

2006-0051
ATTACHMENTS 4-9
APRIL 19, 2006 STAFF REPORT

Metro Transit's North Maintenance Facility Cost Estimate For Replacement Site and Facility - Low End Estimate	
Building Construction 22,600 sq. ft. @ \$110/sq. ft.	\$2,486,000
Site Construction	\$600,000
Construction Cost Subtotal	\$3,086,000
Design, Construction Management and Project Management - 35%	\$1,080,100
SUBTOTAL	\$4,166,100
Project Contingency - 20%	\$833,220
Design and Construction Subtotal	\$4,999,320
Real Estate Costs	\$2,500,000
PROJECT TOTAL	\$7,499,320

Metro Transit's North Maintenance Facility Cost Estimate For Replacement Site and Facility - High End Estimate

Building Construction 22,600 sq. ft. @ \$180/sq. ft.	\$4,068,000
Site Construction	\$700,000
Construction Cost Subtotal	\$4,768,000
Design, Construction Management and Project Management - 35%	\$1,668,800
SUBTOTAL	\$6,436,800
Project Contingency - 20%	\$1,287,360
Design and Construction Subtotal	\$7,724,160
Real Estate Costs	\$3,000,000
PROJECT TOTAL	\$10,724,160

NORTH [LAKE UNION] FACILITIES MAINTENANCE -- EXISTING AND PROGRAMMED SPACES

BUILDING SPACE COMPARISON

OFFICE/ADMIN	Existing sf	Programmed sf	KC Space Standards FMD	Other Sources per architects' space planning
Supervisor's Office	260	180	110-180	
Admin Specialist	216	85	85-120	
Chiefs Office	645 (5 @ 150)	750	110-180	
Lobby/ Waiting Area	36	100	13sf/chair	
File/Fax /Copy Rm	(part of noted sf)	150	150	
Conference/Training	484	600	20sf/chair	
Office restroom	0	150	none	NF program, p. 42
Gross Area Factor 25%	410	504	up to 25%	
Subtotal gross sf	2,051	2,519		

CREW AREAS

First Aid Room	0	120	none	typical at Bases, p. 43
Laundry Room	54	150	none	NF program, p. 44
Locker/Restroom - M	720	550	none	NF program, p. 45
Locker/Restroom - F	included in sf above)	500	none	NF program, p. 46
Break/lunchroom/kitch	1,016	1,100	none	NF program, p. 47
Mudroom	0	350	none	NF program, p. 48
Report Room	0	200	none	NF program, p. 49
Gross Area Factor 15%	269	446	none specified	
Subtotal gross sf	2,059	3,416		

SHOP AREAS

Fabrication / Repair / Carpentry Shop	3,464	3,200	none	NF program, p. 50
Landscaping Shop	868	1,500	none	NF program, p. 51
Sign Shop	1,608	1,000	none	NF program, p. 52
Gross Area Factor 15%	891	855	none specified	
Subtotal gross sf	6,831	6,555		

STORAGE

Construction storage	(included in shop)	500	none	NF program, p. 53
Custodial closet	60	150	none	avg. 100sf at Bases
Office supplies	(included in office sf)	150	none	typical size at Bases
Hazard. Mat storage	100	300	none	NF program, p. 56
Records storage (office)	(included in office sf)	200	none	NF program, p. 57
General storage (archives)	4,800	2,000	none	NF program, p. 58
Stores	800	1,000	none	NF program, p. 59
Gross Area Factor 15%	864	645	none specified	
Subtotal gross sf	6,624	4,945		

SUPPORT AREAS

Ancillary/Fire protect	24	100	none	(code req) typical at Bases
Electrical	74	100	none	(code req) typical at Bases
Mechanical	180	750	none	(code req) typical at Bases
Telephone/data	50	150	none	typical at Bases
Recyclables	in loading dock area)	100	none	typical at Bases
Gross Area Factor 15%	49	180	none specified	
Subtotal gross sf	377	1,380		

Total gross sf	17,942	18,814
Building envelope gross factor 15%*	1,435	2,822
Planning contingency factor 5%	0	941
Building Area Total	19,377	22,577

* A standard grossing factor of 15% is used, however, for an existing building, the grossing factor may be 45% less, reducing it to about 8-10%

SITE SPACE COMPARISON

OUTDOOR SUPPORT AREAS	Existing sf	Programmed sf	KC Space Standards FMD	Other Sources per architects' space planning
Covered Engine Repair	500	500	none	same size as existing
Landscaping Waste Storage	300	600	none	relocate 'off-site' waste storage
Loading Docks	3,600	1,000	none	NF program, p. 16
Outdoor Work Area, uncovered	1,925	750	none	NF program, p. 17
Mulch/Top Soil/Gravel Load Area	0	750	none	NF program, p. 18
Water/Air Refill Station	620	800	none	NF program, p. 19
Scrap Metal & Trash Dumpsters	300	450	none	NF program, p. 20
<i>Gross Area Factor *</i>	9,207	8,245	none specified	
Stormwater Detention 10% imperv.	inc. above	9,114	none specified	
Subtotal gross sf	16,452	22,209		

PARKING / EQUIPMENT AREAS

Employee Parking	0	(46)	18,400	none	Metro parking design standards	
Non-Revenue Vehicle Parking	(4)	1,600	(6)	2,400	none	Metro parking design standards
Pick-up Trucks	(18)	3,600	(22)	4,400	none	NF program, p 24
Garbage Compactor Truck	(1)	360	(2)	720	none	NF program, p 25
Ford Sweeper	(1)	325	(2)	648	none	NF program, p 26
Isuzu Sweeper	(1)	242	(1)	242	none	NF program, p 26
Truck & Landscaping Trailers	(6)	2,400	(9)	3,600	none	NF program, p 27
Truck & Pressure Washer Trailers	(9)	2,880	(9)	2,880	none	NF program, p 28
Sanding & Snow Plow	(1)	348	(1)	348	none	NF program, p 29
<i>Gross Area Factor *</i>	14,939		21,825	none specified		
Site Landscaping (pervious areas) **	14,500		5,012	none specified		
Subtotal gross sf	29,439		26,837			

Total gross sf 45,891 49,046

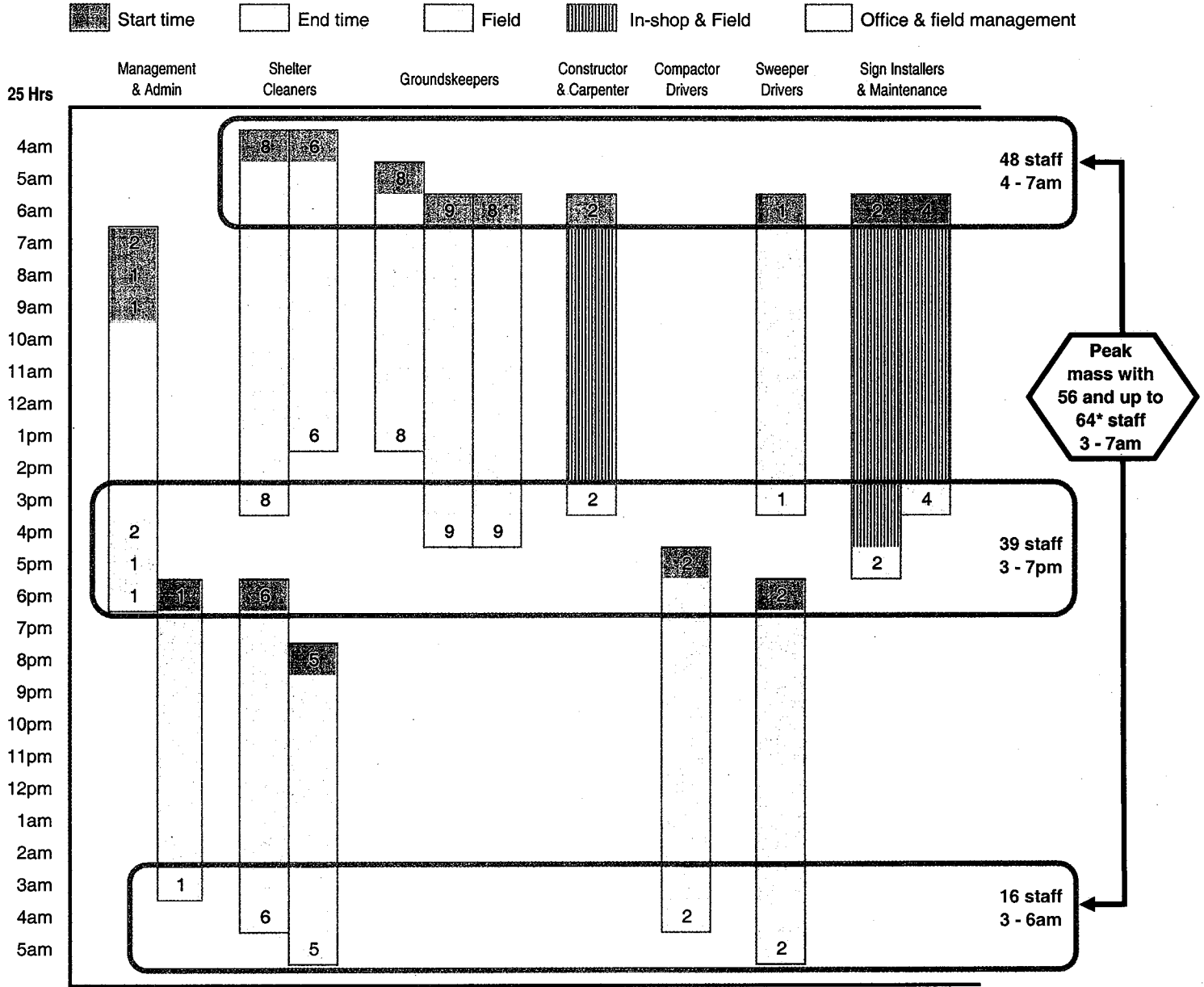
Notes: The existing site area square footage estimates are based on "as-built" drawings and not on any official property surveys.

* A grossing factor of 270% is used for the programmed or planning level s.f. estimates for vehicular circulation, set-backs, buffers and other site. For the existing site, a lower grossing factor of about 45% less, or 127%, is used to cover actual conditions for vehicular circulation, set-backs and stormwater drainage areas and is based on actual space available.

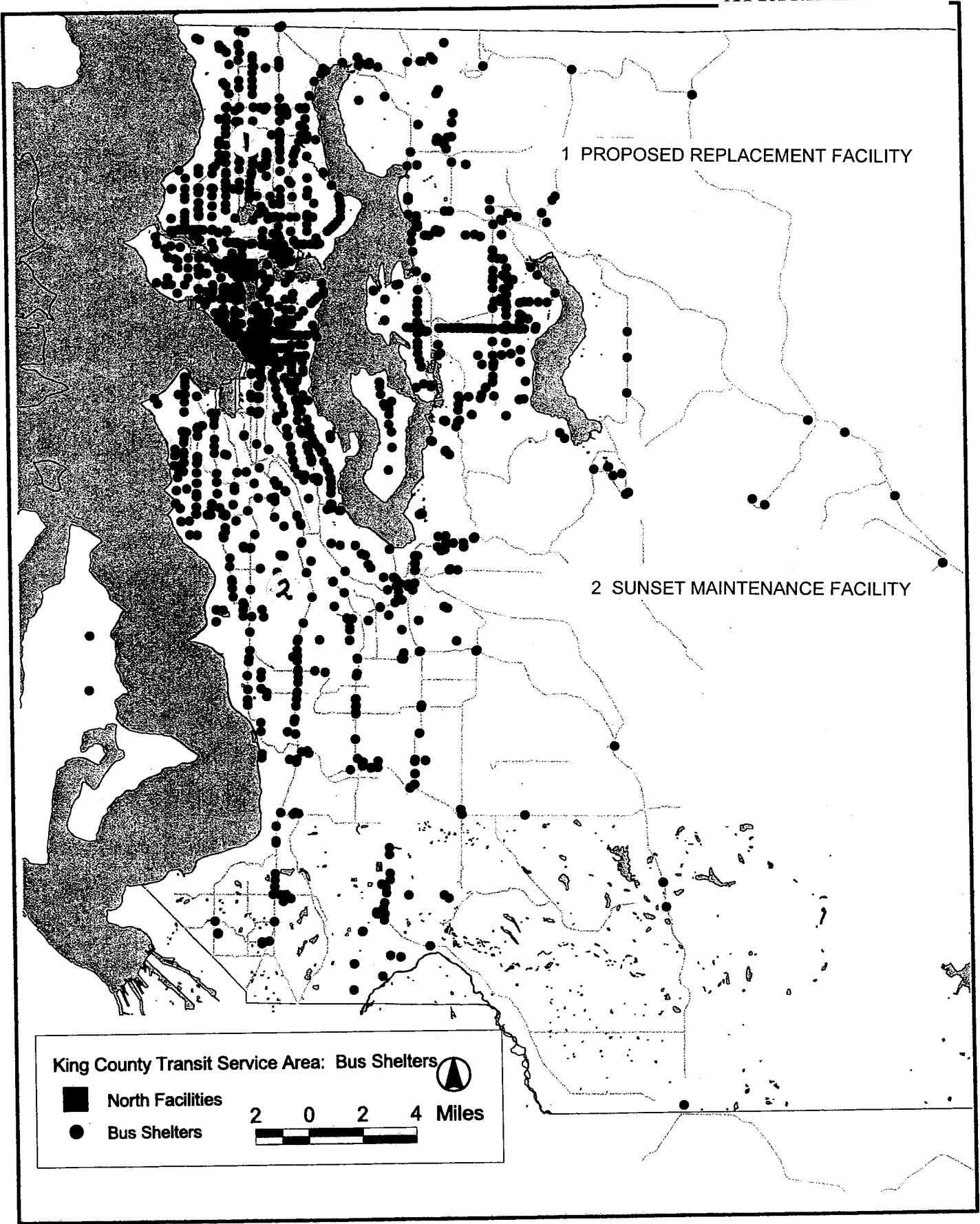
** This is a pervious unlandscaped berm located in the upper yard. This berm is not useable due to its slope.

North [Lake Union] Facilities Crew Schedule - typical work day

For purpose of a visual representation of on-site facility use by staff during a 25hr day. Actual schedules will vary slightly.

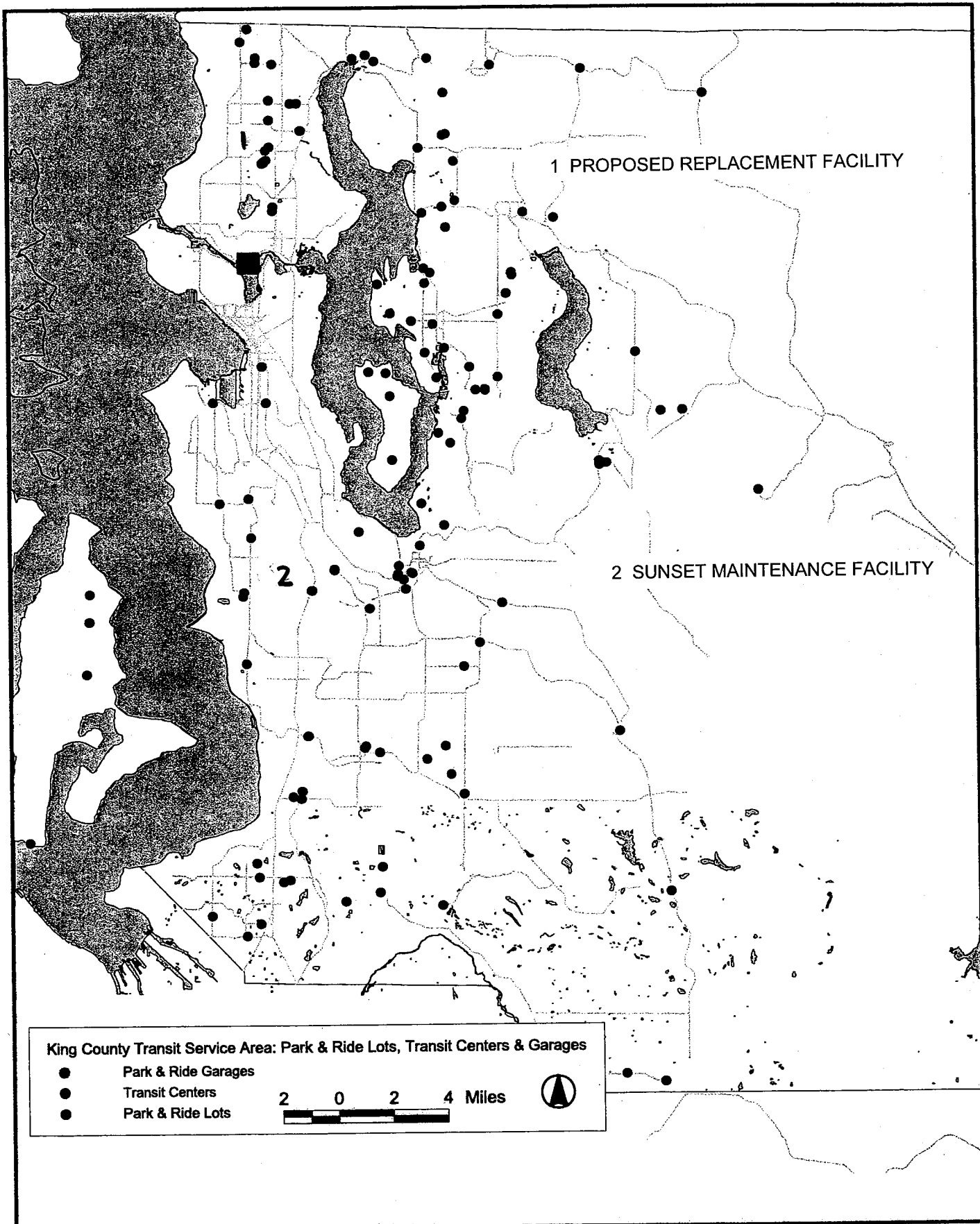


- Notes
- Shifts that begin or end on the half-hour are rounded to the next hour.
 - Individual schedules are from 4/10's and 5/8's.
 - Excepting Administration, each start time includes ~15-20 minutes of work preparation.
 - Excepting Administration, each end time includes ~20-40 minutes of equipment maintenance and clean-up.
 - Excludes crew meetings, personnel meetings, special meetings, training and in-services.
 - * Seasonal hires for grounds support -- about 8 from May through August.



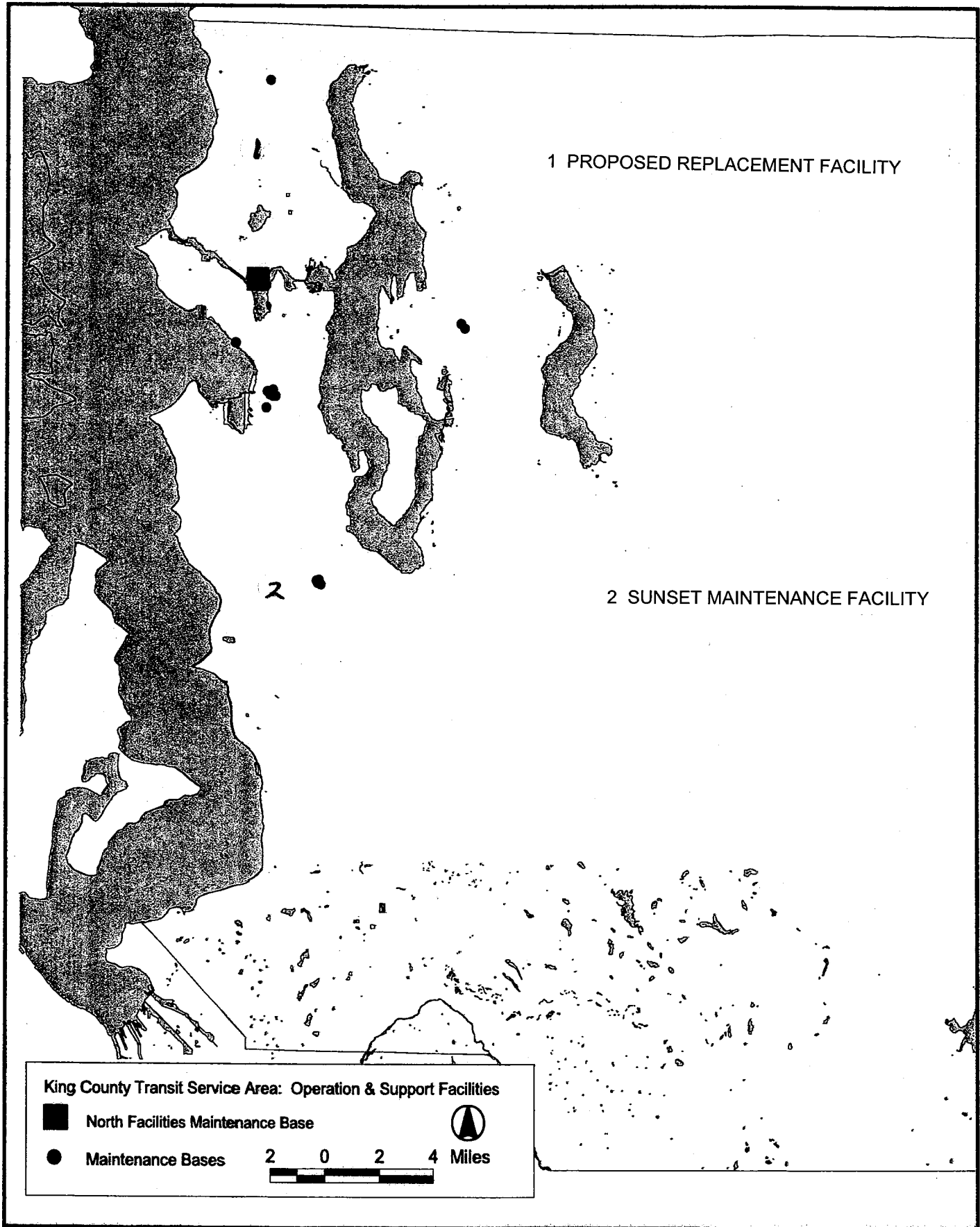
Map 2
King County Transit Service Areas
Bus Shelter Stops

1,521
Total Shelters



Map 3
 King County Transit Service Areas
 Park & Ride Lots & Garages, Transit Centers

**121 Total
 Passenger Facilities**



Map 5
 King County Transit Service Areas
 Bases, Maintenance, & Support Facilities (Non-Passenger)

**18 Total
 Operating Facilities**

Executive Summary

This report documents the cost and related impacts of relocating Metro Transit's Field Maintenance (FM) workgroup to other Transit-owned properties. FM is one of three workgroups under Transit's Power & Facilities Section responsible for the maintenance and repair of transit facilities and systems. The study analyzed two relocation strategies:

1. **In-Whole** relocation of the entire Field Maintenance workgroup.
2. **Dispersed** relocations of the Field Maintenance workgroup separated by functional task groups.

Twelve Transit-owned properties were evaluated for potential relocation in each strategy. A common methodology among both strategies consisted of four sequential activities:

1. Define the functional and space requirements for staff to perform work.
2. Develop the minimum site and building programs for the full FM facility and for the dispersed FM task groups.
3. Apply the full and dispersed programs to each property's capacity. In each strategy, two levels of evaluation were used to narrow the properties for further analysis and cost estimating.
4. Estimate the cost impacts of construction and operating "deadhead" costs of each potential full or dispersed relocation scenario. Operating cost differences are compared with current time/mileage/fuel costs from the present FM base at North Lake Union.

Note: all cost totals depicted in the summary charts are rounded to the nearest thousand dollars



In-Whole Relocation Summary

Four properties were determined to have the capacity to accommodate the full FM workgroup program: North Base, Van Distribution Center, Central Property and Brickyard Park-and-Ride.

Candidate Property	Capital Cost	Operating Deadhead Cost	Total Cost
North Base	\$8,280,000	\$915,000	\$9,195,000
Central Property	\$5,951,000	(\$119,000)	\$5,831,000
Van Distribution Center	\$6,156,000	\$2,301,000	\$8,456,000
Brickyard P&R	\$6,787,000	\$2,902,000	\$9,689,000

Changes in the 20 year Operating Cost, for each scenario, were adjusted to reflect the 2005 Net Present Value (NPV) using a 7 discount rate as outlined in the King County Office of Management and Budget Discount Rate Policy - Section III.

Based on the least cost to relocate FM in-whole, **Central Property was the optimal property.**

Dispersed Relocation Summary

Three task groups – Shelter Cleaners combined with Heavy Equipment Operators (SC/HEO), Landscaping/Groundskeepers (L/G), and Sign Installers (SI) – comprised the dispersed FM workgroup. Out of five possible relocation scenarios, two properties were found optimal to house the dispersed (and re-combined) FM task groups: Central Property and South Facilities.

Task Group	Candidate Property	Capital Cost	Operating Deadhead Cost	Subtotals
SC/HEO	Central Property	\$3,870,000	(\$48,000)	\$3,823,000
L/G & SI	South Facilities	\$1,288,000	\$1,222,000	\$2,510,000
Total Costs		\$5,158,000	\$1,174,000	\$6,333,000

Shelter Cleaners and Heavy Equipment Operators would relocate to Central Property.

Landscaping/Grounds and Sign Installers would relocate to South Facilities.

The next two pages provide further details of these conclusions.

Sunset Maintenance Facility, Parks and Recreation Division

