APRIL 11, 2019
PLANNING COMMISSION WORKSHOP 5:00 P.M.
PLANNING COMMISSION MEETING 6:00 P.M.

City Council Chambers
217 East Center Street
Moab, Utah 84532

1. 5:00 P.M.  Planning Commission Workshop

1.1. Moab Parking Management Plan

Documents:

  MOAB_PARKING_MGMT_PLAN.PDF

1.2. 5:30 PM  Planning Commission Workshop

1.2.1. Barriers To Affordable Housing

Documents:

  BARRIERS TO AFFORDABLE HOUSING IN MOAB.PDF
  PLANNING COMMISSION BARRIERS TO AFFORDABLE HOUSING - 2011.PDF
  RESOLUTION 12-2011 PC IDENTIFIED BARRIERS TO AFFORDABLE HOUSING.PDF

2. 6:00 P.M.  Call To Order

3. Citizens To Be Heard

4. Action Item

4.1. Planning Resolution 04-2019: A Resolution Recommending Approval Of A Hillside Development Permit For Commercial Development On Property Located At 1520 North Main Street In The RC, Resort Commercial Zone

Documents:

  MY PLACE HILLSIDE DEVELOPMENT PLANNING COMMISSION AGENDA SUMMARY.PDF
  04-2019 LEGACY DESIGN GROUP HILLSIDE DEVELOPMENT PERMIT.PDF
  CHAPTER 17.55 CODE.PDF
  MOAB MY PLACE HILLSIDE SLOPE STUDY.PDF
  MOAB MY PLACE HILLSIDE SITE LAYOUT WITH SLOPE STUDY.PDF
  MOAB MY PLACE HILLSIDE SITE LAYOUT WITH CONTOURS.PDF

5. Public Hearing

   Documents:

   2019-03 OUTDOOR LIGHTING ORDINANCE.PDF

6. Action Item


   Documents:

   PLANNING COMMISSION AGENDA SUMMARY ORDINANCE 2019-03.PDF
   10-2019 OUTDOOR LIGHTING AND SIGN ILLUMINATION STANDARDS.PDF
   ORDINANCE 2019-03.PDF

7. Future Agenda Items

8. Adjournment
Moab Parking Management Study
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1. INTRODUCTION & BACKGROUND

Moab is a diverse and vibrant community with thousands of residents and well over a million visitors a year. Much of Moab’s economy centers around downtown shops, restaurants, hotels, and other services. The recently completed Moab Downtown Plan addressed parking at a high-level mentioning that “parking was the number one issue the team heard during the community input process” and the plan specifically protected all the on-street parking in Downtown. But the Moab Downtown Plan never provided numbers or analysis of where and for how long people were using parking, and it never included parking demand projections.

This study was designed to measure parking utilization and see which parking spaces are the most occupied, when people were using them, and for how long. This information allows us to answer the questions like, Does Moab have enough parking? and Can it be used more efficiently?

PROJECT GOALS

The goals of this study were to:

• Create a detailed inventory of public (and some private) parking spaces in the study area (Chapter 2)
• Measure, evaluate, and analyze parking utilization of those spaces (Chapter 3)
• Calculate average parking duration for all areas (Chapter 4)
• Calculate expected parking demand and compare it to observed utilization (Chapter 5)
• Recommend parking management strategies to reduce the negative impacts of parking (Chapter 6)

This report is organized into chapters for each of the study goals. Each chapter details the methodologies used...
and the outcomes of the parking analysis. It paints a comprehensive picture of parking in Moab and Chapter 6 includes detailed recommendations for enhancements that can improve the parking situation in certain areas.

PREVIOUS STUDIES

We acknowledge that several previous studies have addressed parking in Moab. This study builds off of those previously completed plans and we refer to those studies throughout this report. Previous studies include:

The Moab Downtown Plan by Downtown Redevelopment Services and Avenue Consultants, available here: https://arcg.is/1neDrO. The City of Moab set about developing a comprehensive plan to identify resident’s needs and wants in the downtown area, specifically, the creation of a downtown that is walkable and resident-friendly. Vehicle parking within the downtown area was the number one issue brought up during the comprehensive community input process. Understanding the balance between available parking and demand is important to the long-term economic success of the downtown area. To understand this relationship, our team completed a detailed analysis of which spaces are most commonly occupied and how often vehicles are parked. This information was used to formulate parking recommendations for this plan.

The Arches Area Recreation Hotspot Congestion Relief Project, by Jones & DeMille Engineering and Rural Community Consultants, available here: https://spark.adobe.com/page/395Ua2W1TJU (further information is available here: https://arcg.is/15T9uG). The world-class recreational amenities in Moab have generated significant tourism activity, and all expectations are that this will continue to grow, creating stress on the local infrastructure. Moab’s Main Street is particularly impacted because, unlike other recreation destination areas in Utah, this corridor is also a major freight traffic route. Parking in Moab is severely constrained, especially during the tourist season. All stakeholders agreed that the centralized parking for visitors and employees at a downtown transportation hub would likely mitigate downtown congestion significantly, if it existed in tandem with other design changes to Main Street. Use of centralized parking facilities can be encouraged by implementing a permitting system for nearby residential neighborhoods. Utilization of parking lots for trailers will be high if the locations are safely lit and monitored.

The US-191: Moab Signal & Pedestrian Study, by Fehr & Peers, available here: www.fehrandpeers.com/moab. In this study, UDOT and Moab City officials sought to understand mobility trade-offs between vehicle progression and enhancing the pedestrian accommodations on Main Street. This study evaluated a number of potential enhancements, including parking, that have been identified to improve multi-modal mobility along Moab’s Main Street.
The UDOT **Main Street (US-191) Corridor Preservation Study**, available here: [https://tinyurl.com/US-191-corridor-preservation](https://tinyurl.com/US-191-corridor-preservation), which developed a corridor agreement guiding the placement of future private driveway and public/private street accesses on Main Street. This impacts parking as well as promotes greater adherence to UDOT Access Management standards to balance safety and traffic flow.

The ongoing UDOT **Main Street (US-191) Moab Bypass Planning Study**, available here: [http://arcc.is/0XH0W5](http://arcc.is/0XH0W5). As part of the UDOT Recreational HotSpots program, UDOT, in cooperation with Moab and Grand County, evaluated the potential costs and benefits of a Main Street (US-191) Bypass around downtown Moab in order to improve the sense of place, alleviate the increasing freight congestion, mediate parking woes, and foster a comfortable and vibrant downtown.
2. PARKING INVENTORY & DATA COLLECTION

Study Area

The study area was developed by Moab City to represent the portion of the city with the most used public parking spaces. This includes Downtown Moab (100 West to 100 East, and 200 South to 400 North), Center Street and 100 North (100 West to 300 East), Swanny Park, Williams Way, and 400 East.

The study area is presented on the map below. Parking spaces evaluated are shown in red.
Parking Inventory

Moab’s downtown parking supply consists of a mix of on-street parking, public parking lots, and other private lots. A total of 1,462 parking spaces were evaluated for the utilization analysis of which 1107 were on-street parking. The on-street parking consists of 470 angle parking stalls, 622 parallel parking stalls, and 15 accessible stalls. Within the study area there are two public parking lots. The city public lot has 69 parking stalls with two accessible stalls and the Moab Information Center (MIC) lot, located at 25 E Center Street, has 38 stalls, two accessible stalls, and five RV stalls. Other private lots evaluated have a total 239 stalls.
Methodology

To understand existing parking availability as well as parking behavior in Moab, the following data were collected:

- Inventory and utilization data for on-street parking
- Inventory and utilization data for public parking lots (City Lot, Mic Lot)
- Inventory and utilization data for private lots (Canyonlands Inn, Greenwell Inn, McStiff’s Plaza)
- Type of parking space by location (accessible, public, and reserved stalls)

Data were collected for a weekday and weekend (Friday) for 10 hours throughout the day. To efficiently collect parking data an aerial drone was utilized completing a total 40 flights over the course of two days on Thursday, May 17 and Friday, May 18, 2018. Two flights occurred every hour from 9:00 am to 7:00 pm, gathering data on parking occupancy, frequency, and parking turn over for the entire study area. This resulted in a total of 10,152 aerial photos that were collected and used in the analysis.
Peak Parking Days: Daily Approach Volume East/West Streets

Since Moab hosts a variety of events throughout the year and experiences seasonal variations in tourism, parking demand can fluctuate by day, month, and season. To identify if the parking data collection occurred during days with high parking demand, the approach volumes to Main Street on 100 South, Center Street, and 100 North were evaluated. These approach volumes are a proxy for parking demand since these streets provide access on street parking and to local businesses and residents.

Over the course of a year (August 1, 2017 to July 31, 2018), the daily vehicle approach volumes for downtown Moab were determined using Automated Traffic Signal Performance Measure from the Utah Department of Transportation (UDOT). The table below ranks these results in order of highest to lowest daily volumes for the top 20 days of the year. These downtown cross-streets average about 8,200 total daily vehicles with 4,100 vehicles a day on 100 South, 1,400 daily vehicles on Center Street and 2,700 daily vehicles on 100 North. As seen in the table below, the parking data collection occurred during days that had traffic volumes significantly higher than the average daily traffic volume. The data collection on Friday, May 18, 2018 represented 5th highest day and Thursday, May 17, 2018 was 17th highest day of the year. These high volumes on the downtown cross street indicate that the parking data collection occurred during days with higher than average parking demand.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Downtown Streets (100 S, Center, 100 N)</th>
<th>100 South</th>
<th>Center Street</th>
<th>100 North</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date</td>
<td>Volume</td>
<td>Date</td>
<td>Volume</td>
</tr>
</tbody>
</table>
3. PARKING UTILIZATION

Hourly parking utilization was estimated from the parking inventory data and stall occupancy information from the aerial surveys. Individual parking stalls within the study area were identified as occupied or unoccupied for each of the 20 evaluation hours. As shown in the map below, 144 of the 187 public parking stalls evaluated were occupied - a 76% utilization rate for this area (5:00 PM, Thursday, May 17, 2018). For a stall to be identified as occupied, the vehicle must be observed within the stall. For example, the parking stall within the McStiff’s Plaza parking lot with the white SUV either entering or exiting the stall was not identified as occupied. For stalls that were obscured by trees in the overhead mosaic aerial, individual images were reviewed to identify occupancy from different angled images.

Map showing sample of occupancy data at 5pm
Trends

The peak hour of parking demand was Thursday, May 17, 2018 at 6:00 PM with 768 parked vehicles within the study area. The parking stall with the highest turnover was in front of the Moonflower Community Cooperative (39 East 100 North) with 19 unique vehicles in 20 observed hours. While the longest any vehicle was parked was one vehicle that was parked for all 20 observation hours on Williams Way. Similarly, there were 51 stalls that were utilized for all 20 hours but by different vehicles throughout the period. The locations with these high utilization stalls were on Center Street with 19 stalls that were utilized during all 20 observation hours, 100 North with 6 stalls, and Main Street with 5 stalls. There were 162 stalls (11% of parking supply) that never had a parked vehicle during the observation. These unutilized stalls were located away from central downtown core with 34 utilized stalls on 100 North from 100 East to 300 East, 17 stalls by Swanny Park, and 15 stalls on 100 West with the remainder scattered through the study area.
Overall Parking & Peak Hour Utilization

On Thursday, May 17, 2018, 41% to 53% of all parking spaces were occupied. During the peak hour of 6:00 pm, there were 768 parking spaces occupied. On Friday, May 18, 2018, 35% to 50% of all parking spaces were occupied. During Friday’s peak hour of 3:00 pm, there were 735 spaces occupied.
Area-Specific Utilization

Parking can be difficult to find depending on location, time, and day. One of the necessary elements of this study is to determine the areas of limited parking availability. Generally, parking is efficiently utilized when approximately 85% of spaces are full. Above this level, the parking is functionally full and can frustrate drivers looking for a parking space. However, when parking facilities are below this level they are not functioning efficiently. In this study, limited available parking was identified in areas where utilization was greater than 85%, meaning there were generally one to two available parking spaces per block. The areas that experienced two or more hours of 85% utilization were Main Street, Center Street, 100 North, 100 South, and the MIC parking lot.

The map below shows the on-street parking utilization by block for the peak hour of parking.
PARKING STALL LOSS

Some available on-street parking is lost due to oversized vehicles, vehicles towing trailers, and vehicles parking inefficiently. This loss is most prominent on Main Street where the parallel parking is not delineated, but it also occurs in some of the angled parking where trucks with trailers park along the curb blocking multiple spaces.

An example of parking loss on Main Street can be seen in this photograph, where the silver van which is towing a trailer did not leave enough room for a vehicle to park in front of or behind them. This is also an oversized vehicle and it has a trailer. In this case, the vehicle is blocking 3 parking stalls on Main.

In reviewing all the observed data, every instance of parking stall lost was documented. Often vehicles would leave a five to ten-foot gap in front of or behind them, allowing only 2 vehicles to park in 3 spaces.

The percentage of parking stall loss observed varies by location and time of day, but some was always present. For example, on Thursday May 17th during the noon hour 22 parking spaces (16%) on Main Street were lost due to oversized and inefficiently parked vehicles. If every vehicle was appropriately parked that hour it would make 22 more parking stalls available in the high demand area of Main Street.

This parking stall lost can be mitigated by clearly delineating each 20-foot parking stall for parallel parking. Parked vehicles may not always stay within the lines of a single stall, but it will certainly improve the inefficient parking that can be observed now. This was also a recommendation of the Moab Downtown Plan.
AREA-SPECIFIC UTILIZATION - MAIN STREET SOUTH OF CENTER STREET

There was a high utilization on Main Street south of Center Street, with a limited number of parking stalls. The east side of this area experienced a higher utilization than the west side. For seven hours, the east side was above 85% utilization, followed by two hours at 100% utilization. Up to 25% of available space was lost due to unmarked stalls and/or larger vehicles.

On the west side of Main Street, there were four hours where utilization was above 85%, followed by one hour at 100% utilization. In this area, 4% to 20% of available space lost due to unmarked stalls and/or larger vehicles.
AREA-SPECIFIC UTILIZATION - MAIN STREET NORTH OF CENTER STREET

On Main Street north of Center Street, there were a higher number of stalls and more available parking than on Main Street south of Center Street. In this instance, the west side of Main Street experienced a higher utilization than the east side. The east side was always under 85% utilization, with 2% to 22% of available space lost due to unmarked stalls and/or larger vehicles.

On the west side, there were two hours where utilization was above 85%. In this area, 6% to 19% of available space was lost due to...
AREA-SPECIFIC UTILIZATION - CENTER STREET

Center Street had the highest utilization. On the east side there were eleven hours above 85% utilization, followed by four hours that were at 84%. The parking on this side was all angled parking, so no parking was lost due to inefficient parking or larger vehicles.

On the west side, 15 of the 20 observed hours were above 85% utilization, followed by four hours at 100%. In this area, up to 7% of the available space was lost due to unmarked parallel stalls and/or larger vehicles.
AREA-SPECIFIC UTILIZATION - 100 NORTH

100 North had the second highest utilization. On the east side of Main Street, nine hours were above 85% utilization, followed by an hour at 100%. Up to 10% of available space was lost due to unmarked stalls and/or larger vehicles.

On the west side, four hours were above 85% utilization, followed by one hour at 100%. In this area, up to 13% of the available space was lost due to unmarked parallel stalls and/or larger vehicles.
AREA-SPECIFIC UTILIZATION - 100 SOUTH

On 100 South, parking was concentrated near Moab Diner (189 S Main Street) and Pancake Haus (196 S Main Street). On the east side of Main Street, one hour was at 84% utilization with no hours above 85%. Up to 4% of available space was lost due to unmarked stalls and/or larger vehicles.

On the west side, four hours were above 85% utilization, followed by two hours at 84%. In this area, up to 28% of the available space was lost due to unmarked parallel stalls and/or larger vehicles.
AREA-SPECIFIC UTILIZATION - PARKING LOTS

Two of the largest parking lots in Moab were evaluated. The city public lot near 100 North and 100 West and the Moab Information Center (MIC) parking lot located at 25 E Center Street.

The public lot has an average utilization of 42%, with a maximum utilization of 65% at 6:00 pm Thursday and 2:00 pm Friday. Because all were designated parking stalls, no stalls were lost due to inefficient parking or larger vehicles. Despite the high utilization on west Center Street (see page 16), the utilization decreased significantly in this lot, which is approximately 200-feet away.

The MIC parking lot experienced eight hours above 85% utilization. This parking lot has designated parking stalls similar to the public lot. However, about half the cars and trucks in this lot were using designated RV/trailer parking stalls.
STALL UTILIZATION

Parking utilization was also evaluated for each individual parking stall and is summarized below for the high utilization areas. Maps show stall utilization in terms of percent of observed time that parking stalls are occupied. Red indicates parking stalls where a vehicle was parked during every observation hour while orange stalls had a parked vehicle during 18 or 19 hours of the 20-hour observation.

The map shows the individual stall utilization in the Swanny Park area over time. This area has available parking most of the time. The area with the highest parking utilization is on 400 North in front of the Moab Recreation and Aquatic Center where seven parking spaces had over 85% utilization. The rest of the area around the park has mostly less then 65% utilization meaning that spaces are almost always available. This area has able parking. A couple of homes are Park Avenue seems to have cars parked in front during the hours of observation.
MAIN STREET NORTH

The map shows the individual stall utilization in the North Main Street area over time.

This area has a mix of high utilization on the westside of Main Street and lower utilization area along 200 North and the eastside of Main Street. As shown previously, the westside of Main Street has much higher average utilization than the eastside of Main. This is especially true north of 200 North where the businesses on the East side like Wendy’s and the 7-Eleven provide on site parking for their customers.

The parking stalls with the highest utilization are the parking stalls in front of the Moab Cliffs and Canyons next to Canyon Voyages. The parking stalls around these businesses averaged over 85% utilization, but around the corner on 200 North there are many parking stalls that average 0%-25% utilization. This means there are sufficient parking spaces available a short distance from all the businesses in this area.
DOWNTOWN CORE

The map shows the individual stall utilization in the downtown core over time.

Over 70% of the stalls on Center Street were occupied for at least 18 hours or 85% of the time. Of these stalls 19 had a vehicle parked during every hour and 28 had parked vehicles in 18 or 19 hours. Center Street has the most occupied parking.

Main Street and 100 North also had parking stalls with high utilization with a total of 29 stalls on Main Street and 18 stalls on 100 North having vehicles parked over 85% of the time. These higher utilization stalls were generally located on the west side of Main Street and the north side 100 North. Overall, angle parking stalls were utilized more than parallel parking stalls with having a parked vehicle 77% of the time compared to 68% for parallel stalls.

While Center Street parking utilization was very high, there were able available parking stalls in the city lot a short walk away. This means that while many spaces are occupied most of the time, there are always a few spaces available in this area and there are likely enough spaces to meet the current parking demand.
MAIN STREET SOUTH

The map shows the individual stall utilization in the South Main Street area over time.

This area has a mix of high utilization throughout with a few spaces of low utilization peppered in. In this area we also documented several of the private parking lots and stalls specifically for the two hotels and the McStiff’s plaza.

On-street parking in this area is highly used with dozens of spaces registering over 85% utilization. Even a few spaces on 100 South and 200 South show that level of occupancy, however only 3 spaces south of Center Street show over 95% occupancy. This means that while many spaces are occupied most of the time, there are always a few spaces available in this area and there are likely enough spaces to meet the current parking demand.
CITY HALL

The map shows the individual stall utilization in the City Hall Area area over time.

The parking in front of City Hall as well as the Utah Highway Patrol Office have a medium level of utilization with most spaces averaging between 45% and 85% occupied. This is an ideal level for parking utilization. It also indicates a relatively high turnover. All of these stalls showed some utilization, but none were so busy that there were occupied all the time.

Many of the parking spaces on 100 North and several on Center Street saw little to no use with 0%-25% utilization around all the hours of the two days of observation. This means that there is always parking available in this area and the supply seems to be greater than the demand.
400 EAST

The map shows the individual stall utilization in the 400 East over time.

This area had the least occupied parking of anywhere in the study area. The parking on 400 East was seldom used during observations, with the exception of one vehicle on the westside that was parked there the entire time. 37 out of the 47 counted parking stalls were occupied 0-25% of the time. There was parking available on 400 East every hour of the day.
4. PARKING DURATION

Duration Calculation & Method

As each space was marked occupied/unoccupied, individual vehicles were identified from the aerial images to determine if it was the same vehicle or a new vehicle in the subsequent hour. This data was used to estimate the number of new vehicles parking each hour as shown (black numbers) in the graph below for Thursday and Friday. The highest number of new vehicles arrived between 12:00-1:00 PM on Thursday (173 newly parked vehicles) and 4:00-5:00 PM on Friday (178 newly parked vehicles). Vehicle turnover shows similar patterns both days with peaks in newly parked vehicles around lunch and again at 5:00 PM. The number of vehicles leaving (dashed lines) increases through the day peaking at 4:00 PM on Thursday with 160 vehicles, and on Friday at 3:00 PM with 181 vehicles leaving during these hours.

Thursday Vehicle Turnover - Newly Parked Vehicles by Area & Total Leaving by hour

Friday Vehicle Turnover - Newly Parked Vehicles by Area & Total Leaving by hour
Parking Duration by Area

Based upon data from the vehicle turnover, the estimated overall parking duration in downtown Moab is 2.4 hours and city wide it is 2.6 hours. As seen in the table below, the downtown streets generally have lower parking durations than the city as a whole. The lowest average parking duration was 1.6 hours on Main Street south of Center Street.

<table>
<thead>
<tr>
<th>Average time a vehicle is parked in a typical parking spot in downtown Moab</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6 hours</td>
<td>City Average</td>
</tr>
<tr>
<td>1.6 hours</td>
<td>Main St., South of Center - East Side</td>
</tr>
<tr>
<td>1.6 hours</td>
<td>Main St., South of Center - West Side</td>
</tr>
<tr>
<td>2.9 hours</td>
<td>Main St., North of Center - West Side</td>
</tr>
<tr>
<td>2.1 hours</td>
<td>Main St., North of Center - East Side</td>
</tr>
<tr>
<td>2.2 hours</td>
<td>Center St. - East of Main Street</td>
</tr>
<tr>
<td>2.7 hours</td>
<td>Center St. - West of Main Street</td>
</tr>
<tr>
<td>2.5 hours</td>
<td>100 North - East of Main St.</td>
</tr>
<tr>
<td>1.8 hours</td>
<td>100 North - West of Main St.</td>
</tr>
<tr>
<td>2.7 hours</td>
<td>100 South - East of Main St.</td>
</tr>
<tr>
<td>1.6 hours</td>
<td>100 South - West of Main St.</td>
</tr>
<tr>
<td>2.6 hours</td>
<td>MIC Parking Lot</td>
</tr>
<tr>
<td>2.6 hours</td>
<td>Public Lot</td>
</tr>
</tbody>
</table>

One observation to note is that the highest utilized areas or areas of highest demand on Main Street north of Center and Center Street west of Main have average parking durations of 2.9 hours and 2.7 hours respectively. Because parking in these areas is limited and in high demand reducing the duration and increasing the vehicle turnover would allow for more vehicles to park there throughout the day. If the parking duration was shortened to under 2 hours the spaces would likely be able to used by 6 or 7 vehicles per day instead of 4 or 5.

Therefore it is recommended to simply post 2 hour parking limit signs throughout the downtown parking area. This doesn’t need to be enforced the signing alone will reduce the parking duration and many of the drivers parking their vehicles will be compliant with the signs.
5. PARKING DEMAND

Parking demand is different than the observed parking utilization analysis the report has included to this point. Parking Demand is a calculated value of the amount of parking expected for different land uses. For example, a restaurant will expect to have different parking demand than a retail shop and the expected parking demand would occur at different times of day. Similarly a residential house, a post office, coffee shop, hotel, all have different expected parking demand.

Analysis Area

The parking demand analysis area is within this project’s study area (see map below). This includes Downtown Moab, 100 West to 100 East, 300 South to 400 North, Swanny Park, and County Court blocks.

Methodology

The Institute of Transportation Engineers (ITE) Parking Generation Manual (4th Edition) is the industry standard to estimate parking demand. The ITE standards are based on national data and generally reflect isolated, suburban sites. As a result, ITE data should be used for informational purposes only but can establish a starting point to understand potential parking demand. A typical analysis takes the size of the development and multiplies it with a “standard” peak parking generation rate - for example, 10.6 spaces per 1,000 square feet of a sit-down restaurant or 0.89 spaces per occupied hotel room.

For this analysis, each parcel within the study area commercial, residential or institutional land uses were identified along with the square feet of structure or number of units. This information was used to estimate parking demand within the study area.

To compare the ITE calculated parking demand to parking supply, the number of parking spaces within private lots (For example, the Wendy’s parking lot, USFS parking lot, private driveways, etc., that were not included in the utilization analysis) was also required.

Since ITE parking demand generally represents demand at isolated suburban sites, an important concept is multi-stop trips. Multi-stop trips are where a vehicle is parked in one space and a person or group makes multiple trips to several land uses. In Moab, a multi-stop trip would consist of parking to go to dinner then walking to one or more stores along Main Street or parking at the hotel then going to a restaurant without moving your vehicle.
To account for multi-stop trips within the demand analysis, the parking utilization data for a two-block area from 100 West to Main Street and 100 South to 100 North were compared to the estimated ITE parking demand. These two blocks had the most robust data from the utilization analysis with most parking stalls included in the analysis while other blocks in the study area had many private parking lots that were not evaluated. Within these blocks, parking utilization was found to be only 48% of the ITE predicted demand on weekdays and 38% on weekends. This translates to people making 2.08 trips each time they park their vehicle on a weekday and 2.6 trips on weekends.

Instead of using these direct estimates to adjust the ITE predicted demand to match conditions for downtown Moab, a more conservative estimate of 1.67 multi-stop trips was assumed. The 1.67 multi-stop trips adjustment translates 60% of the predicted ITE demand for isolated suburban sites and is higher than both the weekday and weekend estimate for the two-block area. By using this more conservative adjustment, predicted demand is higher and helps identify areas where near-term parking demand may exceed supply.

Parking Demand Over Time

Predicted peak demand is at 1:00 pm on both weekdays and weekends, with 1,289 spaces on the weekdays, and 1,382 spaces on the weekends as illustrated below. While localized demand is over 85% for both weekdays and weekends as discussed in Area-Specific Utilization, there are more than 1,000 empty parking spaces among all public and private lots within study area during peak demand.
Parking Demand - Weekday

On weekdays parking demand was generally less than 85% occupied. However, between 10:00 am and 1:00 pm the block of Center Street to 100 North and Main Street to 100 East had greater than 85% occupancy during that same time because of the proximity of the U.S. Post Office (50 East 100 North) that has very high parking rate.
Parking Demand - Weekend

On the weekend between noon and 5:00 pm, parking demand on the blocks west of Main Street from 100 South to 100 North (shown in red) was generally greater than 85% occupied. This high parking demand was driven by restaurants and retail uses.
**Observed Utilization vs. Predicted Demand**

The daily utilization and predicted demand for the study area are summarized below. Generally, utilization and demand are similar with 40% to 50% of parking utilized and predicted to be occupied throughout the day. However, predicted demand does have a mid-day peak that was not observed in the parking utilization possibly due to the higher multi-stop trip percentage identified within the two-block area.

Regardless these two analyses validate each other. We can feel confident in the observed parking utilization because people’s parking behavior was very similar to what the predicted demand would expect.
Observed Utilization vs. Predicted Demand - By Location

As shown below, utilization and predicted demand have similar spatial distributions. During the weekend peak hour there is high utilization and limited available parking from 100 South to 100 North and 100 West to Main Street. This matches the predicted demand that shows these areas with 95% plus of parking spaces occupied. In addition to these areas Center Street as well as adjacent blocks Main Street and 100 North are above or approaching 85% occupancy indicating limited parking in these locations.
6. PARKING RECOMMENDATIONS

Conclusions

Before listing specific recommendations, below are some general observations and parking conclusions:

- There is ample parking available in the study area for the needs of all land uses and the desires of all drivers to park vehicles
- The goal for parking areas should be achieve 85% utilization, most areas never reach that number (green and yellow areas on the maps) indicating an excess supply
- Some Main Street Shoulder parking is lost due to vehicles with trailers and inefficient spacing
- Restaurants generate the highest public parking demand on Moab
- Peak demand hours are 1 PM and 6 PM
- There are few localized areas (like Center Street between Main and 100 West) where parking demand exceeds parking supply
- People seem unwilling to walk greater than 300 feet from their vehicle to their destination as witnessed by the available parking in the highest demand hours
- In many cases vehicles park on average for over 2 hours at a time
- People may be unaware of available parking in the city owned lot and other areas

Moab is in a good position with more total parking available than is needed to meet the demand. However, during the highest demand hours of the day parking immediately adjacent to some destinations will not be available.

That means that anecdotally, if you are going out to dinner at Pasta Jay’s or The Spoke, then you won’t be able to find parking by the restaurant. This may be frustrating, and you may think, “There is not enough parking in Moab.” However, at that same time you will be able to find plenty of parking on 100 West and you can simply walk the block or block and a half to the restaurant.
## Recommendations

While there is sufficient parking available in the study area there are still several things that Moab can do to enhance parking and increase efficiency of parking utilization. These recommendations are applicable citywide however Moab would likely see the biggest benefit by applying them in the downtown area.

<table>
<thead>
<tr>
<th>Project</th>
<th>Why</th>
<th>Benefit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue with FREE parking</td>
<td>The demand does not seem high enough to begin to charge and there is no appetite for paid parking from businesses and drivers agree</td>
<td>Keep the same number of stalls, businesses and drivers agree</td>
<td>None. No cost needed for meter monitoring &amp; collection of parking fees</td>
</tr>
<tr>
<td>Public parking sign with a 2-hour time limit</td>
<td>Increase the vehicle turn-over in public parking spaces</td>
<td>More drivers will be able to park downtown in the most desired places</td>
<td>$100-300 per installed sign</td>
</tr>
<tr>
<td>Add parking signs to encourage parking in the city owned lot and available spaces</td>
<td>Increase the parking utilization of some of the lesser used spaces</td>
<td>Drivers will likely be able to find parking quicker during peak times</td>
<td>$100-300 per installed sign</td>
</tr>
<tr>
<td>Add red curb paint to restrict parking within 30 feet of an intersection</td>
<td>Utah State Code restricts parking within 30 feet of point to curb (Utah Code 41-6a-1401).</td>
<td>Improves sight distances for drivers and pedestrians at intersections.</td>
<td>$20-$40 per painted curb</td>
</tr>
<tr>
<td>Back-in angle parking on roads with planned bike lanes</td>
<td>Safer bicycle and pedestrian access on roads like 100 North and 100 South</td>
<td>Reduced bicycle crashes and increased pedestrian safety</td>
<td>$10-$20 per line</td>
</tr>
<tr>
<td>Delineate specific parking stalls for the parallel parking Downtown especially on Main Street</td>
<td>This will decrease the amount of parking lost to bad parking gaps and increase efficiency</td>
<td>More drivers will be able to park on Main Street</td>
<td>$7-$15 per line</td>
</tr>
<tr>
<td>Continue forward with the plan to add a parking garage on the current city lot</td>
<td>That is the best location for additional parking as the most occupied parking in on Center Street west of Main Street, plus the State of Utah is providing funds for its construction</td>
<td>Adds 200+ new parking stalls in the highest demand area of Downtown Moab</td>
<td>$7.5 million but funded through the State of Utah’s Hotspot funding</td>
</tr>
<tr>
<td>Continue forward with the plan to add over-sized parking lots north and south of Moab</td>
<td>Drivers will be able to drop off trailers or consolidate vehicles</td>
<td>Fewer large trailers taking up parking spaces</td>
<td>Unknown</td>
</tr>
<tr>
<td>Add wayfinding signs to encourage walking to destinations 1-2 blocks away.</td>
<td>Increase the parking utilization of some of the lesser used spaces</td>
<td>Parking would improve system wide if there was a bit more distribution</td>
<td>$100-300 per installed sign</td>
</tr>
</tbody>
</table>

Several of these recommendations are already underway with the city pursuing State funding for the new parking garage. The other recommendations are all low cost, just the expense of signing or striping.
Potential Barriers to Affordable Housing

Zoning and other land use regulations at the local level may inhibit the provision of a variety of affordable housing options. However, such regulations are not the only factors affecting housing prices. A multitude of factors and forces contribute to housing price and availability, including labor and material costs, availability of financing for buyers and developers, land values, changes in population, demographics, migration, and other local economic factors such as unemployment rates and income. Consumer preferences and expectations related to housing size, quality, and amenities, as well as federal or state priorities and corresponding policies may also contribute to the availability of specific types of housing.

Because there are a number of variables contributing to housing cost, it is important to recognize that the absence of regulation will not necessarily create housing affordability. In places like Moab, where production costs and housing demand are both high, a townhouse on a small lot or an apartment may still be out of reach for a working family. A multitude of factors contribute to housing price and availability, thus a variety of programmatic and financing mechanisms will also need to be employed to truly promote affordable housing development.

It is important to note that land use regulations do not exclusively produce costs and barriers: most regulations were created for the public good and in order to maintain a high standard of development. Whereas reasonable regulations can ensure the health and safety of residents of a community, excessive regulation may artificially elevate housing prices without an equal increase in benefits.

Potential Barriers to Affordable Housing

1. Land Supply
2. Lot Requirements, Setbacks, and Density- Land Use Regulations
3. Housing Types- Planning and Design
4. Infrastructure and Development Standards
5. Parking Standards
6. Landscaping, Buffering, and Parkland and Open Space Dedication
7. Fees
8. Funding
9. Other Barriers
Land Supply

There are several regulations that may impact the availability of land that is available for residential development. The most apparent way in which land supply for residential development is limited is the failure to zone enough land to accommodate estimated population growth. Commercial or industrial uses, and even low-impact, low-density residential uses may be preferred due to their ability to produce revenue while requiring minimum amounts of services in return. Land zoned for medium and high density residential development may be limited, though demand for high density housing types may be great.

Though a parcel of land may be zoned for residential development, it does not follow that the land can be developed or will be immediately used for that purpose. Often, residentially zoned land is engaged in another productive use which the owner may not give up for years or possibly decades. The land may also have certain environmental constraints that would preclude residential development. Additional barriers may exist within the zoning ordinance that may act to discourage development of the land to its fullest potential, or to the density for which it is zoned. Therefore, it is possible for a zoning map to appear to provide adequate opportunities for residential development when in reality limited or no immediate opportunities exist.

Land Use Regulations

Minimum setbacks, including front, side, and rear setback requirements may contribute to larger lot sizes, and may act as a kind of secondary density limit. Side yards provide functional and emergency access to backyards, and front yards act as a transitional space to separate private from public space. However, in some cases front and side yard setback requirements are in excess of what is needed to provide access and/or privacy. Height restrictions, street widths, and parking requirements can all lead to low land use efficiencies and, ultimately, high land costs. The City of Moab and Grand County have taken steps to remove barriers to affordable housing in their respective land use codes. Examples include: streamlining the development review process, reducing buffer requirements between subdivisions, removing open space requirements, expanding accessory dwelling unit opportunities, decreasing minimum lot and building sizes, and improving code enforcement.

Planning and Design

While land use regulations govern development at the community and site-specific scales, developers and architects retain a tremendous amount of discretion in how they utilize available land and establish building footprints. Like many other parts of the United States, the Moab Area is dominated by single family detached dwellings situated on large lots. The development community can effect positive change by shifting its focus from a sprawling development typology to one that is more compact, efficient, and affordable. Smaller lots, attached dwellings, and more modest living spaces are cheaper to build and maintain. Compact
development also leads to reduced transportation costs for residents, and lower infrastructure costs for developers and local governments.

Infrastructure and Development Standards

Many jurisdictions use uniform development requirements, regardless of the type or density of the development. Standards may require excessively wide streets, which are often thought to be necessary for emergency vehicle access. However, wider streets may cost more to build and maintain, and may also increase the volume of storm water, thus necessitating more significant storm water management systems. They will also require pipes and other underground utilities to extend for longer distances at greater expense. Where wider streets are required, the costs will inevitably be passed on to the buyer.

The amount of land available for development may be limited by sewer and water access. Where no water or sewer service is available, larger lot sizes are typically required in order to provide enough space for a septic tank, drain field, and adequate separation distance from an onsite water system. This will ultimately result in fewer housing units and greater land expense for the buyer. Where a developer is required to install public or shared sewer and water, the price of this infrastructure is typically passed on to the buyer. In some cases, development is not possible or must be delayed due to insufficient capacity at local waste treatment facilities.

Sidewalks can provide safe access for pedestrians to a variety of locations, increasing the likelihood that residents will walk rather than drive to nearby destinations. Traditional sidewalks are a vital element of any downtown or walkable community. However, they are unfortunately expensive for developers to install and for homeowners to maintain and replace. In highly rural settings with minimum foot traffic and few commercial or recreational destinations within walking distance, the provision of sidewalks on both sides of the street may increase costs without an equal increase in benefits.

Parking Standards

Moab requires a per-unit parking requirement that is in excess of what a typical household would be expected to use, or may impose minimum stall widths on all parking spaces which are much larger than necessary for most vehicles. Because surface parking is a land intensive use, parking requirements will probably have the most significant impact on housing prices in places where land values are very high. Excessive parking requirements will increase impervious surface area, which may increase the need for storm water management, which in turn, further increases the costs of development. Parking requirements may also vary depending on housing type. Often townhouses, apartments, and other multi-family dwelling types, which are typically some of the most affordable housing options within a community, are required to provide as much, or even more parking as single-family detached housing units. Such regulation runs counter to national trends, which indicate that low-income households on average have fewer cars and make fewer trips than do moderate- and high-income households.
Landscaping, Buffering, and Parkland and Open Space Dedication

Buffering may be required in inappropriate or unnecessary locations, such as between different residential uses or housing types. In some cases, certain residential uses are singled out with buffering requirements while others are not. Required buffers may be exceptionally wide, or may require excessive amounts and types of plantings. Jurisdictions may also require significant parkland or open space dedication in excess of what is necessary for the community or the development, or in a manner that is not compliant with the Moab’s Planning Code.

Fees

Review or impact fees are typically one-time fees applicable to new construction. According to HUD, flat impact fees are often applied uniformly across a municipality, regardless of housing types, value, or realistic estimates of impact. This method has the effect of placing a greater share of the burden on smaller housing units, even though these housing units will generally create less of an impact than do larger housing units. HUD describes this as a “regressive effect; that is, flat fees fall disproportionately on those with lower incomes than with higher ones.

Funding

Funding a project is often one of the most difficult aspects of affordable housing. Development teams work tirelessly to make projects “pencil out,” and rely heavily on outside funding from grants, loans, direct and indirect subsidies, and private donors to get a development to the point of breaking ground. Grand County and the City of Moab provide incentives to developers in the form of density bonuses, impact fee waivers, and relaxed site controls, but lower returns on investment (ROIs) associated with below market rate housing remains a commonly cited impediment. Many affordable housing experts suggest that direct financial support from public funds needs to play a larger role in facilitating the development of new units. Indeed, in many instances, affordable housing will not be constructed without it.

Other Barriers

Overall, many of these potential barriers represent a lack of flexibility in regulations. Overly prescriptive regulations, which may limit the ability of the developer to work with unique site limitations, respond to local preferences and demand, or select the most cost-effective development plan, may be partially responsible for increasingly unaffordable housing prices. Some regulations may not produce the types of housing or communities that people want, or that local residents would hope to see in their communities.

In addition to traditional land use and zoning barriers, other regulations may also have an impact on the availability of affordable housing. Availability and ease of transportation is another factor that may contribute to cost of living. In places like Moab where public transportation is not available, households are essentially forced to rely on private transportation. While private transportation is convenient, the cost of purchasing, insuring,
maintaining, and fueling a private vehicle may quickly place a significant strain on household finances. In remote locations, costs may also be augmented by the long distances that are necessary to travel in order to reach work, school, daycare, the grocery store, or other important destinations. The lack of public transportation in less urbanized areas may thus impact the ability of a household to afford decent housing.
## Planning Commission Barriers to Affordable Housing

**DRAFT**

January 13, 2011

### Running List

<table>
<thead>
<tr>
<th>Development Regulations</th>
<th>Ranking</th>
<th>Comments/Description</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot size</td>
<td>1</td>
<td>Large lots include lots that are 7,000 sq ft or larger in size.</td>
<td>Large lots lead to urban sprawl. Extension of utilities, longer streets and sidewalks, and a lack of a compact design all cost the developer money and add maintenance costs to the local jurisdiction.</td>
</tr>
<tr>
<td>Lot width</td>
<td>2</td>
<td>Increases for additional units</td>
<td>A symptom of large lots and, like large lots, contributes to sprawl. Also wide lots can lead to an inefficient use of all utilities and contributes to increased costs of installation for the developer and higher maintenance costs for local jurisdictions. Required increases in lot width for additional units can inhibit development of a property even though the area of the parcel is adequate for additional units.</td>
</tr>
<tr>
<td>Density</td>
<td>3</td>
<td>Need greater flexibility for development and increases in density</td>
<td>Density is described by the number of dwellings per acre. Generally, a higher number of dwellings per acre will lead to lower housing costs, lower costs of installation and maintenance of utilities, and is an efficient use of all services.</td>
</tr>
</tbody>
</table>
| Densities in PUD        | 4a      | Planned unit developments are primarily residential communities that include private residences, shared public space, and limited commercial development. Densities can be higher in these development types if they are allowed to be a standalone zone and not tied to the regulations of underlying districts. Generally density bonuses are generously granted for affordable housing, and negotiations for other development options between the community leaders and the developer are common. | A planned unit development, or PUD, has a special zoning classification that allows construction techniques that wouldn't be permitted elsewhere. A PUD may serve as an overlay zone or as a stand-alone zoning district. Advantages include:  
1. Convenience. PUDs use layouts that feature clusters of homes and large open spaces or commercial areas that can include shops, parks, recreational facilities and restaurants and other basic goods and services. PUDs often include extensive sidewalks, wide roads, and bicycle paths.  
2. PUDs offer homes in a wide range of prices but dues residents pay for care of common spaces in the development can be one of the biggest drawbacks.  
3. A special zoning aspect of a PUD is the ability to build homes in closer proximity, producing population densities that would be a violation of zoning regulations elsewhere.  
4. |
### Densities in MPD 4b

Master Planned Developments include residential, recreation, open space, and commercial development consistent with a master plan. Density bonuses for affordable housing should be substantial (at least 25%). Planned developments are carefully mapped out communities built entirely from scratch in underdeveloped and undeveloped areas. They ensure sensible development to include green areas of open space, sufficient public facilities, and well-designed public buildings and often serve as an ecological scope for the community. The trend of planned communities in the United States started in the 1930s, took off in the 1950s and has skyrocketed nationwide, suggesting a great numbers of benefits related to them.

1. Planned communities offer security by eliminating high risk factors such as crime. They are good places to raise kids and neighborhoods are typically alienated from commercial areas and guarded with a gate and a guard or patrolled. Also, the entire community looks out for the safety of its inhabitants.

2. Planned communities are great options for people who cannot afford to have some luxury in their life because all community members contribute to shared amenities and benefits of the community. More money is collected toward improved amenities like schools, parks, community centers, swimming pools, walking trails, etc.

3. Planned communities have homeowner’s associations that provide regular maintenance, gardening, lawn mowing and so on and in some cases, exterior repainting may be provided.

4. Planned communities offer property owners architectural options to select a plan that matches the owner’s taste rather than having to choose from a limited selection of floor plans and styles.

### Minimum home size

<table>
<thead>
<tr>
<th>Minimum home size</th>
<th>5</th>
<th>Let the market dictate. Small homes provide an option to many persons who could not live within a community because of land costs. Smaller homes require less energy to heat and cool and can be conveniently placed on smaller building lots creating compact development. (Concerns over energy use has spawned what is being called “the tiny home movement” and most tiny homes are</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Regulations for minimum home sizes have successfully been argued to provide a greater measure of certainty for compatibility with surrounding development in neighborhoods. However, these regulations have also lead to discriminatory zoning by excluding many economic groups from neighborhoods with this type of regulation. Rather than developing economically homogeneous street blocks, it has been determined that community health is promoted by mixing economic levels and housing types. Differing housing styles and sizes also contribute to more interesting streetscapes.</td>
</tr>
</tbody>
</table>
somewhere between 65 and 800 square feet, with varying levels of comfort. Tiny homes offer many benefits. The low cost (most small models begin around $15,000) of units is a major draw for people who want the freedom that comes with not having to make monthly mortgage payments. Environmentally minded individuals appreciate the low carbon footprint that comes with a tiny home. Heating costs can be as low as $10.00/month. The homes can even be mobile and mounted on a towing assembly so they can be hooked into services nearly anywhere, much like an RV.)

<table>
<thead>
<tr>
<th>Open space requirements for apartments</th>
<th>6</th>
<th><strong>Communal Open Space</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Developments must provide communal open space that is:</td>
<td></td>
<td>More advanced zoning ordinances now require useable open space in conjunction with residences. The scientific basis of these requirements is still unclear, but it accords intuitive recognition to the place of the open space in man's life. Open space, thought of from this viewpoint, does not include area devoted to service driveways or off-street parking and loading. Its purpose is to provide space for greenery, yards and recreation. These objectives are usually not explicit so that often the open space requirement coincides with other provisions in the ordinance, such as those for yards. Since it is only open space that is required, and not space for recreation or a landscaped area, the results of these regulations are uncertain and the space itself may be no more useable than customary front, side or rear yards. Nevertheless, there is legal support for useable open space which finds its basis in providing for such amenities as recreation, comfort and pleasure. Often open space is determined to be met if in proximity to schools, parks, trails, and other recreation opportunities.</td>
</tr>
<tr>
<td>a) useable;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) clearly defined;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) safe and attractive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Usually crudely described as a percentage of the property;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is provided in addition to private open space areas;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Has an additional description of dimensions for length and width;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is readily accessible to residents;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Has a maximum slope gradient not exceeding one in ten;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is designed and located so that it is subject to informal surveillance from dwellings on the site;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is clearly delineated from any private areas of the site.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| Secondary dwelling regulations | 7 | Units too small and the location requirements are difficult on larger tracts of property. | The requirements may act as a barrier especially on larger tracts of property that have enough area for location options. Small size of 700 sq ft would be very cramped for a family of three just starting out. |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive street widths</td>
<td>8</td>
<td>Wide streets have been considered excessive development regulations or many years.</td>
<td>The cost of construction continues to rise as technology is refined to extract more of the impurities from crude oil for use in ways other than oil for asphalt. Also, city costs of maintenance continue to rise especially on very wide streets.</td>
</tr>
<tr>
<td>Setbacks</td>
<td>9</td>
<td>Reduce front and sides</td>
<td>Setbacks on the rear and front of lots increase the cost of service line extensions for all utilities. Excessive side setbacks contribute to sprawl, widening of block lengths, and lower densities.</td>
</tr>
<tr>
<td>Height restrictions</td>
<td>10</td>
<td>An issue especially with multi-family affordable housing</td>
<td>“By contrast, the provision of certain amenities in housing finds a firm place in the police power. Measures designed to assure adequate light and air found early acceptance by the courts. The early method was to prescribe the distance between buildings and to limit the height, a crude method which has the further effect of dictating the building envelope and its placement on the lot.”</td>
</tr>
<tr>
<td>Inflexible sidewalk standards</td>
<td>11</td>
<td>Wide sidewalks that front on wide lots consumes many dollars for initial construction and long term maintenance by the municipality.</td>
<td>The construction of sidewalks is very expensive both in labor and materials. Requiring that wide sidewalks be placed on both sides of all streets in a development has been identified by HUD as a barrier to affordable housing.</td>
</tr>
<tr>
<td>Value to community to have mixed economic levels (Diversity of neighborhood) - Goal</td>
<td>12</td>
<td>Desirable to attain</td>
<td>Goal for General Plan discussion</td>
</tr>
<tr>
<td>Impact fees</td>
<td></td>
<td>An impact fee is a fee that is implemented by a local government on a new or proposed development to help assist or pay for a portion of the costs that the new development may cause with public services to the new development. They are considered a charge on new development to help fund and pay for the construction or needed expansion of onsite capital improvements. These fees are usually implemented to help reduce the economic burden on local jurisdictions that are trying to deal with population growth within the area.</td>
<td>Steep impact fees have been identified by HUD as a barrier to affordable housing. The real issue is that fees should cover the actual costs of maintenance and capital improvements but too often they are excessive and unrealistic. While high fees can become barriers, the Planning Commission, in general, does not feel at this time they are a hindrance within the city limits.</td>
</tr>
<tr>
<td>Administrative Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review Process</td>
<td>N/A</td>
<td></td>
<td></td>
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<tr>
<td>----------------</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditional Use</td>
<td>Issues with the process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subdivisions</td>
<td>Redraft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional suggested barriers**

| Apartment open space | Too restrictive- not based on anything |

p:\planning department\jeff\aff hsg\planning commission barriers to affordable housing.docx
CITY OF MOAB
RESOLUTION #12-2011

A RESOLUTION ADOPTING A PRIORITIZED LIST OF REGULATORY BARRIERS TO AFFORDABLE HOUSING IDENTIFIED IN THE MOAB MUNICIPAL CODE AND REFERRED TO COUNCIL BY THE PLANNING AND ZONING COMMISSION

WHEREAS, in 2009 the Grand County Council and Moab City Council recognized the growing need for affordable housing in both jurisdictions and unanimously adopted "The Grand County and Moab Affordable Housing Plan ("The Plan") as an addendum to the respective General Plans; and

WHEREAS, as a result of the adoption of the Plan, the City of Moab Planning Commission ("The Commission") has been directed to review the land use and development titles of the Moab Municipal Code, specifically Titles 15, Buildings and Construction, 16, Subdivisions, and 17, Zoning; to identify regulatory barriers to affordable housing; and

WHEREAS, in several duly advertised public meetings, the Commission discussed various regulations and determined that the listed development provisions, below, should be prioritized for the impact on the affordability of housing; and

WHEREAS, the Commission held a duly advertised public workshop on May 19, 2011 to hear and consider testimony from residents about the identified barriers; and

WHEREAS, in a duly advertised public meeting on June 23, 2011, the Commission accepted the prioritized list of barriers ("The List") and directed Staff to draft a resolution to the Moab City Council ("The Council") requesting acceptance of the List; and

WHEREAS, with the adoption of Resolution No. 09-2011, the Commission determined that the issues described below have the greatest impact on development of affordable housing in the City of Moab:

1. Lot size
2. Lot width
3. Minimum home size
4. Secondary dwelling regulations
5. Density
6a. Densities in PUD
6b. Densities in MPD
7. Open space requirements for apartments
8. Excessive street widths
9. Setbacks
10. Height restrictions
11. Inflexible sidewalk standards
12. Lack of inclusionary zoning

WHEREAS, the Moab City Council ("The Council") reviewed the list of barriers in a public meeting held on June 28, 2011 and with the adoption of Resolution #12-2011, concur with the Planning Commission that the List will facilitate the generation of code amendments that will allow greater development of housing for all of Moab residents.
NOW, THEREFORE, BE IT RESOLVED BY THE MOAB CITY COUNCIL that the List of Barriers to Affordable Housing is hereby Accepted by the Council,

AND, the Council hereby directs the Commission to develop and propose legislation amending the Moab Municipal Code to provide housing for all economic levels.

City Council on June 28, 2011.
PASSED AND APPROVED in open Council by a majority Vote of the Governing Body of Moab

David L. Sakrison, Mayor
Title: Review and Consideration to Adopt Planning Resolution #04-2019, Recommending to City Council Approval of a Hillside Development Permit for a Major Development on Property Located at 1520 N. Main Street in the RC, Resort Commercial, Zone

Staff Presenter: Sommar Johnson, Development Services Coordinator

Attachment(s): Draft Resolution #04-2019, Hillside Development Ordinance, Contour Maps, Slope Study, Site Layout

Options: Approve as submitted, deny, or modify

Applicant: Craig Larsen, Legacy Design Group

Recommended Motion: I move to adopt Planning Resolution #04-2019 recommending to City Council approval of a Hillside Development Permit for a Major Development subject to the following requirement(s):
1. A separate site plan must be reviewed and approved upon approval of a Hillside Development permit.
2. Development is subject to the Assured Workforce Housing Ordinance and must execute a Land Use Restriction Agreement with City Council prior to the issuance of a building permit.

Background:
An application for this Hillside Development permit was received from Mr. Craig Larsen with Legacy Design Group on October 23, 2018. The first review by the Development Review Team (DRT) resulted in an extensive list of comments primarily from the Engineering Department. Legacy Design Group met with City Planning and Engineering staff on December 12, 2018 and worked through a number of the engineering comments. The applicants has provided additional information and all permit review criteria have been addressed.

Note that a separate site plan must be reviewed and approved subsequent to the approval of a Hillside Development Permit, and that this development is subject to the Assured Workforce Housing section of Moab Municipal Code (Chapter 17.69). The applicant must execute a Land Use Restriction Agreement with the City Council prior to the issuance of a building permit.
A RESOLUTION RECOMMENDING APPROVAL OF A HILLSIDE DEVELOPMENT PERMIT FOR COMMERCIAL DEVELOPMENT ON PROPERTY LOCATED AT 1520 NORTH MAIN STREET IN THE RC, RESORT COMMERCIAL ZONE

WHEREAS, My Thirty Five One, LLC, PO Box 1692, Bountiful, Utah, 84011-1692, as the Owner of record (“Owner”) of property located at 1520 North Main Street has applied through their agent, Legacy Design Group, Craig Larsen, President, with offices at PO Box 1692, Bountiful, Utah, 84011-1692, for a hillside development permit; and,

WHEREAS, the applicant has furnished the following legal description of the property located at 1520 North Main Street, Moab Utah, 84532, more particularly described as:

BEG AT COR ON N R/W OF US HWY 191 SAID COR BEARS N 38°53'E 803.7 FT FROM S¼ COR SEC 26 T25S R21E SLB&M & PROC WITH SAID R/W N 47°40'W 697.9 FT; N 0°05'E 223.1 FT; S 89°54'E 717.3 FT; S 9°15'E 366.6 FT; S 38°18'W 420.5 FT TO POB LESS BEG AT THE N'LY R/W OF US HWY 191 SAID COR BEARS N 38°53'E 803.7 FT FROM THE S¼ COR SEC 26 T25S R21E SLMB AND PROCEEDING THENCE N 16°15'E 720.6 FT; THENCE S 9°15'E 366.6 FT; THENCE S 38°18'W 420.5 FT TO THE POB AND CONT 7.02 ACRES M-O-L

WHEREAS, the City adopted the Hillside Development regulations in order to promote the health, safety and the general public welfare of the residents of the City by establishing standards for the development and excavation of hillside and slope areas so as to minimize soil and slope instability and erosion and to preserve the visual and aesthetic character of the surrounding hillsides; and,

WHEREAS, the Owner has submitted to the Planning Commission (the “Commission”) an application for a Hillside Development Permit for possible construction of a sixty-four (64) room My Place Hotel, parking areas, landscaping, and required improvements; and,

WHEREAS, the Commission held a duly advertised meeting on the application in a regular meeting held on February 14, 2019 and April 11, 2019, to review said application; and

WHEREAS, the Commission adopted Planning Resolution #04-2019, subsequent to said public meeting, and recommends that Council approve the Hillside Development Permit with certain requirements; and,

WHEREAS, having considered Staff recommendations, and discussion of the aspects of the development related to hillside development regulations, the Moab Planning Commission does hereby find, determine, and declare, that all applicable provisions of the Moab Municipal Code have or can be met;

NOW, THEREFORE, BE IT RESOLVED BY THE MOAB PLANNING COMMISSION OF THE CITY OF MOAB, UTAH, that the Hillside Development Permit for commercial development of the above described Parcel “B” with a parking lot, storm water structures, and landscaping and providing open space is favorably recommended to Council for approval subject to the following requirements:

1. A separate site plan must be reviewed and approved upon approval of a Hillside Development permit.
2. Development is subject to the Assured Workforce Housing Ordinance and must execute a Land Use Restriction Agreement with City Council prior to the issuance of a building permit.

ATTEST:

__________________________________________  ______________________________________
Allison Brown, Chair                        Date
Chapter 17.55
HILLSIDE DEVELOPMENTS

Sections:

17.55.010  Purpose.
17.55.020  Definitions.
17.55.030  Areas subject to these provisions.
17.55.040  Hillside development density standards.
17.55.050  Determination of slope and slope areas.
17.55.060  Hillside development permit required.
17.55.070  Application submittals.
17.55.080  Improvements security and restoration bond.
17.55.090  Building setbacks, height, and construction materials.
17.55.100  Appeals to the appeal authority.
17.55.110  Verification of compliance.
17.55.120  Penalty for violation.
17.55.130  Permit review criteria.
17.55.140  Application fees.
17.55.150  Severability.

17.55.010  Purpose.

The City finds that the health, safety and the general public welfare of the residents of the City will be promoted by establishing standards for the development and excavation of hillside and slope areas located in the City so as to minimize soil and slope instability and erosion and the negative effects associated with construction in geologic hazard zones. In addition the City finds that the preservation of the visual and aesthetic character of the City's hillsides is an important public goal. The provisions herein are intended to supplement and amplify the City subdivision and zoning ordinances and are designed to accomplish the following:

A.  Prohibit development of uses which would likely result in a hazardous situation due to slope instability, rock falls, or excessive erosion;

B.  Provide for safe vehicular circulation and access;

C.  Encourage the location, design and development of building sites in a manner that will minimize the scarring and erosion effects of cutting, filling and grading of hillsides;

D.  Encourage preservation of open space by encouraging clusters or other design techniques to preserve the natural terrain;
E. Where hillside excavation does occur, require that buildings be located in the cut area to minimize the visual effects of scarring. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.020 Definitions.

For the purposes of this chapter, the following words and phrases shall have the following meanings:

“Cut" means land surface which is re-shaped by man through the removal of soil, rock, or other materials.

“Development" means the carrying out of any building activity or clearing of land as an adjunct of construction.

“Development parcel" means any quantity of land capable of being described with such definiteness that its location and boundaries may be established, which is designated by its owner or developer as land to be used or developed as a unit or which has been used or developed as a unit.

“Excavation" means any disturbance to the ground including but not limited to clearing, grubbing, rock removal, cutting, tunneling, drilling, or any other activity which alters the natural ground.

“Fill" means the deposit of soil, rock, or other materials placed by man.

“Geotechnical engineer“ means a person with a four-year degree in civil engineering or engineering geology from an accredited university who is licensed as an engineer and who, through training and experience, is able to assure that geological factors affecting engineering works are recognized, adequately interpreted, and presented for use in engineering practice and for the protection of the public.

“Ledge" means the first substantial abrupt change in slope along the top edge of a plateau or ridge line.

“Major development“ means and includes any building activity or clearing of land adjunct to construction involving subdivision of land into three or more lots; the construction of multifamily housing such as condominiums or townhouses containing three or more residential units; any residential or commercial construction which involves excavation of a surface area larger than one acre; or any excavation creating a vertical cut into a slope greater than four feet in height.

“Minor development“ means and includes any building activity or clearing of land adjunct to construction involving less than three lots; construction of multifamily housing such as condominiums or townhouses containing less than three residential units; residential or commercial construction which involves excavation of a surface area of one acre or less; or any excavation creating a vertical cut into a slope four feet or less in height.

“Plateau“ means a flat or predominantly flat area of land which is raised sharply above adjacent land on at least one side as illustrated in Exhibit D and designated on ridge line map attached to the ordinance codified in this chapter and on file in the City Recorder's office.

“Ridge line“ means the junction of a rising steep slope on one side and a descending slope that may either be gentle or steep on the other side.
“Setback” means an area, measured as a distance from a property line or geologic boundary, in which no structure or building is allowed to be constructed.

“Slope” means a vertical rise measured over a horizontal distance, expressed as a percentage, measured generally at right angles to contour lines. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

### 17.55.030 Areas subject to these provisions.

Property within the City limits with slopes greater than fifteen percent. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

### 17.55.040 Hillside development density standards.

A. Lot size, density and site disturbance for development in lands subject to this chapter shall comply with the density schedule in this section. To the extent this density schedule is contrary to existing zoning standards the provisions of this section shall take precedence.

B. Any portion of a development parcel having a slope greater than forty-five percent shall not be included in the calculation of the area of such parcel for the purposes of determining conformity with the minimum lot parcel size and density requirements in this section.

C. Where more than two-thirds of a single family lot has a slope of twenty-five percent or less, the entire lot shall be considered as having less than twenty-five percent slope for the purpose of determining lot size.

D. Density standards:

<table>
<thead>
<tr>
<th>Percent Natural Slope</th>
<th>Dwelling Units/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25%</td>
<td>No change in density</td>
</tr>
<tr>
<td>26-39%</td>
<td>One d.u./acre provided the units are clustered in 30% or less of land area within this slope category. 70% of the land area of this slope category shall remain undisturbed.</td>
</tr>
<tr>
<td>40-45%</td>
<td>One d.u. per 20 acres</td>
</tr>
<tr>
<td>46% +</td>
<td>Development not permitted</td>
</tr>
</tbody>
</table>

E. A density bonus shall be available for development that transfers dwelling units from lands with a slope of twenty-six percent to thirty-nine percent to areas with a slope of twenty-five percent or less, either within the same parcel or to an adjacent parcel under the same ownership.
1. Any person transferring dwelling units as specified in subsection E of this section shall be entitled to a transfer density bonus of 0.75 dwelling units.

F. No development shall be permitted upon lots with an average slope of forty-six percent or more.

G. Where commercial rather than residential development is contemplated, density shall be calculated on the basis of each three thousand square foot increment of building construction being equivalent to one dwelling unit. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.050 Determination of slope and slope areas.

A. Slope shall be determined on an individual basis as an average percent natural slope for purposes of density limitations.

B. The contour interval maps and calculations required by this section shall be prepared in a report by a professional civil engineer or licensed surveyor and shall be submitted with applications for permits or subdivision approvals for lands subject to this chapter. Each report shall bear the certification of the engineer or surveyor as to the accuracy of the report.

C. The location of the natural fifteen percent, twenty-five percent, forty percent and forty-five percent slopes for the purposes of this chapter shall be determined using the following procedure:

   1. Preparation of Contour Maps. Current contour maps shall be prepared and certified by a licensed engineer or surveyor showing contours at intervals no greater than five feet (the “contour map”) drawn at one inch equals two hundred feet scale maximum.

   2. Verification Through Field Surveys. Field surveys may be required of the applicant by the City engineer or city planner to verify the accuracy of the contour lines shown on the contour map. The contour map shall identify profile lines which shall be used to verify the field survey. Profile lines shall be perpendicular to contour lines and in no case occur at intervals greater than one hundred fifty feet apart or seventy-five feet from a property line.

   3. Determination of Slope Areas for Density Calculations. Using the contour maps, slopes shall be calculated in intervals no greater than forty to eighty feet along profile lines. Points identified as slopes of fifteen percent, twenty-five percent, forty percent and forty-five percent shall be located on the contour map and connected by a continuous line. That area bounded by said lines and intersecting property lines shall be used for determining dwelling unit density. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.060 Hillside development permit required.

A. All major development on slopes in excess of fifteen percent shall require a hillside development permit granted by the City Council prior to any excavation or construction activity. The Planning Commission shall first review proposed development and make a recommendation to the City Council.
B. All minor development on slopes greater than fifteen percent shall require a hillside development permit granted by the City Council prior to any excavation or construction activity. The Planning Commission shall first review the proposed development and make a recommendation to the City Council.

C. Government Exemptions. Exemptions to this chapter may be granted to government agencies under the following guidelines. Proposed development by the City of Moab and other government agencies, are required to submit the appropriate documentation as established in Section 17.55.070. The application shall be submitted to city staff for review and recommendation to the City Council. Subsequent to review of the proposed project by staff, City Council shall evaluate the project at the next available meeting. In granting an exemption, the City Council may prescribe appropriate reasonable conditions and safeguards to ensure compliance with the requirements of the Moab land development regulations.

Exemptions apply to necessary development of various public works and community development projects including, but are not limited to, flood control structures such as dams and retaining walls, water tanks and water conveyance systems, and structures such as bridges, parking areas, and roadways for transportation projects. In the application of this section, Council shall have the authority to grant exemptions to any of the requirements of this chapter by applying the following review criteria:

1. The establishment, maintenance or operation of the proposed exemption is not detrimental or injurious to the use and enjoyment of existing uses on adjacent properties;

2. The establishment, maintenance or operation of the proposed special exception use or structure will not cause traffic hazards in the vicinity;

3. Adequate provision is made for surface water drainage, ingress and egress to the property, and off-street parking;

4. Adequate public facilities and services are available for the proposed special exception use or structure;

5. The application meets all special requirements as detailed within the zoning ordinance for the specific special exception if any apply;

6. The use will not be detrimental to the public health, safety or welfare;

7. The location, nature and height of each building, wall and fence, the nature and extent of landscaping on the site and the location, size, nature, and intensity of each phase of the use and its access streets will be compatible with the appropriate and orderly development of the district in which it is located;

8. The proposed use will not conflict with an existing or programmed public facility, public service, school, or road;

9. The proposed use has the written recommendations and comments of the public works and engineering departments;

10. The applicant has presented sufficient evidence of public need for the use.
D. Permit approval under this section shall not be required for preliminary plats that have been approved by the City Council prior to the adoption of the ordinance codified in this chapter.

E. Upon review of a permit application for either major or minor development the Planning Commission may, in addition to recommending approval or denial of the application, submit to the City Council recommendations as to conditions to be attached to the permit to mitigate specific adverse impacts associated with the application.

F. The City Council may approve the application as submitted; approve subject to conditions; or deny the permit in full where the development does not meet the standards of this chapter or other provisions of the Municipal Code. (Ord. 10-01, 2010)

Editor's note: Ord. No. 10-01, adopted February 23, 2010, repealed the former §17.55.060, and enacted a new §17.55.060 as set out herein. The former 17.55.060 pertained to similar subject matter and derived from Ord. No. 96-18, 1996 and Ord. No. 97-12, 1997.

17.55.070 Application submittals.

A. Any applicant for a major development on slopes greater than twenty-five percent, shall be required to submit the following technical information and reports:

1. Contour maps as provided in this section; site development plan (subsection C1); grading plan (C2); drainage control plan and report (C3); geology and soils report (C4); landscape plan (C5); other reports as required by city staff (C6); and evidence of title (C7).

B. Any application for a minor development on slopes greater than twenty-five percent, shall be required to submit the following technical information and reports:

1. Contour maps as provided in this section; site development plan (C1); grading plan (C2); geology and soils report (C4); and other reports as required by city staff (C6); and evidence of title (C7).

C. Submittals under this chapter shall contain the following:

1. Site Development Plans. A scaled site development drawing or plans prepared by a licensed engineer, licensed architect, or licensed surveyor containing:

   a. The proposed location and description of all buildings or structures;

   b. The proposed location and description of all landscaping, irrigation structures, and related structures;

   c. The proposed location and description of all public and private roads or driveways, street lighting, drainage structures, water, sewer, and gas lines, electric and telephone lines and related utilities;

   d. All property lines, new lot lines, existing and proposed easements, and areas dedicated to open space;
2. *Grading Plan.* A grading and earth moving plan conforming with all requirements of Appendix Chapter 33 of the Uniform Building Code and showing existing and proposed contours and cross-sections. The grading plan shall show accurate slope conditions and contours for lands extending no less than one hundred feet outside of the application boundaries. The grading plan shall additionally show:

   a. Detailed excavation drawings showing the location and extent of all hillside cuts and fills and all excavations for structures, utilities, or roads, including a description of all methods to be employed for excavation and fill disposal;
   
   b. A time-table providing a schedule for all grading and construction work with starting and ending dates;
   
   c. Specific restoration and mitigation techniques to be employed by the developer for cut and fill areas.

3. *Drainage Control Plan and Report.* A drainage control plan and report prepared by a licensed civil engineer and containing a site specific evaluation of drainage issues for the site and drainage control problems generated by the proposed development, including:

   a. Detailed plans of all surface and subsurface drainage systems and facilities, retaining walls, cribbing or other drainage or erosion protection devices, to be constructed in connection with, or as part of the proposed project;
   
   b. A map showing the drainage area and estimated runoff calculations for the area served by any drainage systems or facilities.

4. *Geology and Soils Report.* A geology and soils report shall be prepared by a licensed engineer trained and experienced in the practice of geotechnical engineering, and shall contain at least the following information:

   a. Slope stability analysis: conclusions and recommendations concerning the effects of material removal, introduction of water, both on and offsite, including, where applicable, on mesa tops, seismic activity, and erosion on slope stability;
   
   b. Foundation investigation: conclusions and recommendations concerning the effects of soil conditions on foundation and structural stability, including bearing capacity, shear strength, and shrink/swell potential of soils;
   
   c. The location and yield of springs, seeps and wetlands which shall be shown on the site plan;
   
   d. Structural features, including any geological hazards such as rock falls, ravines, overhangs, cliff faces or the like;
   
   e. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, together with recommendations identifying the means proposed to minimize any hazard to life or property, or adverse impact on the natural environment.
5. **Landscape and Vegetation Plan.** A landscape plan shall address all existing and proposed landscaping for the development site. It shall address:

   a. Vegetative or other screening in areas of high visual impact and the specific plantings to be installed by the developer, including plantings needed for restoration of cut and fill areas;

   b. Irrigation for all plantings;

   c. Buffering the development from adjoining parcels and any other site specific vegetation issues.

6. **Other Information.** Other reports, plans, and information as may be deemed necessary by the City staff or Planning Commission may be required with the application as a condition of the application process.

7. **Evidence of Title.** A current legal description for the property subject to the application including a copy of the current deed evidencing title in the applicant and a current title insurance commitment and/or abstract of title. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.080 **Improvements security and restoration bond.**

A. The City may require, as a condition for issuance of any hillside development permit or grading permit, that the applicant post adequate security to assure compliance with all permit conditions, including restoration, soil stabilization, landscaping, drainage improvements, or any other permit condition. Any security required by this section shall be an amount, as determined in the discretion of city staff, reasonably calculated to cover anticipated costs for improvements required under the permit and may take the form of the following:

   1. A surety bond or letter of credit naming the City of Moab as beneficiary or payee;

   2. A certified or cashier’s check payable to the City of Moab and held in an escrow account;

   3. An improvements agreement specifying all improvements and permit conditions shall be completed prior to issuance of any certificate of occupancy or building permit for individual lots.

B. In the event the applicant fails to complete development in accordance with the permit conditions within one year from the issuance of the permit the City, upon delivering written notice to the applicant, may proceed to redeem any funds payable to it under this section for the purposes of obtaining completion of the required improvements.

   1. For good cause shown, the City Council, after receiving the recommendation of the Planning Commission, may grant such additional time extension as may be necessary to allow compliance by the applicant with all restoration or improvement conditions of the permit.

C. Where a project is to be completed in phases according to a phasing plan, the applicant can secure a proportionate partial release of any improvements security upon certification by the Zoning Administrator that all permit conditions have been complied with as to that particular phase. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)
17.55.090 Building setbacks, height, and construction materials.

A. Where a ridge line or ledge occurs, the minimum setback shall be one hundred feet measured normal (perpendicular) to the closest point of the ridge, unless a greater setback is recommended in the geotechnical report. The Planning Commission may recommend a lesser setback where the applicant can demonstrate that the one hundred foot setback makes the property unbuildable.

B. All buildings constructed upon lands subject to this chapter shall be one story only, or twenty feet maximum, in height. Height shall be measured as described in Section 17.55.020, definitions.

C. Buildings constructed upon lands subject to this chapter shall be constructed with materials appropriate to mitigate significant visual impacts. Wherever possible, buildings should be constructed of materials that closely resemble and blend in with native vegetation and hillside features. (Ord. 10-01, 2010; Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.100 Appeals to the appeal authority.

The appeal authority shall hear any appeal from staff action; request for variance; or appeal regarding the grant, denial, or conditions attached to any permit under this chapter. (Ord. 10-14, 2010; Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.110 Verification of compliance.

Compliance with all permit conditions shall be verified by the Zoning Administrator. Restoration bonds or other security shall not be released, and certificates of occupancy or building permits shall be withheld for such a development until such time as the Zoning Administrator shall certify compliance. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.120 Penalty for violation.

In addition to those penalties prescribed in Chapter 17.75 of this title, the City staff shall have the right to order a halt to construction of any improvements where, in his/her discretion, there exists a condition which violates or threatens to violate any of the provisions of this chapter. Such suspension of construction activities shall continue until the City Public Works Director or Zoning Administrator is satisfied that measures have been implemented for substantial compliance with this chapter. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)
17.55.130 Permit review criteria.

A. Any permit application under this section shall be reviewed to determine compliance with the following criteria:

1. Compliance with setback, lot area, density, and height limitations contained in this chapter;

2. Compliance with comprehensive plan goals for the area including the development site, including all other Municipal Code provisions;

3. The compatibility of the proposed development with existing land uses in the immediate vicinity of the project site, including aesthetic concerns and visual impacts;

4. Adequacy of the vegetation and landscaping plans, including restoration, vegetative screening, regrading and irrigation;

5. Geotechnical suitability of the development and the potential for geologic hazards to persons or property, whether natural or man-made, including erosion, rockfall, stormwater runoff, or similar concerns;

6. The availability of adequate municipal services, including police and fire protection, schools, culinary water, sanitary sewer service, or the like;

7. Suitability of the proposed drainage and reclamation plans, including the extent to which the design meets the following specific engineering standards:

   a. The height of any cut or fill shall not exceed ten feet when measured vertically from the finished grade to the intersection of the slope with the natural undisturbed ground. The combined height of cuts and fill shall not exceed twenty feet unless otherwise approved by the Planning Commission and the City Council. Approval is subject to incorporating, retaining, terracing, and landscaping or other approved techniques for stabilizing cuts and fills. All excavation and fills shall conform to Appendix Chapter 33 of the Uniform Building Code.

   b. All drainage systems shall be separate and independent from the sanitary sewer system.

   c. Drainage and flood control shall be designed in conformance with the City flood control master plan where applicable.

   d. Property development shall not cause a natural drainage channel to be filled in, obstructed, or diverted. When modification to a natural drainage channel is proposed within the development, such changes will be addressed in the drainage study and shown on the improvement plans, and the developer may be required to dedicate right-of-way or record drainage easements for structures and/or improvements needed to carry storm runoff in the event approval is given for the proposed modifications.

   e. The point of location where the natural drainage channel enters and leaves the property may not be changed without the approval of the City engineer.
f. All of the drainage basin upstream of the development shall be considered to be fully developed in conformance with the City’s current land use master plan. Effects on the downstream property owners relative to increased flood potential and nuisance water shall also be considered in the design, including acquisition of easements or agreements where necessary, or construction or modification of improvements where needed.

g. The applicant shall provide the necessary means to assure drainage within the property being developed by making use of existing facilities or natural washes and constructing master planned improvements.

h. It shall be required that each new development handle its stormwater runoff in such a manner that no net increase in storm runoff above the natural state will occur on the downstream properties. Pre-project flows must not be exceeded by the post-project flows.

i. Projects shall be designed to provide that stormwater from a one hundred year frequency storm shall be adequately conveyed either within the limits of the street right-of-way or in storm drain easement without creating flood hazards to dwellings.

j. When an underground pipe system is required, it shall be designed to carry a ten year storm. Major hydraulic structures shall be designed to carry a twenty-five year storm. The minimum storm drain size shall be ten inches.

k. Unless specifically permitted, retention basins on hillsides shall not be allowed.

l. Detention shall be allowed where it is compatible with all required reports. Detention basins shall be used for the purpose of eliminating the effects of the peak runoff of storms and releasing water flow at the pre-project, or approved rate.

m. Cross-gutter drains on streets shall be avoided whenever possible. They shall not be allowed on collector and higher order streets.

n. Drainage design must be constructed in accordance with accepted engineering standards and must be consistent with data in other reports such as soils, landscaping, and the like.

o. All buildings shall be constructed outside the limits of and eighteen inches above the two hundred year flood stage except on drainages subject to FEMA flood control regulations, in which case construction shall be no less than two feet from any such flood line.

p. Necessary measures shall be taken to prevent erosion and scour at all points throughout the development. Erosion shall be mitigated at all points of discharge and at the face of any cut or fill slope throughout the development.

q. During grading or construction on any property (including off-site construction) the developer shall control both water used for construction and storm runoff in such a manner as to not affect any adjoining properties, nor add silt or debris to any existing storm drain, wash, channel or roadway.
Applications shall be evaluated for compliance with applicable state and federal environmental statutes and regulations promulgated thereunder, including, but not limited to the Federal Water Pollution Control Act. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.140 Application fees.

An applicant for a hillside development permit shall submit an application fee as established by resolution with the completed application. No action shall be taken on any application for a hillside development permit without payment of the proper application fee. (Ord. 06-11 (part), 2006: Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)

17.55.150 Severability.

If any section, subsection, sentence, clause, phrase, or portion of this chapter is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not effect the validity of the remaining portions of this chapter. (Ord. 97-12 (part), 1997: Ord. 96-18 § 2 (part), 1996)
AN ORDINANCE CREATING CHAPTERS 17.09.060 AND 17.09.465 OF THE MOAB MUNICIPAL CODE ESTABLISHING OUTDOOR LIGHTING AND SIGN ILLUMINATION STANDARDS

The following describes the intent of the City of Moab (“City”) in the adoption of these amendments to the Moab Municipal Code (“Code”):

a. Encourage outdoor lighting practices that will minimize light pollution, glare, light trespass and sky glow to curtail the degradation of the night time visual environment;

b. Prevent lighting nuisances on properties located in and adjacent to the City;

c. Promote energy conservation;

d. Improve night-time safety, utility, security, and productivity;

e. Develop an attractive nighttime appearance in the City;

f. Minimize lighting health risks arising from inappropriate quantities and qualities of lighting;

g. Prevent unnecessary or inappropriate outdoor lighting;

h. Minimize nighttime impacts on nocturnal wildlife;

i. Facilitate the economic development potential of astro-tourism, and the enhancement of the visitor experience in the City;

j. Encourage quality outdoor lighting through the use of efficient bulbs and light sources, fully shielded light fixtures, and limits on the location and uses of outdoor lighting; and

k. Establish lighting standards, requirements, and processes consistent with those established by Grand County.

NOW, THEREFORE, the Moab City Council amends the Code by adding the language in Attachment 1.

PASSED AND APPROVED by a majority of the City of Moab City Council on XXX, 2019. This ordinance shall take effect immediately upon passage.

SIGNED:

___________________________  ______________
Emily S. Niehaus, Mayor        Date

ATTEST:

___________________________
Sommar Johnson, Recorder
ATTACHMENT 1:
New Language for Chapters 17.09.060 and 17.09.465

17.09.060 Outdoor Lighting - Purpose

The purposes of this chapter are to:
A. Encourage outdoor lighting practices that will minimize light pollution, glare, light trespass and sky glow to curtail the degradation of the nighttime visual environment;
B. Prevent lighting nuisances on properties located in and adjacent to the City;
C. Promote energy conservation;
D. Improve night-time safety, utility, security, and productivity;
E. Develop an attractive nighttime appearance in the City;
F. Minimize lighting health risks arising from inappropriate quantities and qualities of lighting;
G. Prevent unnecessary or inappropriate outdoor lighting;
H. Minimize nighttime impacts on nocturnal wildlife;
I. Facilitate the economic development potential of astro-tourism, and the enhancement of the visitor experience in the Moab area; and
J. Encourage quality outdoor lighting through the use of efficient bulbs and light sources, fully shielded light fixtures, and limits on the location and uses of outdoor lighting.

17.09.061 Outdoor Lighting - Scope and Applicability

A. All lighting should be purpose driven.
B. All exterior outdoor lighting installed after the effective date of this section in all zones in the City shall conform to the requirements established by this section. This section does not apply to indoor lighting.
C. All existing outdoor lighting that does not meet the requirements of this chapter and is not exempted by this chapter shall be considered a nonconforming use or part of a nonconforming structure subject to an amortization schedule outlined in Chapter 17.09.069.

17.09.062 Outdoor Lighting - Definitions

For the purpose of this section, certain words, phrases and terms shall have the meaning assigned to them by this section.

“Accent or Architectural Lighting” means lighting of building surfaces, landscape features, statues, and similar items for the purpose of decoration, ornamentation, creation of visual hierarchy, sense of liveliness, or other purpose unrelated to safety, business operation, or essential lighting function.

“Backlight” means all the light emanating behind a luminaire.

“B.U.G. Rating” means backlight, up-light, and glare rating, which exists on a scale of zero to five (0 to 5) and describes the light output of a luminaire.
“Correlated Color Temperature” (CCT) is a specification of the color appearance of the light emitted by a lamp, relating its color to the color of light from a reference source when heated to a particular temperature, measured in degrees Kelvin (K). The CCT rating for a lamp is a general "warmth" or "coolness" measure of its appearance. Lamps with a CCT rating below 3,000 K are usually considered "warm" sources, while those with a CCT above 3,000 K are usually considered "cool" in appearance.

“Direct Illumination” means illumination resulting from light emitted directly from a bulb, luminary, or reflector. This does not include light reflected from other surfaces such as the ground or building faces.

“Floodlight” means a fixture or bulb designed to "flood" an area with light. A specific form of bulb or fixture designed to direct its output in a specific direction. Such bulbs are often designated by the manufacturer and are commonly used in residential outdoor lighting.

“Fully Shielded Fixture” means an outdoor light fixture constructed and mounted so that the installed fixture emits no light above the horizontal plane. Where a light manufacturer provides a BUG rating, the uplight rating (U) must equal zero (0). Fully shielded light fixtures must be shielded in and of themselves. Surrounding structures, like canopies, are not to be considered when determining if the fixture is fully shielded. Fully shielded fixtures must be appropriately mounted so that the shielding prevents light from escaping above the horizontal and all light is directed downward.
Examples of fully shielded light fixtures.

“Glare” means the visual sensation caused by excessive brightness and which causes annoyance, discomfort, or a disability loss in visual performance or visibility.

“Internally Illuminated” as it relates to signs, means any sign which has a light source entirely enclosed within the sign and not directly visible to the eye.

“Light Pollution” means any adverse effect of manmade light. Often used to denote "sky glow" from developed areas, but also includes glare, light trespass, visual clutter and other adverse effects of lighting.

“Light Source” means the part of a lighting fixture that produces light, e.g. the bulb, lamp, or chips on board.

“Light Trespass” means any light that falls beyond the legal boundaries of the property it is intended to illuminate.

“Lumen” means a unit of luminous flux equal to the light emitted by a uniform point source of one candle intensity. Lumens refers to the amount of light emitted by a bulb (more lumens equates to brighter light).

<table>
<thead>
<tr>
<th>Brightness in Lumens</th>
<th>220+</th>
<th>400+</th>
<th>700+</th>
<th>900+</th>
<th>1300+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>25W</td>
<td>40W</td>
<td>60W</td>
<td>75W</td>
<td>100W</td>
</tr>
<tr>
<td>Halogen</td>
<td>18W</td>
<td>28W</td>
<td>42W</td>
<td>53W</td>
<td>70W</td>
</tr>
<tr>
<td>CFL</td>
<td>6W</td>
<td>9W</td>
<td>12W</td>
<td>15W</td>
<td>20W</td>
</tr>
<tr>
<td>LED</td>
<td>4W</td>
<td>6W</td>
<td>10W</td>
<td>13W</td>
<td>18W</td>
</tr>
</tbody>
</table>

“Manufacturer's Catalog Cuts” means a publication or other printed material of a bulb or lighting manufacturer offering visual and technical information about a lighting fixture or bulb.

“Net Acre” means a gross acre excluding: public rights-of-way, lands with natural slopes greater than 30 percent, jurisdictional wetlands, lands in the 100 year floodplain, public drinking water supply water sources (recharge areas for the aquifer in the Glen Canyon Formation), lands affected by immitigable geo-hazards, riparian habitats, archeological sites, and required open space.

“Outdoor Light Fixture” means a complete lighting unit consisting of a lamp(s) and ballast(s) (when applicable), together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply. Also known as a luminaire, or simply as a fixture.

“Partially Shielded Light Fixture” means an outdoor light fixture constructed and mounted so that the installed fixture emits most of its light above the horizontal plane. Where a light manufacturer provides a BUG rating, the uplight (U) and backlight (B) ratings are greater than zero (0). Light emitted at or above the horizontal plane (sideways or upwards) shall arise solely from incidental decorative elements or strongly colored or diffusing materials such as colored glass or plastic. Fixtures using spot or flood
lamps are considered partially shielded if the lamps are aimed no higher than 45 degrees above the vertical plane beneath the fixture.

Examples of partially shielded lighting fixtures

“Recreational Lighting” means lighting used to illuminate sports fields, ball courts, playgrounds, or similar outdoor recreational facilities.

“Skyglow” means the brightening of the nighttime sky resulting from the scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Skyglow is caused by light directed or reflected upwards or sideways and reduces one’s ability to view the nighttime sky.

“Spotlight” means a fixture or bulb designed to light a small area very brightly. See definition of Floodlight.

"Total" means the sum of shielded and unshielded light.

"Total outdoor light output" means the total amount of light measured in lumens from all bulbs installed in outdoor lighting fixtures. For bulb types that vary in light output as they age (such as fluorescent and high intensity discharge (HID) bulbs), the initial lumen output as defined by the manufacturer shall be the lumen value used.

“Tower” means any monopole, antenna, or the like that exceeds eighteen feet (18') in height.

“Unshielded Fixture” means a fixture that has no shielding at all that would otherwise specifically prevent light emission above the horizontal.
Examples of unshielded light fixtures.

“Uplight” means all the light emanating above the horizontal plane of a luminaire.

**17.09.063 Outdoor Lighting - Fully Shielded Fixture Requirements**

A. Unless specifically exempted by this section, all outdoor lighting shall use fully shielded fixtures and shall be installed so light is directed downward with no light emitted above the horizontal plane of the fixture. Where a light manufacturer provides a BUG rating, the uplight rating (U) must equal zero (0).

B. In order to qualify as a "fully shielded" fixture, a light fixture must have the top and sides made of completely opaque material such that light only escapes through the bottom of the fixture. Fixtures with translucent or transparent sides, or sides with perforations or slits, do not qualify as fully shielded. Any glass or diffuser on the bottom of the fixture must be flush with the fixture (no drop lenses). Merely placing a light fixture under an eave, canopy, patio cover, or other similar cover does not qualify as fully shielded.

C. Fixtures must not be placed at a location, angle, or height that directs illumination outside the property boundaries where the light fixtures are located.

D. Notwithstanding the exemptions in subsection E below, all residential and commercial luminaires shall be fully shielded within twenty-five (25) feet of adjacent residential property lines.

E. Exemptions to Fully Shielded Fixture Requirements:
   1. All lights exempted by this section shall be included in the calculation for total light output.
   2. Fixtures having a total light output less than one thousand (1,000) lumens are exempted from the fully shielded requirement provided the following criteria are met:
      a. The fixture has a top that is completely opaque such that no light is directed upwards.
      b. The fixture has sides that completely cover the light source and are made of opaque or semi-opaque material. Fixtures with opaque sides may have incidental decorative perforations that emit small amounts of light. Semi-opaque material such as dark tinted glass or translucent plastic may be used if the light source is not discernable behind the material. Completely transparent materials, such as clear or lightly tinted colored glass, are not allowed.
      c. The light source must not be visible from any point outside the property on which the fixture is located.
   3. Spotlights controlled by motion sensors having a light output less than one thousand (1,000) lumens per lamp are exempted from the fully shielded requirement provided:
      a. The fixture is a spotlight or other type of directed light that shall be directed straight down; and
      b. The fixture must not be placed in such a manner that results in illumination being directed outside the property boundaries where the light fixtures are located.
      c. Lights controlled by motion sensors shall not be triggered by movement or activity located off the property on which the light is located.
   4. Pathway lights less than eighteen inches (18”) in height are exempted from the fully shielded fixture requirement, if the total light output from each pathway light is less than three hundred (300) lumens.
5. Temporary exterior lighting intended as holiday or seasonal decorations displayed between November 15 and the following January 15, provided that individual lamps do not exceed 70 lumens and neither cause light trespass nor interfere with the reasonable use and enjoyment of any other property.

6. Traffic control signals and devices.

7. Temporary emergency lighting in use by law enforcement or government agencies or at their direction.

8. The lighting of federal or state flags, provided that the light is a top-down and narrow beam aimed and shielded to illuminate only the flag.

9. An applicant requesting approval for lighting that does not conform to these standards shall follow the procedures and findings requirements set forth in Chapter 17.72 – Administration and Enforcement.

17.09.064 Outdoor Lighting - Total Light Output

A. Commercial. Total outdoor light output shall not exceed fifty thousand (50,000) lumens per developed acre. Streetlights used for illumination of public rights-of-way are excluded from this calculation. Commercial developments shall be permitted a minimum of 5,000 lumens of lighting regardless of parcel size.
   1. In non-residential zone districts, partially and unshielded lighting on a property shall not exceed 5,000 lumens per developed acre, and shall be included in the total outdoor light output calculation.

B. Residential. Total outdoor light output shall not exceed ten thousand (10,000) lumens of lighting for parcels one-half (1/2) acre, or larger, in size. Parcels smaller than one-half (1/2) acre shall be permitted five thousand (5,000) lumens of lighting regardless of parcel size. Total outdoor light output of any apartment development shall not exceed twenty thousand (20,000) lumens of lighting per net acre.
   1. In residential zones, partially and unshielded lighting on a property shall not exceed 1,000 lumens per lot, and shall be included in the total outdoor light output calculation.
   2. Residential units used for overnight accommodations or other commercial uses shall comply with the residential standards for total light output.

17.09.065 Outdoor Lighting - Lighting Hours

A. Commercial establishments shall turn off all outdoor lighting, except that listed below, by ten o'clock (10:00) P.M.:
   a. Businesses open to the public after ten o'clock (10:00) P.M. may leave all outdoor lighting on until one hour after the close of business.
   b. Lighting to illuminate the entrance to the commercial establishment.
   c. Parking lot and pathway lighting required for the safety of guests or customers.

B. Recreational lighting (residential and commercial) shall be turned off by ten o'clock (10:00) P.M. except to conclude a specific sporting event that is underway.

17.09.066 Outdoor Lighting - Lighting Color
All exterior lighting shall utilize light sources with correlated color temperature not to exceed 3,000 Kelvin (K).

17.09.067 Outdoor Lighting - Specialized Outdoor Lighting Conditions and Standards

A. Gas station canopies may be illuminated provided all light fixtures are mounted on the undersurface of the canopy and all light fixtures are fully shielded. Merely placing the fixtures on the underside of the canopy does not qualify as fully shielding the light fixture.

B. Roadway and street lights are prohibited unless recommended by the City engineer or required by UDOT to provide for the safety of the public. When deemed necessary, streetlights shall utilize lamp types that are fully shielded luminaires that minimize sky glow, light trespass, and other unintended impacts of artificial lighting. All streetlights shall utilize the lowest illuminance levels acceptable to the City engineer and UDOT.

C. Parking lots may not utilize spot or flood lighting whether mounted on a post or exterior building wall. The overall height of any light post used to illuminate parking lots in commercial zones shall not exceed twenty-five (25'). All post mounted parking lot lights shall be set back from property lines a distance equal to two and one-half (2.5) times the height of the pole unless an internal or external shield prevents the fixture being visible from outside the property boundaries. The overall height of any light post used to illuminate parking lots in residential zones shall not exceed twenty-five feet (25'). All parking lot lighting shall use fully shielded downward directed fixtures. Internal or external shields shall prevent the fixture being visible from outside the parking lots.

D. Outdoor recreation areas or athletic fields at publicly owned facilities may use illumination to light the surface of play and viewing stands and for the safety of the public. The following standards shall apply to outdoor recreation area or athletic field lighting:

1. The recreational lighting does not exceed illuminance levels for class IV sports lighting set by the Illuminating Engineering Society of North America.

2. The recreational lighting provides illuminance for the surface of play and viewing stands, and not for any other areas or applications.

3. Off-site impacts of the lighting will be limited to the greatest practical extent possible.

4. The lighting for areas or applications outside the surface of play and viewing stands shall conform to all provisions in this chapter.

5. The recreational or athletic facility shall extinguish lighting exempted by this section no later than 10:00pm or one-half hour after the end of play.

6. The recreational lighting shall have timers that automatically extinguish lighting to ensure lights are not left on after the curfew or when the facilities are not in use.
E. Outdoor amphitheaters may use illumination to light the performance area of the amphitheater and for the safety of the public. The following standards apply to all amphitheater lighting:
   a. Lighting used to illuminate the performance area must be either directed spotlighting or fully shielded lighting. If directed spotlighting, the light source must be located and designed such that it is not visible beyond the property boundaries.
   b. Lighting used to illuminate the performance area may only be turned on during performances or rehearsals.
   c. Lighting used to illuminate the seating areas, pathways, and other areas of the amphitheater must meet all standards of this chapter.

F. All illuminated signs shall comply with the standards of Chapter 17.09.465.

17.09.068 Outdoor Lighting - Application and Review Procedures

A. Lighting Plan
   All sign permit applications, subdivision applications, site plan applications, building permit applications, and other development review applications within any zone district shall include a lighting plan that shows evidence that the proposed lighting fixtures and light sources comply with this code. Lighting plans shall include the following:
   1. Plans or drawings indicating the proposed location of lighting fixtures, height of lighting fixtures on the premises, and type of illumination devices, lamps, supports, shielding and reflectors used and installation and electrical details.
   2. Illustrations, such as contained in a manufacturer’s catalog cuts, of all proposed lighting fixtures. For commercial uses, photometric diagrams of proposed lighting fixtures are also required. In the event photometric diagrams are not available, the applicant must provide sufficient information regarding the light fixture, bulb wattage, and shielding mechanisms for the planning commission to be able to determine compliance with the provisions of this chapter.
   3. A table showing the total amount of proposed exterior lights, by fixture type, wattage, lumens, and lamp type.

B. Approval Procedure:
   1. The lighting plan for all new development shall be submitted for approval concurrent with the associated application process.
   2. A certificate of occupancy shall not be issued until such time as the property is subject to a post installation nighttime inspection by the City’s Zoning Administrator.

17.09.069 Outdoor Lighting - Amortization of Nonconforming Outdoor Lighting

A. The City shall require the termination of use of any and all nonconforming outdoor lighting fixtures, structures, lamps, bulbs or other devices that emit or generate light which are not otherwise exempted by this chapter, pursuant to the amortization schedule contained in this section.

B. All outdoor lighting legally existing and installed prior to the effective date of this chapter and which is not exempted shall be considered nonconforming and shall be brought into compliance by the property owner as follows:
   1. Immediate compliance is required as a condition for approval when applying for a building permit, sign permit, conditional use permit, new (nonrenewal) business license,
site plan review or similar City permit or approval if site improvements, construction, reconstruction, expansion, alteration or modification of existing sites, structures, or uses individually or cumulatively equal or exceed one thousand five hundred (1,500) square feet, or 50% of the existing site or structure, whichever is less. Projects less than one thousand five hundred (1,500) square feet in size, or 50% of an existing site or structure will not be subject to immediate compliance. However, the square footage of the improved structure or site will count towards a cumulative total of projects on the same property. When the cumulative total equals or exceeds one thousand five hundred (1,500) square feet, or 50% of the existing site or structure, compliance shall be required for approvals as cited above.

2. All damaged or inoperative nonconforming lighting shall be replaced or repaired only with lighting equipment and fixtures compliant with this chapter.

3. All outdoor lighting not previously scheduled for amortization or otherwise exempted shall be brought into conformance with this chapter within five (5) years from the effective date of this chapter.

C. The City shall perform two (2) audits of all outdoor lighting in the City, one two (2) years and the other four (4) years after the effective date hereof. These audits will identify all lighting that does not conform to the standards of this chapter. The results of these audits will be made available to the public.
17.09.465 Signs -- Permitted Illumination

Signs may be unlighted, lighted externally, lighted internally, or backlit. All sign lighting must be designed, directed, and shielded in such a manner that the light source is not visible beyond the property boundaries where the sign is located. Lighting for signs must be directed such that only the sign face is illuminated. All lighted signs must have stationary and constant lighting. All sign lighting is included in the calculation of total light output for a property.

A. Standards for Externally Illuminated Signs:
   1. Lighting for externally illuminated signs must be aimed and shielded so that light is directed only onto the sign face and does not trespass onto adjacent streets, roads or properties or into the night sky.
   2. Lighting for externally illuminated signs must be mounted at the top of the sign (or within 2 feet of the top of a wall mounted sign), except for freestanding monument style signs which may be illuminated by ground mounted lighting.
   3. Lighting shall consist of no more than four (4) individual fixtures (or lamps) per sign face and produce a maximum of 40,000 lumens per fixture.
   4. All sign lighting shall be included in the calculation of total light output.

<table>
<thead>
<tr>
<th>Permitted and Prohibited External Sign Lighting Configurations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed</td>
</tr>
<tr>
<td>Not Allowed</td>
</tr>
<tr>
<td><img src="image1.png" alt="Fully Shielded" /></td>
</tr>
<tr>
<td><img src="image2.png" alt="Fully Shielded" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Unshielded" /></td>
</tr>
</tbody>
</table>

B. Standards for Internally Illuminated Signs:
   1. Only sign text areas and logos may be illuminated on an internally illuminated sign.
   2. Internally illuminated signs shall use semi-opaque materials for sign text and logos such that the light emanating from the sign is diffused. Transparent or clear materials are not allowed for sign text and logos. Non-text portions of the sign (e.g., background and graphics other than the logo) shall be made of completely opaque material.

C. Standards for Backlit Signs:
   1. The light source shall not be visible.
   2. Backlit signs shall only allow indirect illumination to emanate from the sign. For example, signs that create a "halo" effect around sign copy are allowed.

D. Standards for Illuminated Window Signs
   1. Businesses may display a maximum of two (2) illuminated window signs positioned to be primarily visible outside the business structure.
   2. Illuminated window signs shall not exceed four (4) square feet in area.
3. Illuminated window signs shall not be illuminated when the business is closed.
Moab Planning Commission Agenda Item
Meeting Date: April 11, 2019

Title: Review of Proposed Ordinance #2019-03 and Possible Adoption of Planning Resolution #10-2019 Favorably Recommending the Ordinance to City Council

Attachment(s): Draft Planning Resolution #10-2019, Draft Ordinance #2019-03

Options: Approve, approve with conditions, deny with reasons

Recommended Motion: I move to adopt Planning Resolution #10-2019 and favorably refer Ordinance #2019-03 to the City Council.

Background/Summary: The proposed ordinance reflects the key points discussed by the Planning Commission during the March 14 workshop.
PLANNING RESOLUTION #10-2019

A RESOLUTION RECOMMENDING TO CITY COUNCIL APPROVAL OF ORDINANCE 
#2019-03 CREATING CHAPTERS 17.09.060 AND 17.09.465 OF THE MOAB MUNICIPAL 
CODE ESTABLISHING OUTDOOR LIGHTING AND SIGN ILLUMINATION STANDARDS

WHEREAS, the City of Moab ("City") adopted Chapter 17, Zoning, of the Moab Municipal Code 
("Code") to promote the health, safety, convenience, order, prosperity, and general welfare of the present 
and future inhabitants of the city by guiding development within the City of Moab in accordance with the 
General Plan; and

WHEREAS, the Moab City Planning Commission, in coordination with Grand County, created outdoor 
lighting and sign illumination standards and has determined that those standards should be added to the 
Moab Municipal Code; and

WHEREAS, the Moab Planning Commission held a duly advertised public hearing on April 11, 2019, to 
hear and decide the merits of the proposed changes, and to receive public input; and

WHEREAS, the Planning Commission subsequently adopted Planning Resolution #10-2019 with the 
findings that the amendments are justified and appropriate and recommend approval of Ordinance #2019- 
03 to the City Council.

NOW THEREFORE, the Planning Commission, by a majority vote, favorably recommends Ordinance 
#2019-03 to City Council for approval.

SIGNED:

Allison Brown, Chair

Date