## Western Museum of Mining & Industry (WMMI) Traffic Management Plan (TMP)

## Introduction and Purpose

At the Western Museum of Mining & Industry (WMMI) our public events are a wonderful way to serve the community of El Paso County and a critical way to support our operations, hence the importance of our new variance of use approval. Working with El Paso County, we have outlined various size events and obtained a traffic impact study based around our activities and events. The purpose of this document is to outline an overarching traffic management plan for various events that will take place on the WMMI campus.

## <u>Analysis</u>

An intermediate traffic impact study (TIS) memo was written and provided by LSC Transportation following their field study to collect data. The TIS memo was uploaded in the EDARP system for the variance of use application which was approved by the County Commissioners. To summarize the memo, surrounding intersections (specifically Struthers and North Gate) remained at a LOS of C or better during all size events. Only the WMMI driveway dropped to LOS D during large events. With the completion of the new Power Boulevard interchange, several alternative routes are available now.

## Site access and parking plan

Access to the WMMI campus comes from North Gate Boulevard just west of the Struthers intersection. Travelers can easily reach our location via main arteries such as Voyager boulevard, Interstate Highway 25 and the Power Interchange. The campus entrance is a two-lane dirt road which has served the museum for 40 years and was the driveway for the historic Reynolds Ranch (RRH) since motorize traffic. For daily operations, our visitors park in the main lot in front of the museum. This area plus parking at the RRH serve for private parties and activities throughout the year. For small to medium size events, we have parking on the southwest portion of the lower campus field. For larger events, we utilize the upper campus parking areas as well. From the upper campus, attendees may walk or "hayride" between the upper and lower campus areas (activities).

Parking attendants use a variety of signs, cones, barriers, and methods to guide visitors to the proper parking areas. The team of attendants are usually distributed along the path of travel to direct traffic and supervise parking. Upon departure, guests are sent around the one-way loop to exit the property more easily and safely. Please see parking lot & spot dimension diagrams inserted below for additional information or detail.

## Pedestrian access plan

Since our campus is mostly surrounded by interstate highway and commercial sites, very few pedestrians pass by or travel to WMMI. Our intention and plan during events would be for all attendees to arrive by private vehicle or shuttle bus. Currently, the section of North Gate boulevard with our entrance is an El Paso County ROW which does not have sidewalks for pedestrians. Once the City of Colorado Springs takes ownership of that section, at some point they will install sidewalks and curbs according to their codes.

## Traffic Flow plan

For most of the events/activities, we conduct a one-way loop traffic pattern around the lower campus. We also encourage right turn only entry and exit on North Gate Blvd. This is accomplished using attendants, signs, and cones at critical points along the path of travel. Please see the example inserted here showing the loop utilized on the lower campus. Other event organizers (renters) are expected to follow this procedure and manage the safe flow of vehicles utilizing their staff and appropriate signage.



See additional information in the traffic control section at the end of this plan.\*\*

# **En-route Traveler Information**

We have found that our events are mostly attended by locals, so we employ signs, usually static, along our frontage on North Gate Blvd. At times, events which are organized by others are large enough to employ the changeable type signs. For WMMI events, we provide information via our website and phone receptionists. With current mobile technology, en-route visitors can easily find "real time" information via google maps, Waze and other apps.

## Traffic Surveillance

During events our parking attendants observe and monitor traffic flow and situations. We also have a camera(s) located to document vehicles entering and leaving the campus. For large events, public service officers and / or security officers may be employed to assist with surveillance and other helpful activities.

# Traffic Control

For our routine operations, which includes school groups\*, local visitors, and tourists we provide verbal "instructions or suggestions" about entering and leaving the campus to support the existing layout. We have found that no additional signage or structure is necessary.

We have upper and lower portions of our campus. For daily operations of the Museum and Reynolds Ranch House, our lower campus roads and parking areas can easily handle our typical daily volume of staff and visitors. For events of various sizes, we may employ the lower and upper campus parking and roads depending on the number of vehicles. The upper portion is rarely needed for most activities or only utilized for large events. Our parking areas are dirt (road base) surfaces or open fields (pre-disturbed by 120 years of activity).

For events, traffic and parking are managed by a group of parking attendants, signs & cones, portable barriers, and temporary fencing. For the majority of the events/activities, we conduct a one-way loop

traffic pattern around the lower campus. We also encourage right turn only entry and exit on North Gate Blvd. This is accomplished using attendants, signs, and cones at critical points along the path of travel, be it, on the lower or upper campus areas. (Please see event size details below) If an event's attendance, vehicle volume, is predicted to exceed the campus parking capacity (or for other reasons), then off-site parking will be arranged with other nearby locations such as Bass Pro Shop, Boot Barn or Discovery Canyon Campus. Depending on the location, customers may be able to walk (without crossing a roadway) or a shuttle service will be arranged/provided. WMMI and most event organizers already have connections, experience, and resources to accomplish transport and parking arrangements as needed. (Please see event size details below)

## Traffic control special notes:

\*Public School Districts already design and suggest "right turn only or limited left turn" routes of travel for their buses. WMMI will encourage school vehicles, tour buses and shuttles to use "right turn" entry and exit for their visits.

\*\*Outside event organizers are required to recognize and manage traffic control and associated parking as top priorities. Our written agreements with renters (event organizers) includes stipulations about safe traffic management and proper parking. Organizers also submit a simple written plan or design to WMMI, and sometimes they provide it to other agencies as appropriate. For public events, the organizers apply for and receive permits from the County and other agencies as needed.

# Traffic and parking plans for predicted event sizes:

## Estimated # of visitors: 251 - 1250 people (100 - 400 vehicles)

Traffic and parking are managed by a group of parking attendants utilizing signs & cones, portable barriers, and temporary fencing at critical points. We conduct a one-way loop traffic pattern around the lower campus (and upper campus lots if needed). We also encourage right turn only exit on to North Gate Blvd.

## Estimated # of visitors: 1251 – 1750 people (401 – 700 vehicles)

For vendors and event staff, traffic and parking are managed by a group of parking/traffic attendants utilizing signs & cones, portable barriers, and temporary fencing at critical control points on campus. We conduct a one-way loop traffic pattern around the lower campus. We also encourage right turn only entry and exit on North Gate Blvd.

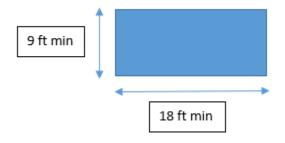
For event attendees, off-site parking will be arranged with other nearby locations such as Bass Pro Shop, Boot Barn or Discovery Canyon Campus. Depending on the location, customers may be able to walk (without crossing a roadway) or a shuttle service will be arranged/provided.

For handicap attendees, parking may be on campus in appropriate areas and the associated traffic will be managed by a group of parking attendants, signs & cones, portable barriers, and temporary fencing.

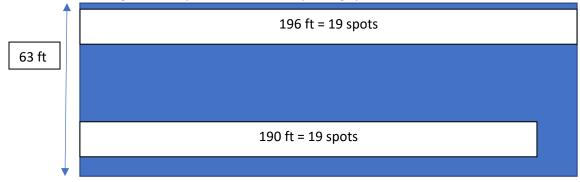
#### WMMI parking lots – Lower Campus

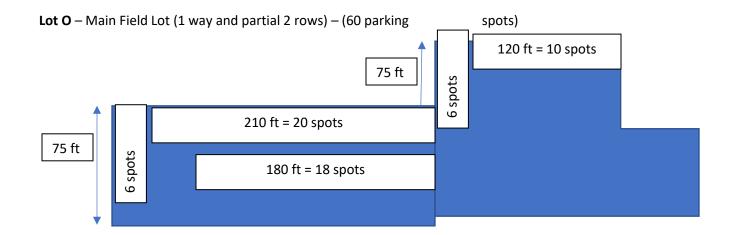
All parking spaces are a minimum of 9 feet wide and 18 feet deep as required in the LDC for 90-degree parking. We were conservative in our calculations using 10 feet or more for the width of each space. Therefore, the parking could handle more cars than we have indicated in the spot counts. The spaces are lined out with rope between posts and sometimes marked with spray paint on the sites (fields, etc.)

# Parking spot dimensions



Lot M – Museum Parking Lot (2 way and 2 rows) – (38 parking spots)

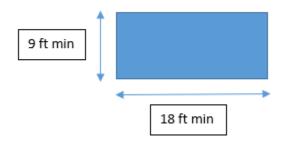




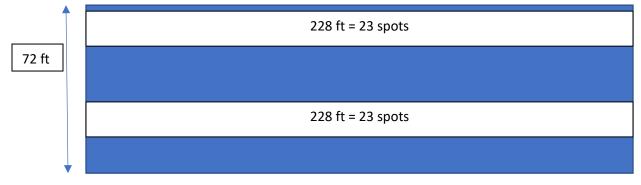
#### WMMI parking lots – Lower Campus

All parking spaces are a minimum of 9 feet wide and 18 feet deep as required in the LDC for 90-degree parking. We were conservative in our calculations using 10 feet or more for the width of each space. Therefore, the parking could handle more cars than we have indicated in the spot counts. The spaces are lined out with rope between posts and sometimes marked with spray paint on the sites (fields, etc.)

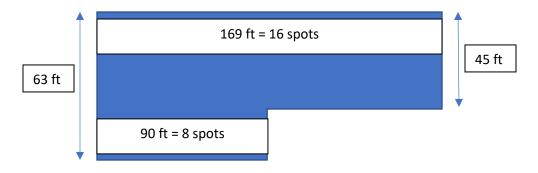
## Parking spot dimensions



Lot Q – South Field Lot (2 way and 2 rows) – (46 parking spots)



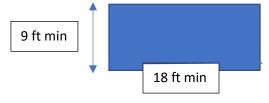
Lot L – Reynolds Ranch House Lot (2 way and partial 2 rows) – (24 parking spots)



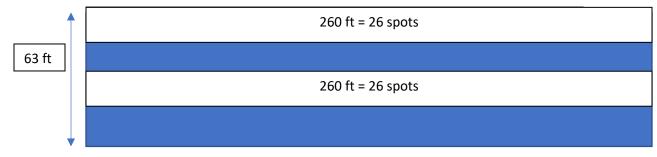
#### WMMI parking lots – UPPER Campus

All parking spaces are a minimum of 9 feet wide and 18 feet deep as required in the LDC for 90-degree parking. We were conservative in our calculations using 10 feet or more for the width of each space. Therefore, the parking could handle more cars than we have indicated in the spot counts. The spaces are lined out with rope between posts and sometimes marked with spray paint on the sites (fields, etc.)

#### Parking spot dimensions



Lot P – South Ridge Lot (2 way and 2 rows) – (52 parking spots)



## Lot N - South East Field Lot (2 way and 2 rows) - (50 parking spots)

