# Kimley»"Horn 

February 22, 2024
Ms. Erin Everett Stevens
United Properties Colorado, LLC
1331 17 ${ }^{\text {th }}$ Street, Suite 605
Denver, Colorado 80202
Re: Reagan Ranch Industrial - Traffic Compliance Letter Colorado Springs, Colorado

Dear Ms. Stevens:
The purpose of this letter is to provide a trip generation comparison to identify conformance with the original Reagan Ranch - Traffic Study Letter for the portion of the Reagan Ranch Industrial project located near the northwest corner of the Space Village Avenue and Marksheffel Road intersection in Colorado Springs, Colorado. The Reagan Ranch - Traffic Study Letter was completed in February 2023 by Kimley-Horn and Associates. The location of the current project was previously evaluated in the northwest area of the original traffic study which was studied to include 365,400 square feet of industrial park space. The current proposal is anticipated to include two industrial buildings totaling 294,800 square feet. It should be noted that four lots are located east of the project that were evaluated in original traffic study letter as part of the northwest area that is not part of this application. This traffic letter has compared the trips generated by the currently proposed Reagan Ranch Industrial project to the land use in the same development area evaluated previously in the Reagan Ranch - Traffic Study Letter. The conceptual site plan for the proposed Reagan Ranch Industrial project is attached.

## SITE INFORMATION AND TRIP GENERATION COMPARISON

Access to the project site will be provided by one vehicle access and one truck access on the north side of Space Village Avenue. The project is proposed to include two industrial buildings totaling 294,800 square feet. The overall northwest area in the Reagan Ranch - Traffic Study Letter was evaluated with 365,400 square feet of industrial space in an approximate 28.1 -acre area. This Reagan Ranch Industrial project is proposed on approximately 21.0 acres of the 28.1-acre site, which is approximately 75 percent of the previously studied area. As such, the originally studied industrial use was prorated to 75 percent and was compared with development of the proposed Reagan Ranch Industrial. Therefore, the purpose of this section is to summarize a comparison of the trip generation from the proposed Reagan Ranch Industrial site to the originally studied industrial use identified for this specific site.

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the Trip Generation Manual' published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses.

Trip generation for the currently proposed land use and the originally studied land use was calculated using the $11^{\text {th }}$ Edition average rates for Industrial Park (ITE Code 130). The following Table 1 compares the trip generation from the original study compared to the expected trip generation for the proposed Reagan Ranch Industrial project. The trip generation from the original traffic study, as well as from the current proposal are attached for reference.

[^0]Table 1 - Trip Generation Comparison: Original Study vs. Current Proposal

| Land Use and Size | Weekday Vehicles Trips |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Daily | AM Peak Hour |  |  | PM Peak Hour |  |  |
|  |  | In | Out | Total | In | Out | Total |
| Original Traffic Study - Reagan Ranch |  |  |  |  |  |  |  |
| Pro-Rated Industrial Park (ITE 130) 274,050 Square Feet (75\%) | 924 | 75 | 18 | 93 | 20 | 73 | 93 |
| Current Proposal - Reagan Ranch Industrial |  |  |  |  |  |  |  |
| Industrial Park (ITE 130) 294,800 Square Feet | 994 | 81 | 19 | 100 | 22 | 78 | 100 |
| Net Difference in Trips | +70 | +6 | +1 | +7 | +2 | +5 | +7 |

As summarized in Table 1, the currently proposed Reagan Ranch Industrial project is anticipated to generate 994 daily weekday trips with 100 trips occurring during both the morning and afternoon peak hours. Based on the original Reagan Ranch - Traffic Study Letter assuming development of 274,050 square feet of industrial space within this exact same development area, the Reagan Ranch Industrial project is anticipated to account for an increase of approximately 70 daily trips and an increase of seven trips during both the morning and afternoon peak hours when compared to the original study.

When comparing to the total number of trips generated by the overall Reagan Ranch development area, the increase in traffic attributable to current proposal compared to the original study is anticipated to account for an increase of approximately 0.18 percent of the daily traffic $(70 / 38,298)$. Likewise, the morning and afternoon peak hour trips are anticipated to increase by 0.35 percent ( 7 / 2,017 ) and 0.22 percent $(7 / 3,172)$, respectively.

## CONCLUSIONS

In summary, this traffic study letter provides a trip generation comparison to the original traffic study for the Reagan Ranch Industrial development. The proposed Reagan Ranch Industrial development is expected to generate approximately 994 weekday daily trips with 100 trips occurring during both the morning and afternoon peak hours. This results in approximately 70 additional weekday daily trips with seven (7) additional morning and afternoon peak hour trips when compared to the use evaluated in the original traffic study. This equates to one additional trip every 8.5 minutes during both the morning and afternoon peak hours. When comparing to the total number of trips generated by the overall Reagan Ranch development, the increase in traffic attributable to current proposal compared to the original study is anticipated to account for less than a half percent for each time period.
Therefore, the increase trips compared to the overall trips in the original traffic study is negligible. It is believed that this slight increase in trips can be accommodated within the surrounding street system. Please let us know if you have any questions or require anything further.

Sincerely, KIMLEY-HORN AND ASSOCIATES, INC.


Jeffrey R. Planck, P.E.
Project Traffic Engineer


## Conceptual Site Plan



## Original Traffic Study Documents

# Kimley»)Horn 

February 28, 2023

Ms. Kelly Nelson
Pikes Peak Investments LLC
90 South Cascade Avenue
Suite 1500
Colorado Springs, CO 80903
Re: Reagan Ranch - Traffic Study Letter
Colorado Springs, CO
Dear Ms. Nelson:
This traffic study letter has been prepared to provide a trip generation comparison with the original master level traffic impact study for the Reagan Ranch development proposed along Marksheffel Road, south of SH-94 in Colorado Springs, Colorado (site plan attached). A vicinity map illustrating the location of the three development areas of Reagan Ranch is shown in Figure 1. The site is currently undeveloped land. As requested by the City of Colorado Springs based on the additional traffic generated by Reagan Ranch due to the increased project size when compared to the original master level study, intersection operational and queueing analysis has been provided. This addendum containing the additional traffic evaluations were prepared to confirm project traffic from the proposed Reagan Ranch development does not necessitate additional improvements at the key intersections previously studied as part of the "Crossroads-Meadowbrook \& Reagan Ranch Traffic Impact Study", prepared by Kimley-Horn in February 2022. Applicable documents from the original traffic study are attached for reference.

## Site Information

Regan Ranch is proposed to contain approximately 365,400 square feet of industrial park space, 571,810 square feet of retail space, 135,170 square feet of office space, 1,328 dwelling units of single-family residential, and 784 units of multi-family residential. The Crossroads-Meadowbrook \& Reagan Ranch master level traffic study identified development of a 365,000 square foot industrial park, 525,000 square feet of shopping center use, 100,000 square feet of office space, 593 dwelling units of single-family housing and 360 dwelling units of mid-rise multifamily housing. The increase in areas of the now proposed Reagan Ranch to what was previously studied is approximately 45,000 square feet of additional retail space, 35,000 square feet of additional office space, 735 additional units of single family residential, and 424 additional units of multifamily housing. Therefore, the purpose of this letter is to summarize a comparison of the trip generation from the proposed Reagan Ranch site to the originally studied uses.

## Unspecified Development Traffic Growth

According to information provided on the website for the Colorado Department of Transportation (CDOT), the average 20-year growth factor along SH-94 in the vicinity of the site is 1.29 . This value equates to an annual growth rate of 1.16 percent. SH-94 traffic information from the CDOT Online Transportation Information System (OTIS) website is attached. Based on this, an annual growth rate of 1.16 percent was used to calculate future traffic volumes within the project study area. This annual growth rate was used to estimate near term 2026 and long term 2040 traffic volume projections at the key intersections.

Along with the annual growth, project traffic volumes from the Meadowbrook Park, Crossroads Mix Use, and Crossroads North developments were added to the background traffic volumes. Additionally, calculated trips from an additional 1,123 single family detached housing units, located in the parcels east of the southeast area of Reagan Ranch, were added to the 2040 background

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| Southeast Area |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Single Family Housing (210) 393 Dwelling Units | 3,662 | 71 | 213 | 284 | 238 | 140 | 378 |
| Mid-Rise Multifamily Housing (221) 360 Dwelling Units | 1,962 | 31 | 89 | 120 | 93 | 59 | 152 |
| $\begin{aligned} & \text { Office (710) - } \\ & 100,000 \text { Square Feet } \end{aligned}$ | 1,062 | 103 | 17 | 120 | 18 | 96 | 114 |
| Shopping Center (820) 350,000 Square Feet | 14,092 | 203 | 124 | 327 | 659 | 714 | 1,373 |
| Total Southeast Area Trips | 20,778 | 408 | 443 | 851 | 1,008 | 1,009 | 2,017 |
| Total SE Area Trips after Internal Capture | 19,116 | 400 | 434 | 834 | 928 | 928 | 1,856 |
| Total Project Trips after Internal Capture | 30,252 | 699 | 659 | 1,358 | 1,437 | 1,503 | 2,940 |
| Proposed Development - Reagan Ranch |  |  |  |  |  |  |  |
| Northwest Area |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Industrial Park (130) - } \\ & 365,400 \mathrm{SF} \end{aligned}$ | 1,232 | 100 | 24 | 124 | 27 | 97 | 124 |
| Northeast Area |  |  |  |  |  |  |  |
| Single-Family Detached Housing (210) 264 Dwelling Units | 2,464 | 47 | 133 | 180 | 156 | 91 | 247 |
| Multifamily Housing Mid-Rise (221) 402 Dwelling Units | 1,872 | 38 | 128 | 166 | 96 | 62 | 158 |
| Shopping Center (820) | 10,206 | 144 | 88 | 232 | 391 | 423 | 814 |
| Total Northeast Area Trips | 14,542 | 229 | 349 | 578 | 643 | 576 | 1,219 |
| Total NE Area Trips after Internal Capture | 12,676 | 224 | 344 | 568 | 494 | 427 | 921 |
| Southeast Area |  |  |  |  |  |  |  |
| Single-Family Detached Housing (210) 1,064 Dwelling Units | 8,886 | 166 | 474 | 640 | 578 | 339 | 917 |
| Multifamily Housing Mid-Rise (221) 382 Dwelling Units | 1,776 | 36 | 122 | 158 | 92 | 58 | 150 |
| General Office Building (710) 135,170 Square Feet | 1,508 | 190 | 26 | 216 | 36 | 178 | 214 |
| Shopping Center (820) 405,520 Square Feet | 16,452 | 231 | 142 | 373 | 742 | 804 | 1,546 |
| Total Southeast Area Trips | 28,622 | 623 | 764 | 1,387 | 1,448 | 1,380 | 2,828 |
| Total SE Area Trips after Internal Capture | 24,390 | 592 | 733 | 1,325 | 1,098 | 1,029 | 2,127 |
| Total Project Trips after Internal Capture | 38,298 | 916 | 1,101 | 2,017 | 1,619 | 1,553 | 3,172 |
| Difference in Trips after Internal Capture | +8,046 | +217 | +442 | +659 | +182 | +50 | +232 |

As summarized in Table 1, the Reagan Ranch development was originally anticipated to generate approximately 30,252 weekday daily trips, with 1,358 of these trips occurring during the morning peak hour, and 2,940 trips occurring during the afternoon peak hour for the buildout horizon. The now current proposal of Reagan Ranch is expected to generate 38,298 weekday daily trips, with 2,017 trips occurring during the morning peak hour, and 3,172 trips occurring during the afternoon peak hour for the buildout horizon. Therefore, the now proposed Reagan Ranch is anticipated to generate

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Project Reagan Ranch TCL (NW Area) - 2040 Buildout
Subject Trip Generation for Industrial Park

| Designed by | TES | Date | December 19, 2022 | Job No. | 096956023 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Checked by |  | Date |  | Sheet No. | of |

## TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates
Land Use Code - Industrial Park (130)
Independent Variable - 1000 Square Feet (X)
$\mathrm{SF}=\quad 365,400$
$X=365.400$
T = Average Vehicle Trip Ends

## Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (100 Series Page 49)



## Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (100 Series Page 50)



## Weekday (100 Series Page 48)

Average Weekday
$(\mathrm{T})=3.37(\mathrm{X})$
$(T)=3.37$ *
(365.4)

Directional Distribution: $50 \%$ ent. $50 \%$ exit. T = $1232 \quad$ Average Vehicle Trip Ends 616 entering 616 exiting $616+616=1232$


## Proposed Trip Generation

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Project Reagan Ranch Industrial
Subject Trip Generation for Industrial Park

| Designed by | TES | Date | February 20, 2024 | Job No. | 096376023 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Checked by |  | Date |  | Sheet No. | of |

## TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates
Land Use Code - Industrial Park (130)
Independent Variable - 1000 Square Feet (X)

$$
S F=\quad 294,800
$$

X = 294.800
T = Average Vehicle Trip Ends

## Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (100 Series Page 49)

$(\mathrm{T})=0.34(\mathrm{X})$
$(\mathrm{T})=0.34{ }^{*}$

Directional Distribution: 81\% ent. 19\% exit.

| $\mathrm{T}=$ | 100 | Average Vehicle Trip Ends |
| :---: | :---: | :---: |
| 81 | entering | 19 |

$81+19=100$
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (100 Series Page 50)


## Weekday (100 Series Page 48)

Average Weekday
$(\mathrm{T})=3.37(\mathrm{X})$
$(\mathrm{T})=3.37$ *
(294.8)

Directional Distribution: $50 \%$ ent. $50 \%$ exit.
T = $994 \quad$ Average Vehicle Trip Ends 497 entering 497 exiting

$$
497+497=994
$$


[^0]:    1 Institute of Transportation Engineers, Trip Generation Manual, Eleventh Edition, Washington DC, 2021.

