Zion National Park:
Enhancing Visitor Experience Through Improved Transportation

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Grand Canyon Entrance Station
1 Mile Ahead
468,860 VEHICLES IN ONE YEAR PERIOD

DURING PEAK SEASON, LONG LINES ARE COMMON

DEMAND >> CAPACITY
Figure 1 - Zion South Entrance Station - Vehicle Counts by Day of the Year - 2011
Figure 6 - Traffic Volume by Hour of the Day

Number of Vehicles Processed

Hour Beginning at Time Shown

7:00 AM, 8:00 AM, 9:00 AM, 10:00 AM, 11:00 AM, 12:00 PM, 1:00 PM, 2:00 PM, 3:00 PM, 4:00 PM, 5:00 PM, 6:00 PM, 7:00 PM, 8:00 PM
### Zion National Park

#### Entrance Fees
- Private Vehicle: $25
- Motorcycle (per person): $12
- Per Person (walk-in, bicycle): $12
- Groups: INQUIRE
- Tunnel Escort: $15

#### Annual & Lifetime Passes
- Zion Annual: $50
- Interagency Annual: $80
- Interagency Senior (US residents age 62): $10
- Interagency Access (US residents permanently disabled): INQUIRE
<table>
<thead>
<tr>
<th>Service</th>
<th>Payment Method</th>
<th>Time (secs)</th>
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<tbody>
<tr>
<td>AUTO 7-DAY PASS CASH</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>AUTO 7-DAY PASS CREDIT</td>
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<td>52</td>
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<tr>
<td>INTERAGENCY PASS CASH</td>
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<tr>
<td>SENIOR PASS CASH</td>
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<td>INTER-AGENCY PASS</td>
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<td>29</td>
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<tr>
<td>SENIOR PASS</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>RETURN VISIT (7-DAY PASS)</td>
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<td>14</td>
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</table>
AVERAGE SERVICE TIME
37 SECONDS

CAPACITY
2 REGULAR LANES 194 VEHICLES PER HOUR
QUEUE LENGTHS AND WAITING TIMES
<table>
<thead>
<tr>
<th>Location</th>
<th>Distance (feet)</th>
<th>No. of vehicles</th>
<th>Waiting Time (min)</th>
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<tbody>
<tr>
<td>THEATER SOUTH DRIVEWAY</td>
<td>1450</td>
<td>62</td>
<td>19</td>
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<tr>
<td>CAFÉ de SOLEIL</td>
<td>1800</td>
<td>72</td>
<td>22</td>
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<tr>
<td>LION BOULEVARD</td>
<td>3350</td>
<td>116</td>
<td>35</td>
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</table>
Figure 1 - Zion South Entrance Station - Vehicle Counts by Day of the Year - 2011
136 DAYS PER YEAR WHEN SIGNIFICANT QUEUING OCCURS
FUTURE DEMAND

PEAK HOUR
FUTURE DEMAND

13th HIGHEST DAY

Figure 5 - Distribution of Number of Vehicles Entering Zion South Entrance by Day

- Number of Days with Greater than the Given Number of Vehicles
- Number of Vehicles Entering per Day
FUTURE DEMAND

20 PERCENT INCREASE IN VISITATION

Figure 8 - Zion Annual Visitation in Recreational Visits - 1992 to 2011
FUTURE DEMAND

314 VEHICLES PER HOUR
INCREASE NUMBER OF LANES
LENGTHEN EMPLOYEE LANE
EXPRESS LANE
DISSEMINATION OF PRE-TRIP PLANNING INFORMATION
HIGHWAY ADVISORY RADIO
SALE OF ENTRY PERMITS AT REMOTE LOCATIONS
STACKED LANE
STACKED LANE
ALTERNATIVES
ALTERNATIVE A – EXISTING CONDITIONS – DO NOTHING

2 Regular Lanes plus unstaffed Employee Lane

214 VPH
ALTERNATIVE I – 4 REGULAR LANES

388 VPH
ALTERNATIVE B – 3 REGULAR LANES AND NO EMPLOYEE LANE

291 VPH
ALTERNATIVE C – 3 REGULAR LANES PLUS EMPLOYEE LANE

311 VPH
ALTERNATIVE D – 2 REGULAR LANES PLUS STAFFED EXPRESS AND EMPLOYEE LANE

291 VPH
ALTERNATIVE E – 1 STACKED LANE PLUS ONE REGULAR LANE PLUS EMPLOYEE LANE

287 VPH
ALTERNATIVE K – SEPARATE EMPLOYEE AND EXPRESS LANES

311 VPH
ALTERNATIVE G – 1 STACKED LANE PLUS 1 REGULAR LANE PLUS STAFFED EXPRESS AND EMPLOYEE LANE

364 VPH
Time Parking Lots Filled versus Number of Vehicles Entering Park

703 PARKING SPACES NEEDED

vs.

514 EXISTING PARKING SPACES
ADDITIONAL ISSUES
ANIMATION USING MICROSIMULATION MODEL
FIGURE 5 -
NUMBER OF VEHICLES ENTERING GRAND CANYON SOUTH ENTRANCE STATION BY DAY
FIGURE 2 - NUMBER OF VEHICLES ENTERING MESA VERDE NATIONAL PARK BY DAY - 2004
Figure 1 - Zion South Entrance Station - Vehicle Counts by Day of the Year - 2011
ENTRANCE STATIONS

GRAND TETON NATIONAL PARK

ZION NATIONAL PARK

MESA VERDE NATIONAL PARK

ARCHES NATIONAL PARK
ENTRANCE STATIONS

MT. RAINIER NATIONAL PARK

YELLOWSTONE NATIONAL PARK

GLACIER NATIONAL PARK

WHITE SANDS NAT’L. MON.
ONE TYPE (INTERAGENCY PASS) > 1/4 OF ENTRIES

71 PERCENT OF ENTRIES ALREADY HAVE AN ENTRY CREDENTIAL
EMPLOYEE LANE

WAVING PRE-PAID VEHICLES THROUGH THE EMPLOYEE LANE
“ROVING” THE LINE

SALE OF ENTRY PERMITS AT REMOTE LOCATIONS

EXPRESS LANE

AUTOMATED LANE