

APPENDIX B:

Traffic Forecast and Analysis

- Traffic Forecast Report
- No Build Traffic Analysis
 - Build Traffic Analysis

Traffic Forecast Report

I-64 Corridor Study, Story Avenue to I-264

Jefferson County

Item No. 5-553.00

Prepared for:

Kentucky Transportation Cabinet



Prepared by:

HMB Professional Engineers



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COMMONLY USED ABBREVIATIONS

| | | |
|----------|--------------------------------------|---|
| AADT | Average Annual Daily Traffic | Adjusted for seasonal and monthly factors |
| AADTT | Average Annual Daily Truck Traffic | Total truck volume for a year |
| ADT | Average Daily Traffic | Unadjusted daily traffic volumes |
| DHV | Design Hour Volume | 30 th highest hour of a year |
| %T | Truck Percentage | Percentage of trucks to total volume |
| FC | Functional Class | Street or highway's group based on service |
| GR | Growth Rate | Calculated value to estimate future volumes |
| PHF | Peak Hour Factor | Considers 15 min. spike in an hourly count |
| K-Factor | 30 th Highest Hour Factor | DHV divided by ADT (DHV/ADT) |
| D-Factor | Directional Factor | Percentage of dominant flow to total |
| MP | Mile Point | Miles increase easterly and northerly |
| ATR | Automatic Traffic Recorder | Permanent and continuous recording station |
| KYSTM | Kentucky Statewide Model | Computerized representation of KY roads |

INTRODUCTION AND STUDY AREA

The I-64 Corridor Study from Story Avenue to I-264, was initiated by the Kentucky Transportation Cabinet (KYTC) to identify and evaluate potential improvement strategies in order to improve the safety and congestion along I-64. The study area is along I-64 from milepoint 6.200 to milepoint 12.300 and is presented in **Figure 1**.

This document summarizes the I-64 traffic forecast procedure and presents the following types of forecasts:

- Annual Average Daily Traffic (AADT) and AM and PM Peak Hour Traffic (VPH) forecasts for a base year 2020, future open year 2025 and future design year 2045
- Annual Average Daily Truck Traffic (AADTT) and AM and PM Peak Hour Truck Traffic forecasts for a base year 2020, future open year 2025 and future design year 2045

The following sections provide information relative to the development and presentation of the traffic forecast numbers.

EXISTING TRAFFIC VOLUMES

The most recent AADT volumes for I-64 mainline and ramps within the study area were obtained from the KYTC traffic count reporting system (CTS). The segment, station numbers, mile points, last year of count, and traffic volumes (AADT) are shown in **Table 1**, and the count stations are shown in **Figure 2**.

FUTURE TRAFFIC VOLUMES

For the purposes of this study, the Design Year was agreed to be 2045 along with an Interim Year of 2025.

Growth Rate / Model Output

The proposed growth rates for this study area were based on multiple sources:

- Historical traffic growth analysis
- Population trends and projections
- Kentuckiana Regional Planning and Development Agency (KIPDA) model

The historical growth rates for this study are based upon traffic growth analysis within the study area. The analysis utilized traffic counts obtained from KYTC's traffic database which included counts from 2000 to 2020. While the COVID-19 Pandemic caused traffic volumes to unexpectedly decline during the second quarter of 2020, the Year 2020 forecasted volumes were based on pre-pandemic conditions. A spreadsheet was developed which analyzed growth trends based on linear and exponential equations. The presented trendline growth rate is a best fit line based on AADTs from the past 20 years.

The Kentuckiana Regional Planning and Development Agency (KIPDA) also provided traffic projections for the study area from their travel demand model. Model runs were completed for years 2025 and 2040 and then compared to the 2020 Base Year to derive a growth rate. The 2040 model runs include all KIPDA Metropolitan Transportation Plan (MTP) projects.

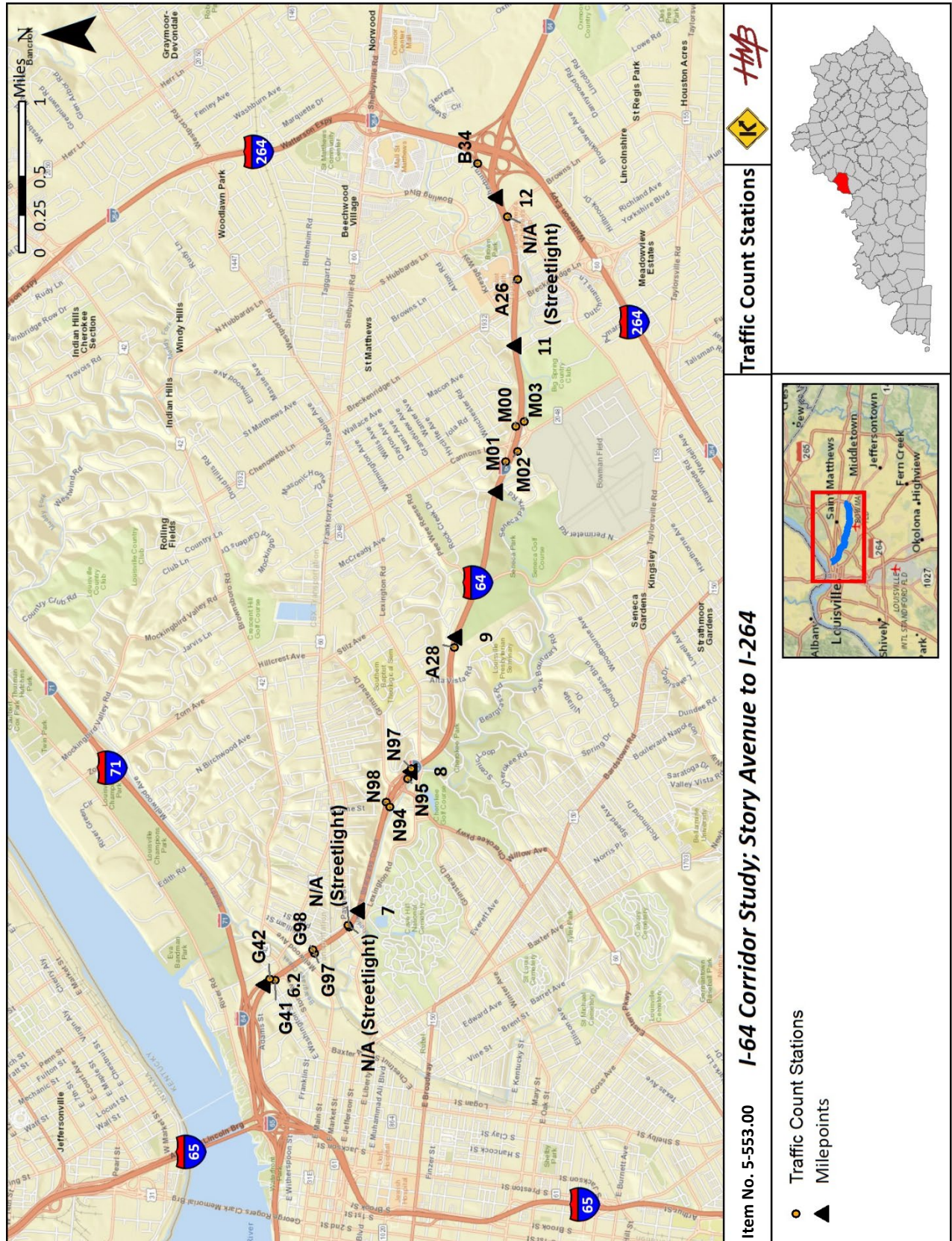
Figure 1. Study Area



Table 1. Count Stations and AADT Volumes

| Count ID | Route/Ramp | Beginning Description | Ending Description | Most Recent AADT Year | Most Recent AADT |
|------------------|--------------------------------|----------------------------------|----------------------------------|-----------------------|------------------|
| Eastbound | | | | | |
| G41 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | 2018 | 6,500 |
| G97 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | 2018 | 3,500 |
| N/A | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | 2019 (Streetlight)* | 37,000 |
| N94 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | 2018 | 3,300 |
| N95 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | 2018 | 6,800 |
| A28 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | 2018 | 40,500 |
| M02 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | 2018 | 6,900 |
| M03 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | 2018 | 3,400 |
| A26 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | 2019 | 37,000 |
| N/A | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | 2018 (Streetlight) | 10,200 |
| Westbound | | | | | |
| B34 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | 2018 | 6,500 |
| A26 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | 2019 | 38,500 |
| M00 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | 2018 | 4,300 |
| M01 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | 2018 | 5,800 |
| A28 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | 2018 | 40,000 |
| N97 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | 2018 | 6,800 |
| N98 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | 2018 | 4,300 |
| N/A | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | 2019 (Streetlight) | 37,500 |
| G98 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | 2018 | 3,200 |
| G42 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | 2018 | 5,700 |

Figure 2. Traffic Count Stations



Using the KIPDA model, three additional Build scenarios were analyzed, and forecasts developed for years 2025 and 2045. The three Build scenarios analyzed as a part of traffic forecasting task are as follows:

- Full Widening – Consists of widening I-64 throughout the study area adding a lane in each direction.
- Partial Widening – Consists of widening I-64 from Story Avenue to Grinstead Drive and Cannons Lane to I-264 adding a lane in each direction. The additional lanes will start and end at the ramps of each interchange.
- Express Lane – Consists of widening I-64 and adding two express lanes in between the eastbound and westbound lanes. The express lane is reversible and will be dedicated to westbound traffic during the AM peak period and to eastbound traffic during the PM peak period.

Based on this comparison, two growth rates were developed and applied to all I-64 mainline and ramp segments. For the No Build and Partial Widening scenarios, a growth rate of 0.35 percent was applied, while a growth rate of 0.50 percent was used for the Full Widening and Express Lane scenarios. A summary of the KIPDA Model results is shown in **Table 2**.

2025 and 2045 No Build Traffic Volumes

Applying the growth rates to 2020 traffic, forecasts were developed for 2025 and 2045. **Figure 3** shows a summary of the forecasted AADT, AADTT, and Peak Hours for years 2020 and 2045 along mainline I-64. A more detailed summary of 2020, 2025, and 2045 AM Peak Hour, PM Peak Hour, and AADT No Build volumes for all mainline and ramp segments along I-64 are shown in **Table 3**.

2025 and 2045 Build Traffic Volumes

Build traffic volumes were derived by comparing the 2025 No Build and Build model volumes and then applying a calibration adjustment to them. These volumes were balanced and then the growth rate was applied to derive the 2045 Build forecasts. A detailed summary of 2020, 2025, and 2045 AM Peak Hour, PM Peak Hour, and AADT Build volumes for all mainline and ramp segments along I-64 are shown in **Table 4**.

DESIGN FACTORS

K-Factor

Hourly factors were calculated from the count data collected for the project mainline segments. Specific factors per each segment are included in **Table 5**.

D-Factor

Directional factors were calculated from the count data collected and shown by segment in **Table 5**.

TRUCK VOLUMES

Truck percentages were derived from count information available through the KYTC Traffic Count Reporting System and the KYTC Vehicle Classification spreadsheet and are shown in **Table 5**.

Mainline truck volumes for all scenarios are listed in **Table 6**.

Table 2. KIPDA Model Results

| Segment | | KIPDA Model Volumes (vpd) | | | | | | | | KIPDA Model Growth Rates | | | | |
|----------------------|----------------------|---------------------------|--------------|--------------|--------------|--------------|------------|------------|--------------|--------------------------|---------------------|---------------------|-----------------|---------------------|
| | | 2020 Base | 2025 NoBuild | 2040 NoBuild | 2025 Widened | 2040 Widened | 2025 646 | 2040 646 | 2025 Express | 2040 Express | NoBuild Growth Rate | Widened Growth Rate | 646 Growth Rate | Express Growth Rate |
| I-64 Eastbound | West of Story | 43,214 | 43,144 | 43,779 | 49,783 | 51,283 | 45,835 | 47,071 | 49,532 | 51,095 | 0.06% | 0.20% | 0.18% | 0.21% |
| | East of Story | 36,902 | 36,695 | 36,803 | 43,633 | 44,604 | 39,498 | 40,281 | 27,176 | 27,375 | -0.01% | 0.15% | 0.13% | 0.05% |
| | East of Mellwood | 42,235 | 43,092 | 44,521 | 51,572 | 53,788 | 46,654 | 48,450 | 34,914 | 36,458 | 0.26% | 0.28% | 0.25% | 0.29% |
| | East of Grinstead | 42,676 | 42,673 | 44,236 | 50,523 | 53,418 | 43,566 | 45,266 | 33,756 | 35,762 | 0.18% | 0.37% | 0.26% | 0.39% |
| | East of Cannons | 37,177 | 38,054 | 39,600 | 44,327 | 46,558 | 39,447 | 41,021 | 27,401 | 28,640 | 0.32% | 0.33% | 0.26% | 0.30% |
| | East of I-264 | 66,907 | 69,623 | 69,180 | 71,157 | 71,052 | 69,908 | 69,739 | 70,966 | 70,685 | 0.17% | -0.01% | -0.02% | -0.03% |
| | Express Lane | | | | | | | | 16,168 | 17,027 | | | | 0.35% |
| I-64 Westbound | East of I-264 | 66,014 | 69,440 | 68,516 | 71,043 | 70,982 | 70,122 | 69,169 | 70,567 | 70,210 | 0.19% | -0.01% | -0.09% | -0.03% |
| | East of Cannons | 39,483 | 40,553 | 40,524 | 47,115 | 49,446 | 43,012 | 43,148 | 29,142 | 29,635 | 0.13% | 0.32% | 0.02% | 0.11% |
| | East of Grinstead | 42,682 | 42,936 | 44,280 | 50,689 | 54,312 | 44,181 | 45,491 | 33,343 | 35,569 | 0.18% | 0.46% | 0.19% | 0.43% |
| | East of Mellwood | 41,526 | 42,949 | 44,509 | 50,709 | 54,597 | 46,180 | 48,492 | 33,582 | 36,195 | 0.35% | 0.49% | 0.33% | 0.50% |
| | East of Story | 37,872 | 38,952 | 40,594 | 45,606 | 48,704 | 41,846 | 43,820 | 28,637 | 30,636 | 0.35% | 0.44% | 0.31% | 0.45% |
| | West of Story | 30,700 | 31,206 | 31,730 | 33,547 | 35,069 | 32,009 | 32,721 | 33,210 | 34,395 | 0.17% | 0.30% | 0.15% | 0.23% |
| | Express Lane | | | | | | | | 16,162 | 17,024 | | | | 0.35% |
| Story/Mellwood Ramps | Story to I-65 | 5,262 | 5,501 | 5,434 | 5,260 | 5,459 | 5,359 | 5,476 | 5,295 | 5,446 | -0.08% | 0.25% | 0.14% | 0.19% |
| | Story to I-64 | 6,317 | 6,058 | 6,606 | 5,077 | 5,577 | 5,643 | 5,966 | 5,118 | 5,646 | 0.58% | 0.63% | 0.37% | 0.66% |
| | I-64 EB to Story | 6,313 | 6,448 | 6,976 | 6,150 | 6,680 | 6,337 | 6,790 | 6,188 | 6,694 | 0.53% | 0.55% | 0.46% | 0.53% |
| | I-64 WB to Mellwood | 3,655 | 3,997 | 3,915 | 5,104 | 5,892 | 4,333 | 4,672 | 4,945 | 5,559 | -0.14% | 0.96% | 0.50% | 0.78% |
| | Mellwood to I-64 EB | 5,333 | 6,396 | 7,718 | 7,939 | 9,184 | 7,156 | 8,169 | 7,738 | 9,082 | 1.26% | 0.98% | 0.89% | 1.07% |
| Grinstead Ramps | Grinstead to I-64 WB | 5,757 | 7,164 | 6,770 | 7,895 | 8,007 | 8,650 | 8,798 | 7,931 | 8,067 | -0.38% | 0.09% | 0.11% | 0.11% |
| | I-64 EB to Grinstead | 6,307 | 6,909 | 6,476 | 7,959 | 7,041 | 8,738 | 8,213 | 7,987 | 7,008 | -0.43% | -0.81% | -0.41% | -0.87% |
| | I-64 WB to Grinstead | 6,913 | 7,151 | 6,541 | 7,875 | 7,723 | 6,652 | 5,797 | 7,691 | 7,441 | -0.59% | -0.13% | -0.91% | -0.22% |
| | Grinstead to I-64 EB | 6,748 | 6,490 | 6,192 | 6,911 | 6,672 | 5,651 | 5,029 | 6,828 | 6,313 | -0.31% | -0.23% | -0.77% | -0.52% |
| Cannons Ramps | Cannons to I-64 WB | 9,191 | 8,673 | 9,201 | 9,842 | 10,446 | 8,535 | 8,495 | 10,171 | 11,060 | 0.39% | 0.40% | -0.03% | 0.56% |
| | I-64 EB to Cannons | 12,208 | 11,710 | 11,531 | 12,711 | 13,385 | 11,320 | 11,358 | 12,843 | 13,496 | -0.10% | 0.35% | 0.02% | 0.33% |
| | I-64 WB to Cannons | 5,992 | 6,290 | 5,445 | 6,268 | 5,580 | 7,365 | 6,153 | 5,970 | 5,126 | -0.96% | -0.77% | -1.19% | -1.01% |
| | Cannons to I-64 EB | 6,709 | 7,091 | 6,894 | 6,515 | 6,525 | 7,201 | 7,113 | 6,488 | 6,374 | -0.19% | 0.01% | -0.08% | -0.12% |
| I-264 Ramps | I-264 WB to I-64 WB | 3,507 | 3,175 | 3,263 | 6,009 | 6,759 | 3,879 | 4,143 | 5,503 | 6,043 | 0.18% | 0.79% | 0.44% | 0.63% |
| | I-264 EB to I-64 WB | 6,802 | 6,388 | 3,892 | 7,715 | 5,888 | 6,808 | 4,562 | 7,262 | 5,066 | -3.25% | -1.79% | -2.63% | -2.37% |
| | I-64 EB to I-264 WB | 550 | 391 | 830 | 1,882 | 2,525 | 941 | 1,207 | 1,645 | 2,382 | 5.15% | 1.98% | 1.67% | 2.50% |
| | I-64 EB to I-264 EB | 4,944 | 5,017 | 4,546 | 6,733 | 6,354 | 5,222 | 4,624 | 6,736 | 6,307 | -0.66% | -0.39% | -0.81% | -0.44% |
| | I-64 WB to I-264 WB | 29,310 | 30,686 | 28,337 | 29,995 | 27,802 | 30,075 | 28,158 | 30,332 | 27,976 | -0.53% | -0.50% | -0.44% | -0.54% |
| | I-64 WB to I-264 EB | 7,529 | 7,764 | 6,811 | 7,656 | 6,380 | 7,722 | 6,567 | 7,698 | 6,682 | -0.87% | -1.21% | -1.07% | -0.94% |
| | I-264 EB to I-64 EB | 26,370 | 27,512 | 29,152 | 26,429 | 27,731 | 27,226 | 28,834 | 26,683 | 28,041 | 0.39% | 0.32% | 0.38% | 0.33% |
| | I-264 WB to I-64 EB | 8,854 | 9,464 | 5,805 | 9,016 | 5,641 | 9,398 | 5,715 | 9,095 | 5,666 | -3.21% | -3.08% | -3.26% | -3.11% |
| VMT/VHT | Regional VMT | 28,725,716 | 30,332,870 | 34,950,316 | 30,356,222 | 34,974,323 | 30,340,393 | 34,957,440 | 30,350,409 | 34,969,776 | 0.95% | -0.94% | 0.95% | 0.95% |
| | Regional VHT | 907,568 | 956,150 | 1,095,870 | 954,762 | 1,093,958 | 955,702 | 1,095,344 | 955,029 | 1,094,259 | 0.91% | -0.91% | 0.91% | 0.91% |

Figure 3. Traffic Forecast Summary –2020 and 2045 No Build Volumes

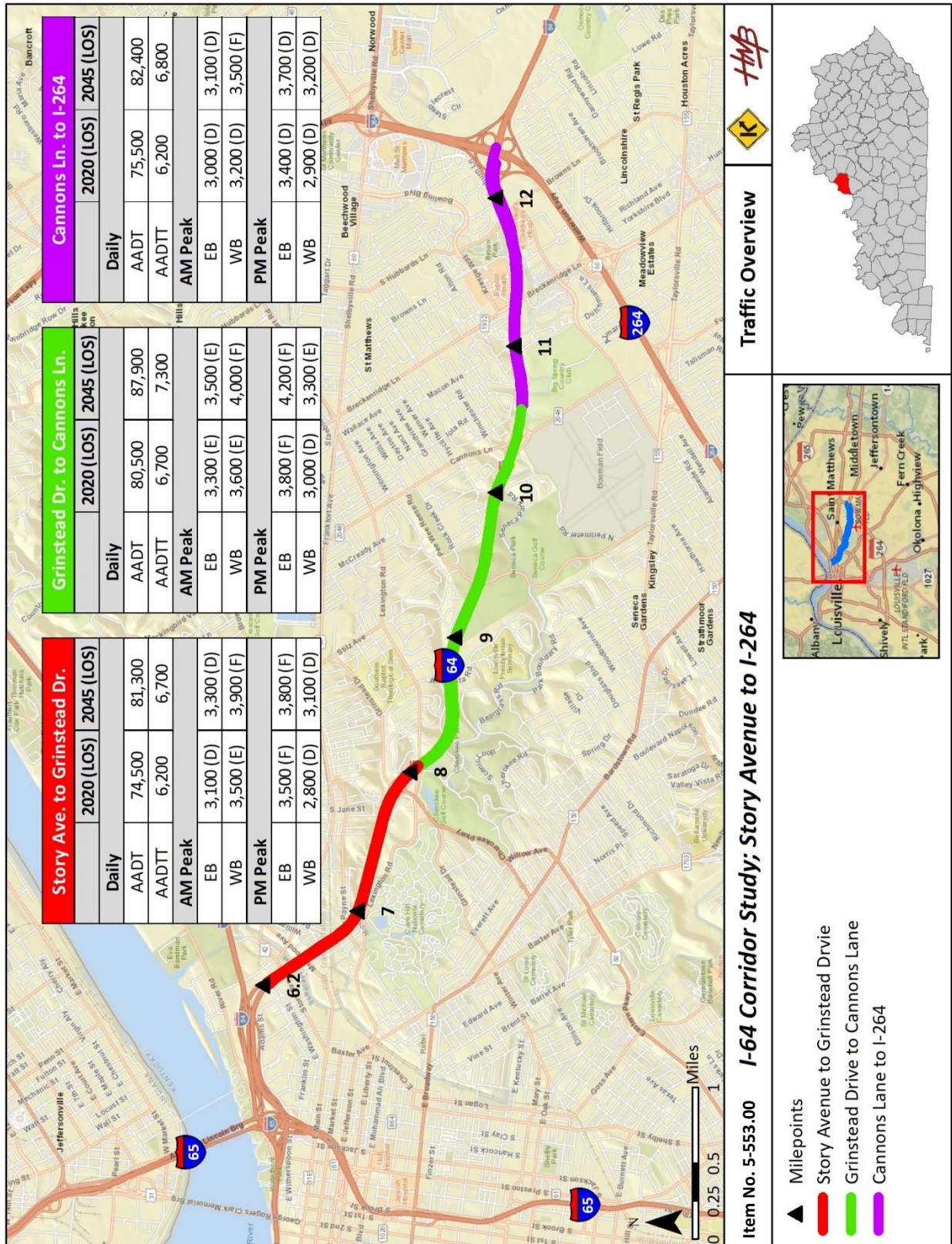


Table 3. Traffic Forecast Summary –2020, 2025, and 2045 No Build Volumes

| Segment | Route/Ramp | Beginning Description | Ending Description | 2020 AADT | 2020 AM Peak Hour | 2020 PM Peak Hour | 2025 AADT | 2025 AM Peak Hour | 2025 PM Peak Hour | 2045 AADT | 2045 AM Peak Hour | 2045 PM Peak Hour |
|------------------|--------------------------------|----------------------------------|----------------------------------|-----------|-------------------|-------------------|-----------|-------------------|-------------------|-----------|-------------------|-------------------|
| Eastbound | | | | | | | | | | | | |
| A | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | 40,000 | 3,600 | 3,500 | 40,700 | 3,700 | 3,600 | 43,700 | 3,900 | 3,800 |
| - | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | 6,500 | 600 | 500 | 6,600 | 600 | 500 | 7,100 | 700 | 500 |
| - | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | 3,500 | 100 | 500 | 3,600 | 100 | 500 | 3,800 | 100 | 500 |
| B | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | 37,000 | 3,100 | 3,500 | 37,700 | 3,200 | 3,600 | 40,400 | 3,300 | 3,800 |
| - | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | 3,300 | 300 | 300 | 3,400 | 300 | 300 | 3,600 | 300 | 300 |
| - | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | 6,800 | 500 | 600 | 6,900 | 500 | 600 | 7,400 | 500 | 700 |
| C | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | 40,500 | 3,300 | 3,800 | 41,200 | 3,400 | 3,900 | 44,200 | 3,500 | 4,200 |
| - | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | 6,900 | 600 | 700 | 7,000 | 600 | 700 | 7,500 | 700 | 800 |
| - | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | 3,400 | 300 | 300 | 3,500 | 300 | 300 | 3,700 | 300 | 300 |
| D | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | 37,000 | 3,000 | 3,400 | 37,700 | 3,100 | 3,500 | 40,400 | 3,100 | 3,700 |
| - | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | 10,200 | 700 | 1,200 | 10,400 | 700 | 1,200 | 11,100 | 800 | 1,300 |
| E | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | 26,800 | 2,300 | 2,200 | 27,300 | 2,400 | 2,300 | 29,200 | 2,300 | 2,400 |
| Westbound | | | | | | | | | | | | |
| E | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | 32,000 | 2,700 | 2,400 | 32,600 | 2,800 | 2,500 | 34,900 | 3,000 | 2,700 |
| - | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | 6,500 | 500 | 500 | 6,600 | 500 | 500 | 7,100 | 500 | 500 |
| D | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | 38,500 | 3,200 | 2,900 | 39,200 | 3,300 | 3,000 | 42,000 | 3,500 | 3,200 |
| - | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | 4,300 | 300 | 400 | 4,400 | 300 | 400 | 4,700 | 300 | 400 |
| - | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | 5,800 | 700 | 500 | 5,900 | 700 | 500 | 6,300 | 800 | 500 |
| C | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | 40,000 | 3,600 | 3,000 | 40,700 | 3,700 | 3,100 | 43,700 | 4,000 | 3,300 |
| - | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | 6,800 | 400 | 500 | 6,900 | 400 | 500 | 7,400 | 400 | 500 |
| - | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | 4,300 | 300 | 300 | 4,400 | 300 | 300 | 4,700 | 300 | 300 |
| B | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | 37,500 | 3,500 | 2,800 | 38,200 | 3,600 | 2,900 | 40,900 | 3,900 | 3,100 |
| - | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | 3,200 | 300 | 200 | 3,300 | 300 | 200 | 3,500 | 300 | 200 |
| - | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | 15,300 | 1,400 | 1,100 | 15,600 | 1,400 | 1,100 | 16,700 | 1,500 | 1,200 |
| - | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | 5,700 | 400 | 500 | 5,800 | 400 | 500 | 6,200 | 400 | 500 |
| A | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | 24,700 | 2,200 | 2,000 | 25,100 | 2,300 | 2,100 | 27,000 | 2,500 | 2,200 |

Table 4. Traffic Forecast Summary – Build 2025 and 2045 Volumes

| Segment | Route/Ramp | Beginning Description | Ending Description | Build - Full Widening | | | | | | Build - Partial Widening | | | | | | Build - Express Lane | | | | | | | | | |
|------------------|--------------------------------|----------------------------------|----------------------------------|-----------------------|-------------------|-------------------|-----------|-------------------|-------------------|--------------------------|-------------------|-------------------|-----------|-------------------|-------------------|----------------------|------------------------------|----------------------------------|------------------------------|----------------------------------|-----------|------------------------------|----------------------------------|------------------------------|----------------------------------|
| | | | | 2025 AADT | 2025 AM Peak Hour | 2025 PM Peak Hour | 2045 AADT | 2045 AM Peak Hour | 2045 PM Peak Hour | 2025 AADT | 2025 AM Peak Hour | 2025 PM Peak Hour | 2045 AADT | 2045 AM Peak Hour | 2045 PM Peak Hour | 2025 AADT | 2025 AM Peak Hour (Mainline) | 2025 AM Peak Hour (Express Lane) | 2025 PM Peak Hour (Mainline) | 2025 PM Peak Hour (Express Lane) | 2045 AADT | 2045 AM Peak Hour (Mainline) | 2045 AM Peak Hour (Express Lane) | 2045 PM Peak Hour (Mainline) | 2045 PM Peak Hour (Express Lane) |
| Eastbound | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | 46,700 | 4,200 | 4,100 | 51,600 | 4,600 | 4,500 | 42,900 | 3,900 | 3,800 | 46,300 | 4,200 | 4,100 | 46,600 | 3,700 | | 4,100 | | 51,500 | 3,900 | | 4,500 | |
| - | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | 6,300 | 600 | 500 | 7,000 | 700 | 600 | 6,400 | 600 | 500 | 7,000 | 600 | 500 | 6,300 | 600 | | 500 | | 7,000 | 700 | | 600 | |
| - | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | 4,600 | 100 | 600 | 5,100 | 100 | 700 | 4,100 | 100 | 600 | 4,400 | 100 | 600 | 4,500 | 100 | | 600 | | 5,000 | 200 | | 700 | |
| B | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | 45,000 | 3,700 | 4,200 | 49,700 | 4,000 | 4,600 | 40,600 | 3,400 | 3,900 | 43,800 | 3,700 | 4,200 | 44,800 | 3,200 | N/A | 1,900 | 2,300 | 49,500 | 3,400 | N/A | 2,100 | 2,500 |
| - | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | 3,900 | 300 | 300 | 4,300 | 300 | 300 | 4,300 | 400 | 400 | 4,700 | 400 | 400 | 3,900 | 300 | | 300 | | 4,300 | 300 | | 300 | |
| - | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | 7,300 | 500 | 700 | 8,100 | 600 | 700 | 6,100 | 400 | 500 | 6,500 | 400 | 500 | 7,200 | 500 | | 600 | | 8,000 | 500 | | 700 | |
| C | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | 48,400 | 3,900 | 4,600 | 53,500 | 4,300 | 5,000 | 42,400 | 3,400 | 4,000 | 45,300 | 3,700 | 4,300 | 48,100 | 3,400 | N/A | 2,200 | 2,300 | 53,100 | 3,600 | N/A | 2,500 | 2,500 |
| - | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | 7,600 | 700 | 800 | 8,400 | 800 | 900 | 6,800 | 600 | 700 | 7,300 | 600 | 800 | 7,700 | 600 | | 800 | | 8,500 | 700 | | 900 | |
| - | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | 3,100 | 300 | 300 | 3,400 | 300 | 300 | 3,500 | 300 | 300 | 3,800 | 300 | 300 | 3,100 | 300 | | 300 | | 3,400 | 300 | | 300 | |
| D | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | 43,900 | 3,500 | 4,100 | 48,500 | 3,800 | 4,400 | 39,100 | 3,100 | 3,600 | 42,000 | 3,400 | 3,800 | 43,500 | 3,100 | N/A | 1,700 | 2,300 | 48,100 | 3,200 | N/A | 1,900 | 2,500 |
| - | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | 14,100 | 900 | 1,600 | 15,600 | 1,000 | 1,800 | 11,500 | 800 | 1,400 | 12,700 | 900 | 1,500 | 14,100 | 700 | | 1,600 | | 15,600 | 700 | | 1,800 | |
| E | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | 29,800 | 2,600 | 2,500 | 32,900 | 2,800 | 2,600 | 27,600 | 2,300 | 2,200 | 29,800 | 2,500 | 2,300 | 29,400 | 2,400 | | 2,400 | | 32,500 | 2,500 | | 2,600 | |
| Westbound | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | 35,700 | 3,000 | 2,600 | 39,400 | 3,300 | 2,900 | 33,800 | 2,800 | 2,500 | 36,700 | 3,000 | 2,700 | 34,700 | 2,900 | | 2,500 | | 38,300 | 3,100 | | 2,700 | |
| - | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | 9,600 | 700 | 700 | 10,600 | 800 | 800 | 7,900 | 600 | 600 | 8,500 | 600 | 600 | 9,400 | 700 | | 500 | | 10,400 | 800 | | 600 | |
| D | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | 45,300 | 3,700 | 3,300 | 50,100 | 4,100 | 3,700 | 41,700 | 3,400 | 3,100 | 44,700 | 3,600 | 3,300 | 44,100 | 1,300 | 2,300 | 3,000 | N/A | 48,700 | 1,400 | 2,500 | 3,300 | N/A |
| - | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | 4,400 | 300 | 400 | 4,900 | 300 | 400 | 5,400 | 400 | 500 | 5,600 | 400 | 500 | 4,200 | 300 | | 400 | | 4,600 | 300 | | 400 | |
| - | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | 6,800 | 800 | 600 | 7,500 | 900 | 700 | 5,800 | 700 | 500 | 6,300 | 800 | 500 | 6,900 | 800 | | 500 | | 7,600 | 900 | | 600 | |
| C | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | 47,700 | 4,200 | 3,500 | 52,700 | 4,700 | 4,000 | 42,100 | 3,700 | 3,100 | 45,000 | 4,000 | 3,300 | 46,800 | 1,800 | 2,300 | 3,100 | N/A | 51,700 | 2,000 | 2,500 | 3,500 | N/A |
| - | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | 7,600 | 400 | 600 | 8,400 | 400 | 700 | 6,400 | 400 | 500 | 6,900 | 400 | 500 | 7,500 | 400 | | 500 | | 8,300 | 400 | | 600 | |
| - | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | 4,900 | 300 | 300 | 5,400 | 300 | 300 | 5,500 | 400 | 400 | 5,900 | 400 | 400 | 5,000 | 300 | | 300 | | 5,500 | 300 | | 300 | |
| B | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | 45,000 | 4,100 | 3,200 | 49,700 | 4,600 | 3,600 | 41,200 | 3,700 | 3,000 | 44,200 | 4,000 | 3,200 | 44,300 | 1,700 | 2,300 | 2,900 | N/A | 48,900 | 1,900 | 2,500 | 3,200 | N/A |
| - | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | 4,200 | 400 | 300 | 4,600 | 400 | 300 | 3,500 | 300 | 200 | 3,800 | 300 | 200 | 4,200 | 400 | | 200 | | 4,600 | 400 | | 200 | |
| - | I-64 WB: I-65 Off-Ramp | Mellwood Ave | I-65 | 21,000 | 1,900 | 1,500 | 23,200 | 2,100 | 1,700 | 19,500 | 1,600 | 1,200 | 18,800 | 1,700 | 1,300 | 21,000 | 1,900 | | 1,100 | | 23,200 | 2,100 | | 1,200 | |
| - | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | 4,900 | 300 | 400 | 5,400 | 300 | 400 | 5,400 | 400 | 500 | 5,800 | 400 | 500 | 5,000 | 300 | | 500 | | 5,500 | 300 | | 600 | |
| A | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | 24,700 | 2,100 | 1,800 | 27,300 | 2,400 | 2,000 | 23,600 | 2,200 | 2,100 | 27,600 | 2,400 | 2,200 | 24,100 | 2,000 | | 2,100 | | 26,600 | 2,200 | | 2,400 | |

Table 5. Design Factors

| Count ID | Route/Ramp | Beginning Description | Ending Description | K Factor | D Factor | % Trucks |
|------------------|--------------------------------|----------------------------------|----------------------------------|----------|----------|----------|
| Eastbound | | | | | | |
| G97 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | 12.30 | 59 | |
| N94 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | 18.80 | 59 | |
| N95 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | 11.30 | 59 | |
| A28 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | 12.10 | 59 | 8.27 |
| M02 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | 9.20 | 54 | |
| M03 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | 13.50 | 53 | 2.35 |
| A26 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | 9.50 | 59 | 8.27 |
| Westbound | | | | | | |
| B34 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | 12.20 | 53 | |
| A26 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | 9.50 | 59 | 8.27 |
| M00 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | 15.10 | 100 | 1.70 |
| M01 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | 14.80 | 53 | 1.50 |
| A28 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | 9.20 | 54 | 8.27 |
| N97 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | 12.60 | 59 | |
| N98 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | 12.60 | 59 | |
| G98 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | 11.00 | 59 | |
| G42 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | 10.90 | 59 | |

Table 6. Truck Volumes

| Segment | Direction | 2025 AADT | 2025 Peak Hour Volume | | 2045 AADT | 2045 Peak Hour Volume | |
|---------------------------------|-----------|-----------|-----------------------|-----|-----------|-----------------------|-----|
| | | | AM | PM | | AM | PM |
| No Build | | | | | | | |
| Story Avenue to Grinstead Drive | EB | 3,100 | 260 | 300 | 3,300 | 270 | 310 |
| | WB | 3,200 | 300 | 240 | 3,400 | 320 | 260 |
| Grinstead Drive to Cannons Lane | EB | 3,400 | 280 | 320 | 3,700 | 290 | 350 |
| | WB | 3,400 | 310 | 260 | 3,600 | 330 | 270 |
| Cannons Lane to I-264 | EB | 3,100 | 260 | 290 | 3,300 | 260 | 310 |
| | WB | 3,200 | 270 | 250 | 3,500 | 290 | 260 |
| Full Widening | | | | | | | |
| Story Avenue to Grinstead Drive | EB | 3,700 | 310 | 350 | 4,100 | 330 | 380 |
| | WB | 3,700 | 340 | 260 | 4,100 | 380 | 300 |
| Grinstead Drive to Cannons Lane | EB | 4,000 | 320 | 380 | 4,400 | 360 | 410 |
| | WB | 3,900 | 350 | 290 | 4,400 | 390 | 330 |
| Cannons Lane to I-264 | EB | 3,600 | 290 | 340 | 4,000 | 310 | 360 |
| | WB | 3,700 | 310 | 270 | 4,100 | 340 | 310 |
| Partial Widening | | | | | | | |
| Story Avenue to Grinstead Drive | EB | 3,400 | 280 | 320 | 3,600 | 310 | 350 |
| | WB | 3,400 | 310 | 250 | 3,700 | 330 | 260 |
| Grinstead Drive to Cannons Lane | EB | 3,500 | 280 | 330 | 3,700 | 310 | 360 |
| | WB | 3,500 | 310 | 260 | 3,700 | 330 | 270 |
| Cannons Lane to I-264 | EB | 3,200 | 260 | 300 | 3,500 | 280 | 310 |
| | WB | 3,400 | 280 | 260 | 3,700 | 300 | 270 |
| Express Lane | | | | | | | |
| Story Avenue to Grinstead Drive | EB | 3,700 | 260 | 160 | 4,100 | 280 | 170 |
| | WB | 3,700 | 140 | 240 | 4,000 | 160 | 260 |
| Grinstead Drive to Cannons Lane | EB | 4,000 | 280 | 180 | 4,400 | 300 | 210 |
| | WB | 3,900 | 150 | 260 | 4,300 | 170 | 290 |
| Cannons Lane to I-264 | EB | 3,600 | 260 | 140 | 4,000 | 260 | 160 |
| | WB | 3,600 | 110 | 250 | 4,000 | 120 | 270 |

POPULATION

Population data was obtained from the Kentucky State Data Center for Kentucky and Jefferson county to assist with the determination of a growth rate. **Table 7** provides historical population growth by decade. **Table 8** displays population projections by decade.

Table 7. Historical Population Growth

| | 1990 | 2000 | 2010 | % Growth (2000-2010) | Annual Growth |
|-----------|-----------|-----------|-----------|----------------------|---------------|
| Kentucky | 3,685,296 | 4,041,769 | 4,339,367 | 7.4% | 0.2% |
| Jefferson | 665,123 | 693,604 | 741,096 | 6.8% | 0.2% |

Source: Kentucky State Data Center (Vintage 2016)

Table 8. Population Projections

| | 2010 Census | 2019 Estimate | 2020 | 2030 | 2040 | % Growth (2010-2040) | Annual Growth |
|-----------|-------------|---------------|-----------|-----------|-----------|----------------------|---------------|
| Kentucky | 4,339,367 | 4,461,153 | 4,533,464 | 4,762,382 | 4,886,381 | 12.6% | 0.4% |
| Jefferson | 741,096 | 766,757 | 790,010 | 837,477 | 875,459 | 18.1% | 0.6% |

Source: Kentucky State Data Center (Vintage 2016)

| LOS - No Build | | | | | | | |
|--------------------------------------|--------------------------------|----------------------------------|----------------------------------|---------------|---------------|---------------|---------------|
| Segment | Route/Ramp | Beginning Description | Ending Description | 2020 AM Peak | 2020 PM Peak | 2045 AM Peak | 2045 PM Peak |
| Eastbound | | | | | | | |
| A | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | C | C | C | C |
| - | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | C | C | C | F |
| - | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | D | D | D | F |
| B | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | D | F | D | F |
| - | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | D | F | E | F |
| - | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | D | F | D | F |
| C | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | E | F | E | F |
| - | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | E | F | E | F |
| - | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | C | C | C | C |
| D | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | D | D | D | D |
| - | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | D | D | D | F |
| E | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | C | B | C | B |
| Facility Travel Time(min)/LOS | | | | 6.90/D | 8.10/F | 7.10/D | 9.60/F |
| Westbound | | | | | | | |
| E | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | C | C | D | C |
| - | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | D | C | D | D |
| D | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | D | D | F | D |
| - | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | D | D | F | D |
| - | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | D | D | F | D |
| C | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | E | D | F | D |
| - | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | E | D | F | D |
| - | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | D | C | F | D |
| B | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | E | D | F | D |
| - | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | E | D | F | D |
| - | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | C | B | C | B |
| - | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | B | B | B |
| A | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | C | C | C | C |
| Facility Travel Time/LOS | | | | 7.00/E | 6.50/D | 8.40/F | 6.70/D |

LOS - Build (Full Widening)

| Segment | HCS Segment | Route/Ramp | Beginning Description | Ending Description | 2025 AM Peak | 2025 PM Peak | 2045 AM Peak | 2045 PM Peak |
|--------------------------------------|-------------|--------------------------------|----------------------------------|----------------------------------|---------------|---------------|---------------|---------------|
| Eastbound | | | | | | | | |
| A | 1 | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | D | D | D | D |
| - | 2 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | C | C | D | C |
| - | 4 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | C | C | C | D |
| B | 5 | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | C | D | C | D |
| - | 6 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | C | D | D | D |
| - | 8 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | C | D | C | D |
| C | 9/10 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | C | D | D | E |
| - | 11 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | D | D | D | D |
| - | 13 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | B | C | C | C |
| D | 14 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | C | D | C | D |
| - | 15 | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | C | D | D | F |
| E | 16 | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | B | B | B | B |
| Facility Travel Time(min)/LOS | | | | | 6.60/C | 6.70/D | 6.60/C | 7.00/F |
| Westbound | | | | | | | | |
| E | 1 | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | C | B | C | C |
| - | 2 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | C | C | C | C |
| D | 3 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | C | C | D | C |
| - | 4 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | C | C | D | C |
| - | 6 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | C | C | D | C |
| C | 7/8 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | D | C | D | C |
| - | 9 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | D | C | D | D |
| - | 11 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | C | B | C | C |
| B | 12 | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | D | C | D | C |
| - | 13 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | D | C | D | C |
| - | 14 | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | B | B | C | B |
| - | 16 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | B | B | B |
| A | 17 | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | B | B | B | B |
| Facility Travel Time/LOS | | | | | 6.30/C | 6.20/C | 6.40/D | 6.20/C |

LOS - Build (Partial Widening)

| Segment | HCS Segment | Route/Ramp | Beginning Description | Ending Description | 2025 AM Peak | 2025 PM Peak | 2045 AM Peak | 2045 PM Peak |
|--------------------------------------|-------------|--------------------------------|----------------------------------|----------------------------------|---------------|---------------|---------------|---------------|
| Eastbound | | | | | | | | |
| A | 1 | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | C | C | D | D |
| - | 2 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | C | C | C | C |
| - | 4 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | C | C | C | C |
| B | 5 | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | C | C | C | F |
| - | 6 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | C | F | C | F |
| - | 8 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | D | F | D | F |
| C | 9/10 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | E | F | F | F |
| - | 11 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | E | F | F | F |
| - | 13 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | C | C | C | C |
| D | 14 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | C | C | C | C |
| - | 15 | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | C | C | C | C |
| E | 16 | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | C | B | C | B |
| Facility Travel Time(min)/LOS | | | | | 6.80/D | 8.20/F | 7.30/F | 9.20/F |
| Westbound | | | | | | | | |
| E | 1 | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | D | C | D | C |
| - | 2 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | C | C | C | C |
| D | 3 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | C | C | C | C |
| - | 4 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | C | C | F | C |
| - | 6 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | D | D | F | D |
| C | 7/8 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | F | D | F | E |
| - | 9 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | F | D | F | E |
| - | 11 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | C | C | C | C |
| B | 12 | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | C | C | C | C |
| - | 13 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | C | C | C | C |
| - | 14 | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | B | B | B | B |
| - | 16 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | B | B | B |
| A | 17 | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | B | B | B | B |
| Facility Travel Time/LOS | | | | | 6.80/F | 6.30/C | 7.90/F | 6.40/C |

LOS - Build (Modified Partial)

| Segment | HCS Segment | Route/Ramp | Beginning Description | Ending Description | 2025 AM Peak | 2025 PM Peak | 2045 AM Peak | 2045 PM Peak |
|--------------------------------------|-------------|--------------------------------|----------------------------------|----------------------------------|---------------|---------------|---------------|---------------|
| Eastbound | | | | | | | | |
| A | 1 | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | C | C | D | D |
| - | 2 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | C | C | C | C |
| - | 4 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | C | C | C | C |
| B | 5 | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | C | C | C | D |
| - | 6 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | C | F | C | F |
| - | 8 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | C | F | F | F |
| C | 9/10 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | E | F | F | F |
| - | 11 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | C | C | C | C |
| - | 13 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | B | B | B | B |
| D | 14 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | C | C | C | C |
| - | 15 | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | C | C | C | C |
| E | 16 | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | C | B | C | B |
| Facility Travel Time(min)/LOS | | | | | 6.50/C | 7.90/F | 7.10/F | 8.60/F |
| Westbound | | | | | | | | |
| E | 1 | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | D | C | D | C |
| - | 2 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | C | C | C | C |
| D | 3 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | C | C | C | C |
| - | 4 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | C | C | C | C |
| - | 6 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | C | B | F | C |
| C | 7/8 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | F | D | F | E |
| - | 9 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | C | C | C | C |
| - | 11 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | C | B | C | C |
| B | 12 | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | C | C | C | C |
| - | 13 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | C | C | C | C |
| - | 14 | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | B | B | B | B |
| - | 16 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | B | B | B |
| A | 17 | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | B | B | B | B |
| Facility Travel Time/LOS | | | | | 6.60/F | 6.30/C | 7.90/F | 6.40/C |

LOS - Build (One Lane Express Lane)

| Segment | HCS Segment | Route/Ramp | Beginning Description | Ending Description | 2025 AM Peak | 2025 PM Peak | 2045 AM Peak | 2045 PM Peak |
|--------------------------------------|-------------|--------------------------------|----------------------------------|----------------------------------|--------------|--------------|--------------|--------------|
| Eastbound | | | | | | | | |
| A | 1 | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | | D | | D |
| - | 2 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | | C | | C |
| - | 4 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | | C | | D |
| B | 5 | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | | D | | D |
| - | 6 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | | D | | D |
| - | 8 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | | D | | D |
| C | 9/10 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | | D | | E |
| - | 11 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | | D | | E |
| - | 13 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | | C | | C |
| D | 14 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | | C | | F |
| - | 15 | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | | C | | C |
| E | 16 | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | | C | | C |
| Facility Travel Time(min)/LOS | | | | | | | 6.70/D | 7.80/F |
| Westbound | | | | | | | | |
| E | 1 | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | D | | F | |
| - | 2 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | D | | F | |
| D | 3 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | E | | F | |
| - | 4 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | C | | C | |
| - | 6 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | C | | C | |
| C | 7/8 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | C | | D | |
| - | 9 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | D | | D | |
| - | 11 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | C | | C | |
| B | 12 | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | B | | C | |
| - | 13 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | C | | C | |
| - | 14 | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | B | | B | |
| - | 16 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | | B | |
| A | 17 | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | C | | B | |
| Facility Travel Time/LOS | | | | | | 7.00/F | | 7.60/F |

LOS - Build (Two Lane Express Lanes)

| Segment | HCS Segment | Route/Ramp | Beginning Description | Ending Description | 2025 AM Peak | 2025 PM Peak | 2045 AM Peak | 2045 PM Peak |
|--------------------------------------|-------------|--------------------------------|----------------------------------|----------------------------------|--------------|--------------|--------------|--------------|
| Eastbound | | | | | | | | |
| A | 1 | I-64 EB | I-64 EB (MP 6.200) | Story Ave (Exit 7) (MP 6.303) | | D | | D |
| - | 2 | I-64 EB: Story Ave Off-Ramp | I-64 EB | Story Ave | | C | | C |
| - | 4 | I-64 EB: Mellwood Ave On-Ramp | Mellwood Ave | I-64 EB | | D | | D |
| B | 5 | I-64 EB | Mellwood Ave (Exit 7) (MP 6.303) | Grinstead Dr (Exit 8) (MP 7.809) | | C | | C |
| - | 6 | I-64 EB: Grinstead Dr Off-Ramp | I-64 EB | Grinstead Dr | | C | | C |
| - | 8 | I-64 EB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 EB | | C | | C |
| C | 9/10 | I-64 EB | Grinstead Dr (Exit 8) (MP 7.809) | Cannons Ln (Exit 10) (MP 10.308) | | C | | C |
| - | 11 | I-64 EB: Cannons Ln Off-Ramp | I-64 EB | Cannons Ln | | D | | D |
| - | 13 | I-64 EB: Cannons Ln On-Ramp | Cannons Ln | I-64 EB | | B | | B |
| D | 14 | I-64 EB | Cannons Ln (Exit 10) (MP 10.308) | I-264 (Exit 12) (MP 12.275) | | C | | C |
| - | 15 | I-64 EB: I-264 Off-Ramp | I-64 EB | I-264 (Exit 12) | | C | | C |
| E | 16 | I-64 EB | I-264 (Exit 12) (MP 12.275) | I-64 EB (MP 12.5) | | C | | C |
| Facility Travel Time(min)/LOS | | | | | | | 6.70/C | 6.70/F |
| Westbound | | | | | | | | |
| E | 1 | I-64 WB | I-64 WB (MP 12.5) | I-264 (Exit 12) (MP 12.275) | D | | F | |
| - | 2 | I-264 WB to I-64 WB | I-264 (Exit 12) | I-64 WB | D | | F | |
| D | 3 | I-64 WB | I-264 (Exit 12) (MP 12.275) | Cannons Ln (Exit 10) (MP 10.308) | F | | F | |
| - | 4 | I-64 WB: Cannons Ln Off-Ramp | I-64 WB | Cannons Ln | B | | B | |
| - | 6 | I-64 WB: Cannons Ln On-Ramp | Cannons Ln | I-64 WB | B | | B | |
| C | 7/8 | I-64 WB | Cannons Ln (Exit 10) (MP 10.308) | Grinstead Dr (Exit 8) (MP 7.809) | B | | B | |
| - | 9 | I-64 WB: Grinstead Dr Off-Ramp | I-64 WB | Grinstead Dr | B | | B | |
| - | 11 | I-64 WB: Grinstead Dr On-Ramp | Grinstead Dr | I-64 WB | B | | B | |
| B | 12 | I-64 WB | Grinstead Dr (Exit 8) (MP 7.809) | Mellwood Ave (Exit 7) (MP 6.303) | B | | B | |
| - | 13 | I-64 WB: Mellwood Ave Off-Ramp | I-64 WB | Mellwood Ave | C | | C | |
| - | 14 | I-64 WB: I-65 Off-Ramp | Melwood Ave | I-65 | B | | B | |
| - | 16 | I-64 WB: Story Ave On-Ramp | Story Ave | I-64 WB | B | | B | |
| A | 17 | I-64 WB | Story Ave (Exit 7) (MP 6.303) | I-64 EB (MP 6.200) | C | | B | |
| Facility Travel Time/LOS | | | | | | 7.90/F | | 7.90/F |