 through September 30, 1981; authorizing an expenditure of \$23,629 within the CETA Fund and declaring an emergency.

THE COMMISSIONERS VOTED AS FOLLOWS:		
	Yeas	Nays
Jordan	1	
Lindberg	1	
Schwab	1	
Strachan	1	
Ivancie	1	

FOUR-FIFTHS CALENDAR	
Jordan	
Lindberg	
Schwab	
Strachan	
Ivancie	

Filed APR 10 1981

GEORGE YERKOVICH
Auditor of the CITY OF PORTLAND

By George C. Powell
Deputy

INTRODUCED BY
Commissioner Mike Lindberg

NOTED BY THE COMMISSIONER
Affairs
Finance and Administration
Safety
Utilities
Works <i>ML/MS</i>

BUREAU APPROVAL
Bureau: Human Resources
Prepared By: <i>JPG/lyc</i> Date: <i>4/7/31</i> JB Joseph P. Gonzales
Budget Impact Review: <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Not required
Bureau Head: <i>Erma E. Hepburn</i> Erma E. Hepburn

CALENDAR
Consent <input checked="" type="checkbox"/> Regular

NOTED BY
City Attorney
City Auditor
City Engineer