



# MRMPO Project Scoring Form 2022 - New Project Request

## Mid-Region Metropolitan Planning Organization

809 Copper Avenue NM, Albuquerque, NM 87102 505-247-1750

## Project Submittal Form for the Project Selection Process (PSP)

The PSP was developed to score and rank member agency submitted projects and programs. This selection process was developed to promote projects that incorporate national transportation goals and regional goals and priorities from the Connections 2040 Metropolitan Transportation Plan (MTP). This form includes 7 pages:

- A. General Project Information
- B. Work Type and Location Information
  - 1. Optimized Mobility Questions and Strategies
  - 2. Active Transportation Questions and Strategies
  - 3. Economic Linkages Questions and Strategies
  - 4. Environmental Resiliency Questions and Strategies
  - 5. Equity Questions and Strategies

While the PSP is an important tool in project selection, it is not the only determining factor. Other considerations, such as the benefit of the project to the local community, and the project's cost and time frame for completion, are also important factors.

*The table below shows the connection between national and regional goals. Narrative Questions with an asterisk by them are developed directly from national goals.*

National Transportation Goals	2040 MTP Goal(s)
<b>Safety:</b> To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	Active Transportation, Optimized Mobility
<b>Infrastructure Condition:</b> To maintain the highway infrastructure asset system in a state of good repair.	Optimized Mobility
<b>Congestion Reduction:</b> To achieve a significant reduction in congestion on the National Highway System.	Optimized Mobility, Economic Linkages
<b>System Reliability:</b> To improve the efficiency of the surface transportation system.	Optimized Mobility, Active Transportation, Economic Linkages
<b>Freight Movement and Economic Vitality:</b> To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.	Economic Linkages, Optimized Mobility
<b>Environmental Sustainability:</b> To enhance the performance of the transportation system while protecting and enhancing the natural environment.	Environmental Resiliency
<b>Reduced Project Delivery Delays:</b> To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.	Economic Linkages, Project Selection Process (PSP)

### A. General Project Information

Lead Agency / Project Information

**Project Title** NMRX Operations and Maintenance Facility, Phase 1

**Lead Agency** Rio Metro Regional Transit District

**Agency Contact** Grant Brodehl

**Phone Number** ((505)) 724-3638

**E-mail** gbrodehl@mrcog-nm.gov

## Project Type

Transit

### Scope of Work / Project Description:

TIP Project Description: Plan, acquire land for, design, construct, furnish and equip the first phase of the NMRX Operations and Maintenance Facility, including all appurtenances necessary to service and maintain rolling stock. (Note: The project title/description varies slightly from the existing TIP to better align with the current project scope)

Scope of Work: The NMRX Operations and Maintenance Facility (OMF) will be located at the existing NMRX Yard (100 Iron Ave. SE, Albuquerque, NM 87102). The NMRX Yard is the home for Rail Runner fleet maintenance, servicing and storage.

At full build out, the centerpiece of the OMF is envisioned to be a two-story 36,000 SF maintenance shop that is generally divided between a high-bay shop, storage areas and offices. The high-bay shop—open to the second floor—features a 240-foot heavy repair track, 240-foot maintenance/inspection track, and a 140-foot storage track used for truck and wheelset storage. The repair/maintenance tracks are each served by a two-car-length concrete maintenance pit with a drop table, a 30-ton overhead crane capable of moving large components, and platforms that provide rooftop access to locomotives and railcars.

Other spaces within the maintenance shop include a train wash, parts storeroom, welding/machine shop, and smaller areas for component cleaning, electronics storage, tool storage, lubrication storage, and compressors. Office areas provide space for mechanical, maintenance of way, signals, administration, operations and dispatch personnel.

Site improvements include utilities, tracks that tie the maintenance shop into existing yard tracks, and a fueling, sanding, lubrication, waste dumping, and water filling station that allows a train to be fully serviced in one stop.

As proposed at the time of this application, the first phase of the OMF will feature planning, land acquisition, design and construction of utilities, site improvements, and building shell with, heavy repair track and other essential improvements to perform indoor maintenance.

**Is this a new project? If YES, Control Number and MPO ID will be assigned by MPO.**

No

**If NO, please indicated the MPO ID:** 737

**If NO, please indicate the Control Number:** TA00490

**For all new projects please enter the MPO ID from Appendix A of the Connections 2040 Metropolitan Transportation Plan (use link below):**

Not a new project, but see both 641.0 and 1640.1.

[Metropolitan Transportation Planning \(MTP\) Appendix A](#)

This Appendix includes projects listed in the MTP and provides the MPO ID

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## B. Work Type and Route Information

**Work Type**

Transit (23)

If you would like to see the previous Form B excel spreadsheet used to calculate costs you can [click here](#). This will download the spreadsheet for you. Please enter final totals and the associated years below.

**What is the Total Amount requested for the Work Type?**

Scoping / Environmental:

PE & Design:

Utilities:

Right of Way:

Construction / Implementation:

Other: \$12 million Federal (\$3 million local match)

**What is the Year for the Work Type? (2024 through 2029)**

Scoping / Environmental:

PE & Design:

Utilities:

Right of Way:

Construction / Implementation:

Other: FFY2026 \$6 million, FFY2027 \$6 million

**Route Name**

NMRX Yard

**Route Beginning (southern/western or Mile Point)**

100 Iron Ave. SE, Albuquerque, NM 87102

**Route Ending (northern/eastern or Mile Point)**

100 Iron Ave. SE, Albuquerque, NM 87102

**Does your project have additional routes? (ie: intersection improvements or work on two parallel facilities). If so, please fill out additional information below.**

No

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## 1. Optimized Mobility

Optimized Mobility focuses on the overall management of our roadways, including the introduction of more advanced technologies, such as smart signals and vehicle to vehicle communication. In addition, a greater in accordance with national guidance, an emphasis is placed on prioritizing cost effective maintenance and operations to preserve existing infrastructure.

## Optimized Mobility Narrative Questions

Please be short and sweet, but specific about how your project addresses this goal.

**\*How does this project or program improve the reliability (consistency and predictability of travel time) of transportation, and for which modes of travel? If this is a Transit project then explain improved hours and/or frequency.**

All locomotives and railcars are currently serviced underneath a 35-foot x 200-foot maintenance canopy—a metal-framed, metal-roofed structure open on all sides. Beneath the maintenance canopy is a single track and 25-foot-long concrete maintenance pit that is sized to serve a single locomotive or railcar wheelset from below. Locomotive- and railcar-related activities at the maintenance canopy include daily train servicing and inspections, running repairs, preventative maintenance, truck and wheelset replacements, engine-related replacements (turbocharger, head-end power, etc.), HVAC overhauls and brake work.

The open-sided maintenance canopy and single-wheelset maintenance pit create cost inefficiencies and increased maintenance and inspection time. For example, the current configuration requires four train movements to inspect two cars/four wheelsets. Ultimately, this and other examples result in too much lost time to support significant increases in Rail Runner service.

The OMF lays the groundwork for Rio Metro to increase Rail Runner service. Rio Metro envisions that the next major step for Rail Runner operations is to transition from its relatively infrequent, commuter-oriented schedule to 1-hour headways. The OMF, would be more than capable of supporting the 35 locomotives and railcars that Rio Metro estimates would enable this transition, in addition to the greater maintenance/inspection frequencies that accompany such a service increase.

**\*How does this project or program reduce congestion, and for which modes of travel?**

By enabling future increases in Rail Runner service, the OMF will support diversions from private automobile travel. For example, in FY2019 Rio Metro estimates that 29,509,327 VMT were diverted from the region's roads (35,411,192 passenger miles traveled divided by an average vehicle occupancy of 1.2, which assumes a strong majority of NMRX passengers are commuters/solo travelers).

**Does the project or program implement new, or update existing, ITS infrastructure? Does the project or program implement identified services in the ITS Architecture Plan?**

The OMF will eventually house/support the Rail Runner Operations/Dispatch element found within the ITS Architecture Plan. This element ties into numerous ITS functional areas, interfaces and service packages.

See <https://www.consystem.com/ampa/web/html/inv/el180.htm>

[ITS Architecture Plan](#)

## Optimized Mobility Strategies

Strategies are modeled after the Congestion Management Process priority matrix developed by the CMP committee.

### Transit Strategies

Transit service expansion (frequency increase)

Transit service expansion (extended hours)

Supports increased Rail Runner frequency/span

## 2. Active Transportation

Active Transportation focuses on non-motorized modes of travel such as walking, biking, and other ways to travel in the region like using bike share or scooters. The Active Transportation goal also enhances safety concerns in response to a disproportionately high rate of pedestrian fatalities in our region, and the critical role of transportation investments in activity centers.

### Active Transportation Narrative Questions

Please be short and sweet, but specific about how your project addresses this goal.

**\*How does this project or program reduce fatal and serious injury crashes on the transportation facility? Does it implement a program or project from a regional or local safety plan? If so, indicate which one.**

The OMF eliminates or mitigates significant safety risks. Currently, there are several downsides to performing vehicle maintenance outdoors, including a higher risk of slipping and tripping, especially in icy, snowy, wet or muddy conditions. Mechanical crews must also dress and hydrate appropriately for single-digit or triple-digit temperatures. Furthermore, lighting levels are uneven throughout the day—depending upon the sun angle, cloud cover, etc.—making visual inspections more difficult because of glare or poor illumination.

The controlled, indoor environment of the OMF maintenance shop will reduce the above risks to employees, and also reduce the risk of contamination to parts and equipment. For example, spring winds regularly exceed 20 to 30 mph. While mechanical crews try to avoid certain activities during high-wind events, those activities cannot always be put off. Therefore, sensitive components (e.g., open hydraulic lines/ports) must be covered or wrapped in plastic to mitigate the risk of contamination that could lead to premature wear or failure. Lack of adequate storage space also requires many parts to be stored outside.

Moreover, when vehicles are maintained in an indoor facility, the largest and most critical pieces of equipment are typically integral to the structure. This eliminates the need for mechanical crews to set up portable equipment on sometimes muddy terrain as they do today. For example, overhead work on locomotives and railcars currently requires Rio Metro to rent a crane with an appropriate load capacity, and to position and secure it for proper operation. In the OMF maintenance shop, the need for a rental crane will be supplanted by a 30-ton overhead crane affixed to the building frame.

The OMF maintenance shop will also protect workers in other ways, for example fall protection and elevated platforms will be integrated into the structure. Additionally, it will be far less likely that unauthorized individuals are able to trespass onto the jobsite as sometimes occurs with trespassers walking along the railroad right-of-way.

Outside the maintenance shop, the OMF will also feature other safety enhancements. The train servicing station with fuel tanks at the north end of the OMF will eliminate the need for fuel trucks to drive the NMRX Yard to fuel locomotives. This will reduce the risk of collisions with vehicles, equipment or workers. Furthermore, Rio Metro is preparing to install a centralized traffic control signal system overlain by PTC in Downtown Albuquerque. As part of that effort, the installation of electric locks at turnouts/switches that control access into and out of the OMF will increase the safety of train movements. Electric locks prevent a train from entering a block of controlled track unless dispatch has given that train permission and/or adequate time has passed for the block to be cleared by another train.

**Does the project address Complete Streets design as identified in your local entity's guidance, or as identified in the Long Range Transportation Systems Guidelines (LRTS)? Refer to the LRRS classification of the roadway.**

Rio Metro intends to construct ADA-compliant sidewalks along project frontage on Commercial St.

(the south entrance to the OMF) and Iron Ave. (north/main entrance to the OMF). Where appropriate, walkways throughout the OMF will be ADA compliant, too.

### [Long Range Transportation Systems Guidelines](#)

**Does this project or program improve overall network connectivity, provide network redundancy, or make a direct connection to an important regional destination? If so, explain and identify which destination.**

The adjacency of the OMF to the Alvarado Transportation Center/Downtown Albuquerque Station—the station of origin for many Rail Runner trains—minimizes deadhead movements and thereby promotes more efficient and cost-effective commuter rail service. The Downtown Albuquerque Station is also the Rail Runner's highest ridership station.

## Active Transportation Strategies

Multiple options available. Please adequately describe Other option.

### Pedestrian and Bicycle Strategies

Adding sidewalks to adjoining streets

### Geometric Safety Strategies

Consolidates or eliminates driveways

Railroad signal system and switching upgrades

3+ driveways will be reduced to two locations; addition of electric locks to yard track

### [FHWA Countermeasures](#)

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## 3. Economic Linkages

Economic Linkages explores the economic impacts benefits of place-making and captures a better sense of the fiscal implications of expanded growth, such as new expanded roadways and transit services, and costs of public services like schools and/or fire stations.

## Economic Linkages Narrative Questions

Please be short and sweet, but specific about how your project addresses this goal.

**\*How does the project or program provide insurance that it is shovel ready? Has the project already received federal funds or a soft match? Does it include innovative financing such as Public Private Partnerships?**

Rio Metro has already taken steps to advance the project and thereby demonstrate that it is “shovel ready”. In April 2022, Rio Metro completed a Conceptual Design Report that included both an initial and final build for the OMF. Rio Metro also applied for a 2022 RAISE grant, but was unsuccessful. Finally, Rio Metro is currently pursuing land acquisition and may acquire the property with its own funds during this TIP development process (funding programmed in the existing project).

**\*How does this project or program improve upon existing freight networks or provide access to international trade markets?**

The project does not directly improve upon existing freight networks or provide new access to international trade markets. However, it will ultimately provide office space and efficient parts storage space for track and signal maintainers who work to keep the NMRX system in a state of good repair

for all operating railroads, including BNSF.

### **How will this project spur economic development? Will the project support local businesses and/or permanent job creation?**

As noted previously, the OMF facilitates increased Rail Runner service, which means even greater access—especially from rural and small urban areas—to employment, educational and healthcare opportunities in urban areas. Furthermore, a 2018 (pre-COVID) survey found that slightly over one-third of Rail Runner passenger trips were leisure/tourism related, suggesting that an investment in the Rail Runner is an investment in central New Mexico tourism and well-being.

The OMF is also ideally located to benefit Rail Runner operations, and thereby reduce Rio Metro’s “cost of doing business”. The OMF’s adjacency to the Downtown Albuquerque Station—the station of origin for most Rail Runner trains—minimizes deadhead. Siting the OMF at the existing NMRX yard also respects the investments (maintenance canopy, storage tracks, utilities, signals, etc.) that Rio Metro has made over the years in the adjoining NMDOT-owned railroad right-of-way—often with federal participation.

There are currently 112 employees that work at the NMRX Yard. Rio Metro expects that employment at the OMF will increase commensurate with Rail Runner service increases and subsequent phases of OMF construction.

## **Economic Linkages Strategies**

Multiple options available. Please adequately describe Other option.

### **Access Strategies**

Provides or improves multimodal access to an employment center or large employer

Provides or improves access to an employment center via non single occupancy vehicle mode/s

Provides or improves access to industrial development

### **Financial Strategies**

Helps facilitate development in areas with existing water, sewer, roadway and other infrastructure

Helps facilitate redevelopment of abandoned or dilapidated properties

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## **4. Environmental Resiliency**

Environmental Resiliency acknowledges the transportation sector's impact on air quality and climate change. Environmental Resiliency also includes urban heat island effects, the benefits of low impact development and tree coverage, and expands on emergency evacuation and critical transportation infrastructure. Critical transportation infrastructure includes assessing the overall connectivity of our transportation networks.

### **Environmental Resiliency Narrative Questions**

Please be short and sweet, but specific about how your project addresses this goal.

**\*How does this project or program protect the natural regional environment? Does it include any**

## **emissions reductions, Green Infrastructure, wildlife crossings, or storm water management?**

The OMF will mitigate several environmental concerns at the existing NMRX Yard. First, Rio Metro estimates that capacity and efficiency gains of the OMF will lead to about a 50 percent reduction in train movements. For example, consider that the underside of each in-service locomotive and railcar is inspected every 24 hours, and that only one wheelset can be viewed from the existing maintenance pit. This setup requires four train movements to inspect two cars/four wheelsets. The OMF maintenance shop's tracks will allow maintenance crews to inspect two cars/four wheelsets in one movement. A similar benefit applies to having one designated service station with co-located fueling, lubrication, sanding, water and waste equipment.

Second, the OMF will provide adequate electrical power to avoid idling locomotives to power their trailing cars during maintenance, inspections or cleaning. Presently, the 480-volt/200-amp service provided at 6 locations in the NMRX Yard is inadequate to power more than two railcars at a time. Consequently, locomotives are often started and idled so that their "head-end-power" engines can generate and distribute electricity to all of their trailing cars. Rio Metro is currently installing 6 more locations with 480-volt/400-amp service to reduce this idling, and the electric company is increasing the capacity of the transformers on site to support this effort. Rio Metro will carry this approach forward with the OMF, ensuring that trains within the maintenance shop and out on the neighboring storage tracks have adequate power to eliminate unnecessary idling. This will have the added benefit of reducing fuel consumption and locomotive wear.

The OMF will also dramatically improve the site's resiliency to major storm events. While the site is not within a special flood hazard area (1 percent annual chance flood hazard) or any other FEMA-designated area of flood hazard, it is relatively level with no appreciable slope. Consequently, during thunderstorms, the concrete maintenance pit can fill with water that must be pumped out and treated, spilled materials can disperse throughout the site or infiltrate the soil, and the surrounding ground inevitably turns to mud, which increases risk to employees and equipment. Rio Metro will correct these issues by installing a drainage pond directing stormwater via grading and piping to that pond.

## **\*How does this project or program maintain or improve the existing infrastructure? Does the project or program improve a bridge that is failing, or is the project first and foremost focused on preservation of existing infrastructure that is deteriorating?**

Rio Metro conducted a Phase I environmental site assessment (ESA) to identify any recognized environmental condition (REC) that might impact the existing NMRX Yard and the future OMF. The report identified surface soil staining as an existing REC, and notably considered the entire site a suspect REC because of the unknown nature of past ATSF and BNSF use prior to the Rio Metro's use of the site. Furthermore, there are several dilapidated buildings dating to the 1950s and 1960s that will be demolished and their functions consolidated into the maintenance shop.

Consequently, the existing NMRX Yard is effectively a de facto brownfield. Were Rio Metro to locate the OMF elsewhere and vacate the NMRX Yard, the next potential user—unlikely to be a railroad—would have to undertake significant rehabilitation to repurpose the site. Instead, by redeveloping the NMRX Yard, Rio Metro will preserve railroad use at this location and mitigate many past environmental concerns.

## **Does the project or program improve critical infrastructure in the region? Please indicate how the project or program is CRITICAL to emergency evacuation or overall network function.**

The OMF is just as necessary as the track and station infrastructure that the Rail Runner utilizes in revenue service, and is critical for on-going and future Rail Runner operations. For example, as the Rail Runner fleet ages, a modern facility will help Rio Metro efficiently respond to increasing maintenance demands. Also, any significant future service increases will require a more efficient means of maintaining and servicing Rail Runner rolling stock.



In an emergency scenario that might disrupt roadway travel, the Rail Runner is the only existing alternative mode for intercity travel between Belen and Santa Fe.

## Environmental Resiliency Strategies

Multiple options available. Please adequately describe Other option.

### Air Quality Strategies

Provides alternative travel option/s to single occupant vehicle

Vehicle charging stations

OMF will likely incorporate charging for service vehicles (e.g., pickups) and employee vehicles

### Climate Change Strategies - Flooding, Wildfires, and Urban Heat

LED retrofits

Reduce impervious surface ground cover

Solar electricity generation stations

Maximize infiltration on-site or off-site beyond porous or impervious surfaces

Rio Metro intends to incorporate LEED-related improvements, which will likely include LEDs, solar and water harvesting

### Preservation Strategies

Transit facility repairs

Rail track repairs and upgrades

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## 5. Equity

Equity refers to ensuring all members of a community have similar access to the transportation system and that no groups are disproportionately burdened or benefited by transportation decisions and investments. Addressing equity also means working to prioritize improvements for underserved communities that have been denied the full opportunity to participate in aspects of economic, social, and civic life. MRMPO has developed a Vulnerability Index (MVI) to assess areas of concern.

### How does this project address Equity and ensure no negative consequences for underserved communities?

The OMF's capacity to support additional Rail Runner service will improve the quality of life for New Mexicans, especially those in need. The OMF is located within a USDOT-designated Historically Disadvantaged Community (HDC) and Area of Persistent Poverty (APP), and of the 15 Rail Runner stations, 8 are located in HDCs, 7 are located in APPs, and 3 are located within Native American pueblos. Thus, any improvement to the Rail Runner that supports increased service, has the potential to bolster access from these locations to employment, educational, and health care opportunities.

Until such a service increase, the OMF will keep the existing fleet in a state of good repair so that the Rail Runner can continue to operate at its current capacity and quality.

Even though the OMF is located within a relatively industrial rail corridor, Rio Metro also sees opportunity for improving the facility's compatibility with nearby commercial and residential development. In addition to noise, emission and light pollution reductions, Rio Metro desires that the design of the OMF maintenance shop takes its inspiration from existing uses and planning efforts. For example, the neighboring Albuquerque Rail Yards has three architectural guidelines for infill development:

- Infill development that creates new occupiable square footage shall be simple and volumetric.
- Infill development should not have a recognizable architectural style and/or should not try to mimic a historic style.
- Infill development should capture the spirit of the Rail Yards by utilizing current leading technology and/or engineering.

**Equity / Vulnerable Communities Strategies**

Provides or improves an alternative travel option to the single occupancy vehicle

The Rail Runner improves access to many of the above facility types