COMMONWEALTH OF MASSACHUSETTS
METROPOLITAN DISTRICT COMMISSION
RESERVATIONS AND HISTORIC SITES DIVISION
TRANSPORTATION PROPOSAL

September 28, 1987

GOVERNMENT DOCUMENTS
COLLECTION

University of Massachusetts
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September 28, 1987

MOTOR VEHICLE MANAGEMENT BUREAU
TO: Ernest C. Sofis, Fleet Administrator
FROM: Stephen Corbett, Deputy Fleet Administrator
RE: Transportation Proposal

Attached please find the Transportation Proposal conducted by the Motor Vehicle Management Bureau and the Metropolitan District Commission - Reservation and Historic Sites Division.

This document details the costs/benefits of the proposed system.
INTRODUCTION

The purpose of this proposal is to review the present system for providing transportation for employees of the Metropolitan District Commission - Reservation and Historic Sites Division. We have identified problem areas and have made recommendations to overhaul the present system, reduce transportation costs, and eliminate abuses of the present system. In so doing, we have endeavored to develop recommendations that are cost effective and which can be readily implemented.

The resulting document provides a solid, practical analysis to the proposed Metropolitan District Commission - Reservation and Historic Sites Division's - transportation system.

EXISTING MDC TRANSPORTATION SYSTEM:

Presently, the MDC - Reservation and Historic Sites Division leases 20 vehicles per year. These vehicles are pick-up trucks and vans that are used on the reservations to patrol and manage the areas during the spring thru fall seasons. The average period the vehicles are used is approximately six (6) months. The vehicles are using commercial plates, and since they are leased, there are insurance costs included in the lease.

MDC - Reservation Division - has $41,000 for vehicles plus an additional $102,000 that they are requesting to pay for vehicle leases. The total amount that they will spend on leased transportation for a 6 month period is $143,000.

TRANSPORTATION COST OF EXISTING MDC - RESERVATION AND HISTORIC SITES DIVISION

The following is a cost analysis of the present transportation system.

Number of lease vehicles ......................... 20 vehicles
Yearly cost of leased transportation ............. $143,000
FUEL COST:

10,000 miles per year (est.) x 20 (veh.) ..........200,000 miles
200,000 miles / by 24 mpg ..........................8,333 gallons
8,333 gallons x $.65 per gallon ..................... $5,416

REPAIR AND MAINTENANCE:

$330 (average cost) X 20 (veh.) ....................... $6,600.

Miscellaneous Costs:

a) Car Washes
   $4 (per car wash) x 1 (a month) = $4 per mo/per vehicle
   $4 x 6 (months a year) x 20 (veh) = $480
b) Wear and Tear Clause (In Lease)
   $300.00 (average yearly cost) x 20 (vehicles) = $6000

A recap the total Annual Costs of the present transportation
system for the MDC - Reservation and Historic Sites Division
would be as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lease Cost (20 vehicles)</td>
<td>$143,000</td>
</tr>
<tr>
<td>Fuel Costs</td>
<td>$5,416</td>
</tr>
<tr>
<td>Repair &amp; Maintenance</td>
<td>$6,600</td>
</tr>
<tr>
<td>Car Washes</td>
<td>$480</td>
</tr>
<tr>
<td>Wear &amp; Tear Clause (In Lease)</td>
<td>$6,000</td>
</tr>
<tr>
<td>Total Cost Per Year</td>
<td>$161,496</td>
</tr>
</tbody>
</table>

It costs the MDC $8075 per vehicle/per year to Lease the 20 vehicles

$161,496 / 20 vehicles .......... $8,075
It is important to remember that these leased vehicles are utilized only 6 months per year and are returned to the lessor. The MDC receives no equity or vehicles as a result of this costly arrangement.

**MOTOR VEHICLE MANAGEMENT BUREAU PROPOSED TRANSPORTATION SYSTEM**

The following is a cost analysis of the projected plan by MVMB and MDC - Reservation and Historic Sites Division. This system would replace the current practice of leasing vehicles.

**VEHICLE PURCHASE COST:**

20 vehicles x $9,000 per vehicle .......................$180,000.
Deduct $500 trade-in value after 6 years of use .............$10,000.
Net purchase price ........................................$170,000.
Purchase price amortized over 6 years .......................$28,333.

**FUEL COST:**

15,000 miles per year (estimated) x 20 (veh) ....... 300,000 miles
300,000 miles / by 24 mpg.................................. 12,500 gallons
12,500 gallons x $.65 per gallon........................... $8,125

**REPAIR AND MAINTENANCE:**

$248 (in house costs) X 20 (veh) ......................... $4,960.

**MISCELLANEOUS COSTS:**

a) **Car Washes**

$4 (per car wash) x 1 (a month) = $4 per mo/per vehicle
$4 x 12 months a year x 20 (veh) = $960

**Registrations Plates**

$1.40 (per plate) x 2 (plates per vehicle) x 20 (veh) = $56
The total cost to implement the new system per year would be the combination of that years amortized purchase cost, the fuel cost, repair and maintenance, and miscellaneous cost.

A recap of the annual costs that make up the proposed transportation system are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price (amortized over 6 years)</td>
<td>$28,333</td>
</tr>
<tr>
<td>Fuel costs</td>
<td>$8,125</td>
</tr>
<tr>
<td>R&amp;M costs</td>
<td>$4,960</td>
</tr>
<tr>
<td>Car washes</td>
<td>$960</td>
</tr>
<tr>
<td>Registration plates</td>
<td>$56</td>
</tr>
<tr>
<td>Total cost</td>
<td>$42,434</td>
</tr>
</tbody>
</table>

COMPARISON OF BOTH TRANSPORTATION SYSTEMS

By comparing the proposed system costs and the existing costs we can see that the proposed system would create a $714,252 cost reduction to the MDC - Reservation and Historic Sites Division over a six year period.

This is reflected as follows:

CURRENT TRANSPORTATION COSTS (Lease costs)

$161,976 (per year) x 6 years $968,976

Deduct proposed transportation cost for 6 years $254,604

Cost reduction to MDC - Reservation and Historic Sites Division $714,372

A breakdown of the cost saving on a yearly basis shows that the MDC would save $122,251 per year

$714,372/ 6 YEARS (6 year cost saving / 6 years) $119,062
BENEFITS OF PROPOSED SYSTEM

The benefits that can be realized as a result of adopting the proposed system are:

1) Substantial reduction in the transportation costs to the MDC - Reservation and Historic Sites Division.

2) Easier identification of vehicles will give managers at MDC the capability for better utilizing available resources. This could lead to an additional reduction in private mileage payments as a result of better utilization of MDC owned vehicles.

3) State license plates as well as decals will help to reduce any unauthorized personnel use of vehicles by MDC employees.

CONCLUSION:

The current transportation system is costly, lacks control and creates concerns for the future transportation needs of the Reservation and Historic Sites Division. The proposed system will realize a substantial cost savings to the Commonwealth and the MDC. The new system will also enable the Commonwealth to own versus lease its vehicle requirement.

In order to execute this plan, the funds must be transferred from the 16 subsidiary to the 15 subsidiary in the MDC Account. This will, of course, require the approval of the budget bureau.

In consideration of all the positive aspects that the proposed Transportation system puts forth, I propose that we adopt the new Transportation System for the M.D.C. Reservation and Historic Sites Division as soon as possible.