FEATHER RIVER RAIL SOCIETY

DATE: April 2016

ITEM: Old Business 2

FROM: Eugene Vicknair

SUBJECT: **Archives Research Facility**

In 2014, the Board gave consensus approval to the concept of an Archives Research Facility to be build in the MoP baggage car donated by the UP. I was given approval to seek grants to help fund it and further develop the proposal with input from the Board.

We have now received a $3,000 grant from the UP Foundation toward this idea.

I have received no additional feedback since the March meeting.

Requested Action: I ask the Board to approve this plan by motion.

Project Proposal

Arthur Walter Keddie Railroad Library

Research Facility

Overview

This is a proposal to convert former Missouri Pacific baggage / MW car 14144 into a climate controlled archives storage and research room for year round use at the Western Pacific Railroad Museum.

The car would be partitioned into 4 sections:

- An archives storage area with rack shelving
- An entry / lounge area separated from archives work / storage areas by doors
- A research / work room with large tables, scanners and computer work stations
- An electronics room with server, large storage array, networking and back-up systems

The purpose would be to provide a climate controlled, year round accessible location for work by FRRS archives catalogers and researchers, as well as a location for public users of the archives to access materials in a controlled environment.

The car would be placed on the current dock track behind the Office Car and in place of the "Asbestos Zephyr". Prior to placement, the "Asbestos Zephyr" / WP baggage car would be emptied and mothballed, and preferably given a car wrap.

The details of each section will be reviewed below.

Archives Storage

The storage room will be used for temporary storage only. Archives will be storage on 85" high, heavy duty rack shelving. One section of shelves will be designated for materials that are reserved and waiting for public researchers who have called ahead for access. All other shelving will be for sets of archive materials that are currently being worked on by FRRS archive volunteers. Working portions will be tagged once scanning / cataloging is completed and then, once an entire set is complete, it will be taken back into the main archives, tagged and cataloged, and a new set will be moved into the storage room.

This area will be controlled access, no public, and only qualified FRRS archives volunteers and managers will have access. All lighting will be overheard LED, non-UV emitting fixtures. Recommended HVAC and humidity control systems will also be installed.

Entry / Lounge

This will be a small (126 sq ft) area where visitors enter the car. There will be a laminate or pergo floor area for cleaning shoes (and perhaps a shoe rack with a space for archive slippers, where very dirty shoes can be left and substituted for temporary footware), several chairs and a trash receptacle.

This area is completely segregated from all archives areas by doors. It is intended to be a break area for archives volunteers and an orientation / staging area for public researchers.

Research / Work Room

The largest area of the car. It will contain eight (8) work areas, each with a 5' X 2.5' table and chair. Four (4) of the areas will have computer workstations and high resolution scanners. The other workstations will have network and power for laptops. One or two will have large format scanners and at least two will have slide / negative scanners. One station will also have a handheld scanner.

All windows in this section will be blanked and all light is provided by overhead and work station LED lights. These lights are non-UV emitting and ideal for archives work. Several stations will have movable magnifiers with LED lighting. As with the storage area, proper HVAC and humidity systems will be used.

There will also be storage cabinets in the room with archive gloves, paper, printer ink, computer cables and other needed supplies.

Electronics Room

Located at the extreme end of the car, this small area will contain the breaker panel, server rack, server, network hub and a 48TB high capacity network storage device, as well as advanced network firewall and capability to back-up to secure off-site storage. This area is strictly off-limits except for FRRS qualified IT personnel and managers.

WORK PHASES

Most labor will be done by volunteers. Exceptions are: electrical wiring, server set-up and flooring. The work is broken into 4 phases:

- Phase 1 – car clean-out and interior build – estimated cost $14,000
    - Install new doors / interior walls
    - Blank windows in research and storage areas
    - Install carpet and laminate entry flooring
    - Seal roof
    - Install A/C units and temperature / humidity controls
    - Install non-UV LED lighting
    - Upgrade electrical wiring
    - NOTE: all connections, power and water, to the car will be quick disconnect

  This phase would seal the car against the weather, install the climate control systems and the basic interior.

- Phase 2 – initial installs and partial functionality – estimated cost $10,000
    - Install 8 - 36” W X 18” D X 85” H 18 gauge steel 5 shelf storage units
    - Install 4 - 72“ W X 30” D work tables and chairs
    - Install 4 - 48” W X 18” D X 85” H 18 gauge steel 5 shelf storage units
    - Install 1 - 18“ W X 24” D X 72“ H enclosed storage cabinet
    - Install 1 - 18” W X 24” D X 72” H enclosed storage cabinet
    - Install hand wash sink

  This phase would complete the storage room and put in half of the workstation furniture in the research room.

- Phase 3 – exterior work – estimated cost $14,000
    - Repaint the exterior
    - Coat roof

- Phase 4 – final outfitting, network and electronics – estimated cost $18,000
    - Install 4 - 72“ W X 30” D work tables and chairs
    - Install 1 - 18“ W X 24” D X 72“ H enclosed storage cabinet
    - Install server system and storage with back-up
    - Acquire scanners and workstations

  This phase would complete the car’s outfitting, including the complete network / server system, the remaining workstation furniture and computer / scanner stations in the research room.

FUNDING

Total estimated cost for the build out project, including a 6% overrun, is $65,000. Funding for the project will come from 5 primary sources:

- FRRS Building (account 40405) and / or General Fund - $3,000

- FRRS Archives / Library Fund (account 40409) - $10,000
- ***Union Pacific Foundation - $3,000 (awarded February 2016)***
- Targeted Fundraising Campaign - $14,000
- Foundation for Rural Service Grant - $5,000
- Dailey Foundation Grant - $15,000
- Museums for America Grant - $20,000

The funds from the FRRS accounts and UP Foundation Grant would be used for initial work, Phase 1, and part of the exterior work in Phase 3.

Due to grant limitations, most of the Phase 3 funding would come from the targeted fundraiser. Remaining monies from the fundraiser would be used as fill-in for other areas. The fundraiser would be sent specifically to those who have expressed overt interest in the archives, those who have attended conventions over the last 4 years and past large money donors.

The grants would be used for a majority of work in Phases 2 and 4, with the Museums for America grant specifically being used for technology and storage shelving, including additional storage shelving for the Simplot archives car, as outlined in a proposal from Archivist Frank Brehm.

SCHEDULE

Actual work on this project would commence in June or July 2016, ideally ***after*** completion of the Perimeter Fence and the rework of the Wood Shop in the Diesel House. Adoption of this plan would require a variance in the current "No New Projects" policy.

Project timeline is proposed as follows:

- March 12, 2016 – Project Proposal to FRRS Board
- April 9, 2016 – Final plan report to Board, to include any revisions / changes; final approval
- June - July, 2016 – First work session; Car is placed on Dock Track
- July 1, 2016 – Fundraising request goes out to targeted members
- October 1, 2016 – Submit grant requests to Dailey Foundation and Foundation for Rural Service
- December 1, 2016 – Submit grant request to Museums for America
- December 1, 2016 – Targeted fundraiser ends
- April 1, 2017 – Phase 1 and 2 complete by this date
- August 2017 – Exterior painting performed
- October 11, 2017 – Phase 4 complete by this date, system begin testing and limited use
- April 9, 2018 – Research Room officially open for use

WORK TEAM

Project Supervisor – Eugene Vicknair

Advisors – TBD

Electrician – TBD (licensed)

Network Advisor and Install Supervisor – Curtis Olliff (tentative)

Painting and Exterior Work – Tom Carter (tentative)

MP 14144 Baggage Car Rebuild for Archives Research and Storage

Cost Estimate

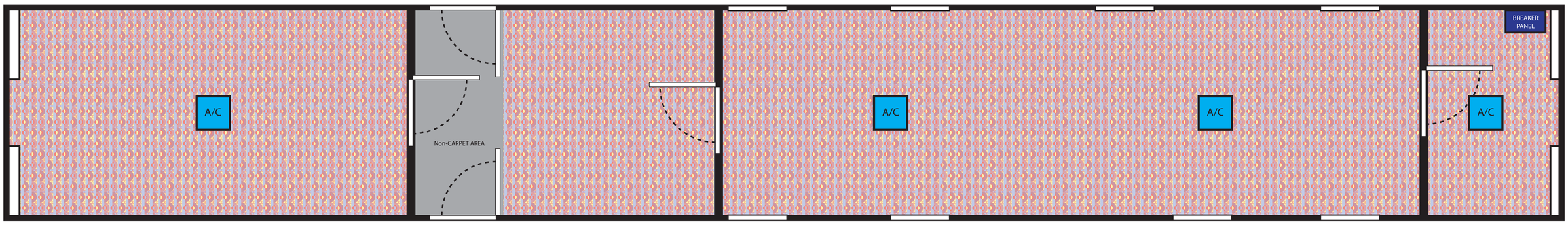
	number	heritage	style	area of work	work	total cost	count	per unit cost	supplier	type	notes
FRRX	101	MoP 14144	baggage car								
				HVAC							
					Roof units	$3,000.00	4	$750.00	RV Parts Country	Ductless	Brisk Air 15K BTU Heat Pump
					Ceiling Units	$540.00	4	$135.00	RV Parts Country	Ductless	Brisk Air 15K Ceiling Unit
					Additional	$10,000.00					filtration / other controls
				Electrical							
					Breaker Panel	$500.00	1	$500.00			
					Electrical Components	$1,200.00	1	$1,500.00	Grainger, PexSupply		outlets, wire, conduit
				Interior							
					Lights	$1,640.00	10	$164.00			Cooper Lighting - 49.1 Watt - Dimmable LED - 2 x 4 Troffer 3500K
					Ceiling Fans	$60.00	1	$60.00	Home Depot		Hampton Bay 44" low profile Hawkins fan brushed nickel
					Carpet	$525.00	700	$0.75	Carpet Express	sq ft	Magic Carpet
					Carpet	$350.00	700	$0.50	Carpet Express	sq ft	Pad, trim, etc.
Ph 1		$22,018.60			Pergo	$103.60	40	$2.59	Home Depot	sq ft	for entry area
					Work Chairs	$2,879.40	12	$239.95	Global Industrial		Item #: WG240123BK - Contoured Office Chair - Black Fabric
					Work Tables	$2,431.60	8	$303.95	Global Industrial		Item #: WGB708896 - Oak Activity Table - 30"W X 72"L
					Décor	$700.00					Paint and Decorations
Ph 2		$12,530.60			Wall Cabinet	$160.00	1	$160.00	for cleaning storage		
					General Repair	$2,500.00			use lumber, insulation and some sheetrock from current stores		
Ph 3		$14,000.00									
				Electronics							
					Computer Workstations	$5,000.00	4	$1,250.00	Lenovo ThinkCentre M93p with 16GB memory and ViewSonic VX2703MH-LED 27-Inch LED-Lit LCD Monitor		
					High Res Scanners	$840.00	4	$210.00			Epson V660
					Slide / Negative Scanners	$230.00	2	$115.00			Jumbl 22MP
					Large Format Scanner	$500.00	1	$500.00			11 X 17 flatbed scanner
					Large Format Printer	$400.00	1	$400.00			Canon Pixma Pro9500 MkII
					5X magnifiers with LED lighting	$189.00	3	$63.00	Global Industrial		
					Server with Storage and Back-up	$4,000.00	1	$4,000.00			Synology 48TB rack mount with 12 Seagate NAS 4TB drives
Ph 4		$17,019.00			Network Hardware	$1,500.00					
					Server Rack	$500.00					
				Shelving and Storage							
					Rack Shelving	$1,247.60	8	$155.95	Global Industrial		36" W X 18" D X 85" H 18ga 5 shelf steel with back

Rack Shelving	$731.80	4	$182.95	Global Industrial	48" W X 18" D X 85" H 18ga 5 shelf steel with back
Storage	$1,785.00	3	$595.00	Global Industrial	18" W X 24" D X 72" H 18ga Enclosed Storage Cabinet
	$960.00	16	$60.00	Global Industrial	Extra Shelves and Label Accessories
Simplot Car Rack Shelving	$2,495.20	16	$155.95	Global Industrial	36" W X 18" D X 85" H 18ga 5 shelf steel with back
Exterior					
Doors and Framing	$1,000.00				
Window Repair	$600.00	8	$400.00		
Paint	$14,000.00				Rhino Liner Roof, WP MW yellow exterior
misc. overruns	$3,000.00				
subtotal	$65,568.20				
combined subtotal	$65,568.20				
tax and 6% overrun	$9,671.31				
materials total	$75,239.51				
total cost	**$75,239.51**				

Funding		apply	max	deadline for application
Union Pacific Foundation	general work	$3,000.00		received
Museums for America grant	technology and storage materials	$22,000.00	$25,000.00	Dec. 1, 2016
Dailey Foundation	general work on car, storage supplies	$15,000.00	$15,000.00	Oct. 1, 2016
Foundation for Rural Service Grant	computer workstations	$5,000.00	$5,000.00	Oct. 1, 2016
FRRS Building Fund	general work on car - seed money	$3,000.00		
Archives Restricted Fund	general work on car, car exterior, storage supplies and tech	$10,000.00	$17,000.00	
Archives Car Fundraiser	general items, car exterior	$14,000.00		Jul. 1 - Dec. 1, 2016
		$72,000.00		

Phase 1 Work - projected cost $14,000 - funding source(s): Dailey Foundation Grant and Archives Restricted Fund

Install new doors / interior walls
Install carpet and laminate entry flooring
Install A/C units and temperature / humidity controls
Upgrade electrical wiring
Blank windows in research and storage areas
Seal roof
Install non-UV LED lighting

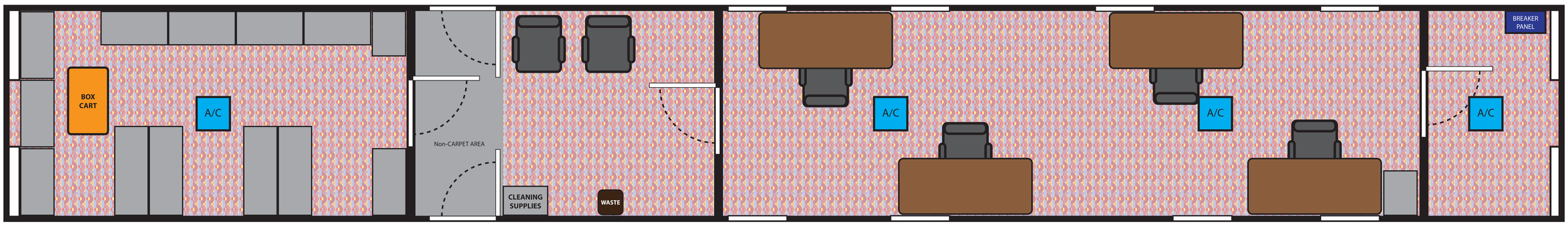


Archives Research Room - 70' long MoP Baggage car

Phase 2 Work - projected cost $10,000 - funding source(s): Dailey Foundation Grant and Targeted Fundraiser

Install: 8 - 36" W X 18" D X 85" H 18 gauge steel 5 shelf storage units
4 - 48" W X 18" D X 85" H 18 gauge steel 5 shelf storage units
1 - 18" W X 24" D X 72" H enclosed storage cabinet

Install: 4 - 72" W X 30" D work tables and chairs
1 - 18" W X 24" D X 72" H enclosed storage cabinet



Archives Research Room - 70' long MoP Baggage car

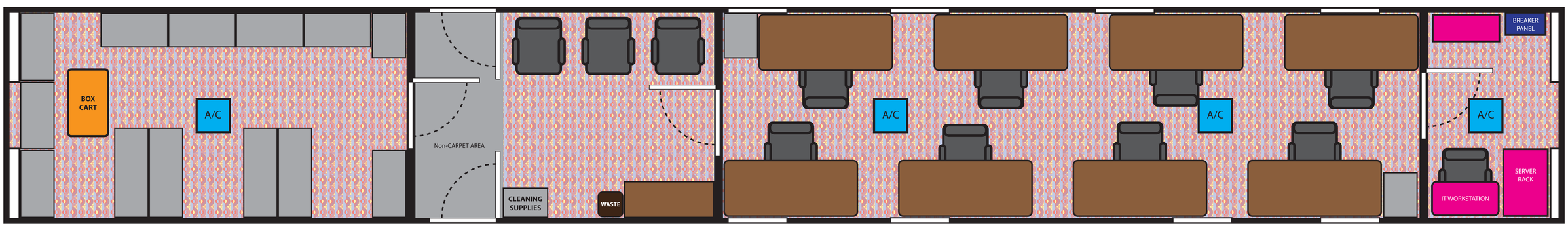
Phase 3 Work - projected cost $14,000 - funding source(s): Archives Restricted Fund and Targeted Fundraiser

Repaint car exterior

Phase 4 Work - projected cost $18,000 - funding source(s): Museums for America Grant and Targeted Fundraiser

Install: 4 - 72" W X 30" D work tables and chairs
1 - 18" W X 24" D X 72" H enclosed storage cabinet

Install server system and storage with back-up
Acquire scanners and workstations



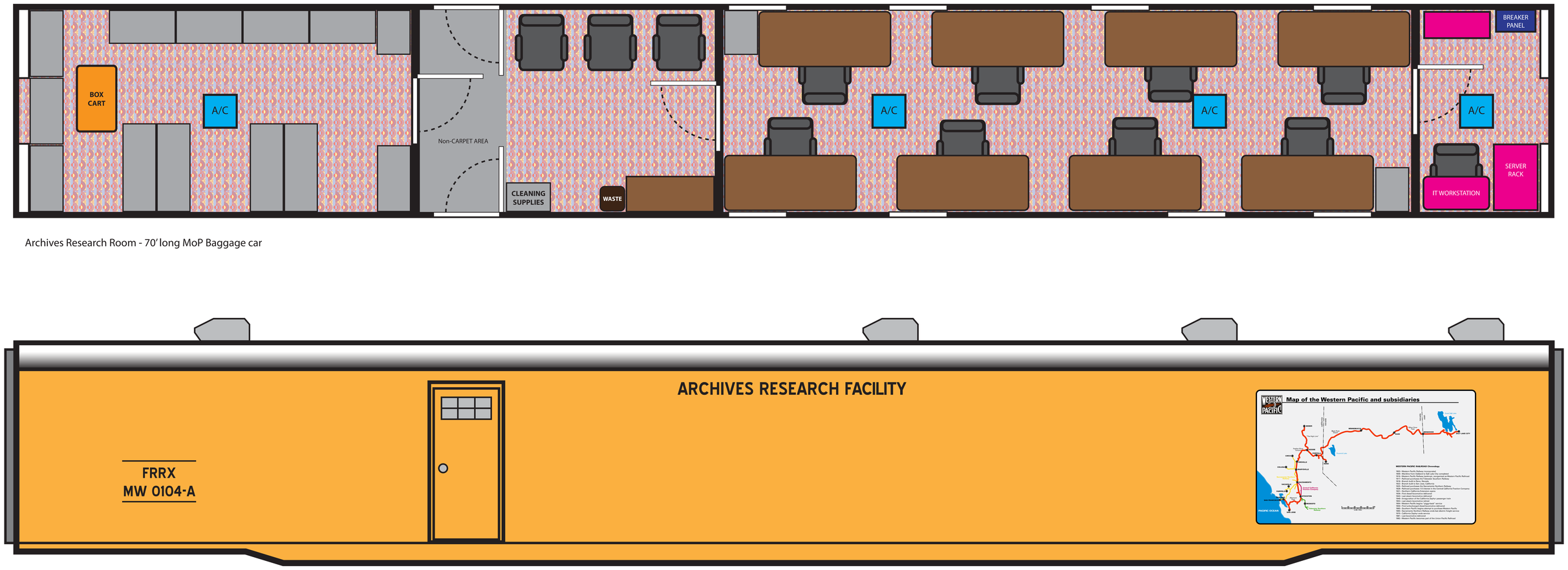
Archives Research Room - 70' long MoP Baggage car

Working Archives Storage Area
8 - 36" W X 18" D X 85" H 18 gauge steel 5 shelf storage units
4 - 48" W X 18" D X 85" H 18 gauge steel 5 shelf storage units
1 - 18" W X 24" D X 72" H enclosed storage cabinet

Lounge Area

Research / Work Area
8 - 72" W X 30" D work tables
2 - 18" W X 24" D X 72" H enclosed storage cabinets
non-UV emitting LED lighting
scanners, slide scanners, computer work stations

Server / Network Room
server rack
network storage
back-up and firewall systems



Archives Research Room - 70' long MoP Baggage car

Repainted WP MOW Deep Yellow