

## APPENDIX A

Figures



## Primary Arterial

Proposed typical cross-section for Mount Comfort Rd \& U.S. 40


Notes:

1. Alternative configurations for the pedestrian / bicycle facilities could be implemented such as one-way / two-way cycle track and separate 5 foot sidewalk.
2. Dedicated left-turn and right-turn lanes to be provided at intersections as needed

## Secondary Arterial

Proposed typical cross-section for German Church Rd


1. Existing right-of-way width appears to vary from $70^{\prime}$ to $120^{\prime}$
2. Existing landscape width varies.
3. Existing sidewalk width varies: None, $5^{\prime}$, or $8^{\prime}$

## Future Major / Minor Collector



Notes:

1. This typical cross-section represents the desirable right-of-way width and components for a future collector roadway (either major or minor).
2. Dedicated left-turn and right-turn lanes to be provided at intersections as needed.

## Existing Major / Minor Collector

Existing typical cross-section varies
Examples: C.R. 700 W \& E 21st St (C.R. 100 N)

1. Existing right-of-way width appears to vary from 50' to 100'

2. Existing landscape width varies: typically 10' wide
3. Existing sidewalk width varies: None, 6' or 8'
4. The pedestrian and bicycle components shown above for Future Collectors should be added whenever possible


Town of Cumberland, Indiana Transportation Master Plan

## Local Roads



Town of Cumberland, Indiana Transportation Master Plan









Alternate A
(see also the conceptual site plan within the separate Pennsy Trail \& Carroll Rd Corridor Reuse Plan)

## Alternate B

(another possible alternate could locate the future traffic signal at Buck Creek Rd. Carroll Rd could hen be re-aligned with Buck Creek Rd)


## LEGEND

| Existing | Future | Functional Classification |
| :---: | :---: | :---: |
|  | N/A | Primary Arterial |
|  | - | Major Collector |
|  | - | Minor Collector |
| (See Note 2) | - | Local Road |

$\bigcirc=$ Existing Traffic Signal
$\bigcirc=$ Recommended Traffic Signal (when warranted)
= Access Control to be Determined on a Case-By-Case Basis; Recommended Left-in Right-in / Right-out (LI/RI/RO)
$\square$ = Approximate Parcel Boundaries
NOTES (same notes for all recommended access figures): 1. All roadway classifications should include pedestrian / bicycl accommodations.
2. All existing roadways not classified under any of the above 2. classifications fall under the category of Local Road. 3. Conceptual future Local Roads are shown for the sole purpose of recommending access locations along Mt. Comfor Road and U.S. 40. The specific alignment of any future Local Road can vary significantly from what is shown as long as th access recommendations are implemented.
The specific alignment of any future Local Road should provide curvature in order to discourage cut-through traffic.
5. Access along Mt. Comfort Road and U.S. 40 should ideally be limited to the recommended left-in / right-in / right-out (LI/RI/RO) intersections which are located approximate mile center-to-center between the traffic signals. The LI/RI/RO locations can vary slightly as needed.
6. Right-in / right-out (RI/RO) access driveways may also be located along Mt. Comfort Road and U.S. 40 between the traffic signals and LI/RI/RO's as needed but must be outside the functional area of nearby intersections.


Town of Cumberland, Indiana Access Management Plan Mt. Comfort Road and U.S. 40

February 28,2020
Recommended Access: U.S. 40 Carroll / Buck Creek Alternates






## APPENDIX B

## Traffic Data and Level-Of-Service



| Year | AADT | DHV-30 | к\% | D\% | PA | вс | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{2019}$ | 16,048 |  |  |  | $\begin{aligned} & 15,604 \\ & (97 \%) \end{aligned}$ | 443 (3\%) |  |
| 2018 | 16,317 |  |  |  | $\begin{aligned} & 15,880 \\ & (97 \%) \end{aligned}$ | 436 (3\%) |  |
| $\underline{2017}$ | 16,076 |  |  |  | $\begin{aligned} & 13,726 \\ & (85 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2,349 \\ & (15 \%) \\ & \hline \end{aligned}$ |  |
| 2016 | 16,986 |  | 10 | 61 |  |  | Grown from 2015 |
| 2015 | 16,935 |  | 10 | 61 |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Grown from } \\ 2014 \end{array} \\ \hline \end{array}$ |
| 2014 | 16,570 | 1,730 | 10 | 61 |  |  | Grown from <br> 2013 |
| $\underline{2013}$ | 16,406 | 1,713 | 10 | 61 |  |  |  |
| 2012 | 16,547 |  |  |  |  |  | Grown from <br> 2011 |
| 2011 | 16,564 |  |  |  |  |  | $\begin{gathered} \text { Grown from } \\ 2010 \end{gathered}$ |
| $\underline{2010}$ | 16,271 |  |  |  |  |  |  |

CAGR

| Compound |
| :---: |
| 2013-2019 |
| $-0.37 \%$ |



| Year | AADT | DHV-30 | K \% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 12,963 |  | 10 | 57 | 11,849 <br> $(91 \%)$ | $1,113(9 \%)$ | Grown from <br> 2017 |
| $\underline{\mathbf{2 0 1 7}}$ | $\underline{\mathbf{1 2 , 9 1 1}}$ | 1,325 | 10 | 57 | 11,801 <br> $(91 \%)$ | $1,109(9 \%)$ |  |
| 2016 | 14,279 |  | 11 | 61 |  |  | Grown from <br> 2015 |
| 2015 | 14,236 |  | 11 | 61 |  |  | Grown from <br> 2014 |
| 2014 | 13,930 | 1,522 | 11 | 61 |  |  | Grown from <br> 2013 |
| $\mathbf{2 0 1 3}$ | $\underline{\mathbf{1 3 , 7 9 2}}$ | 1,507 | 11 | 61 |  |  |  |
| 2012 | 15,535 |  |  |  |  |  | Grown from <br> 2011 |
| $\mathbf{2 0 1 1}$ | $\underline{15,551}$ |  |  |  |  |  |  |
| 2002 | 18,030 |  |  |  |  |  | Flowmap |
| $\mathbf{1 9 9 9}$ | 17,780 |  |  |  |  |  | Flowmap |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2017 | 12911 | $-1.64 \%$ |
| 2013 | 13792 | $-5.83 \%$ |
| 2011 | 15551 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2013-2017$ |
| $-1.64 \%$ |


| Location ID | 491100 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 2000000040 0000001 | LRS Loc Pt. | 67.82894 |
| SF Group | U2_Swg | Route Type | US Route |
| AF Group | U2_A | Route | 40 |
| GF Group | U2_Swg | Active | Yes |
| Class Dist Grp |  | Category |  |
| Seas Clss Grp |  |  |  |
| WIM Group |  |  |  |
| QC Group | JUR2SHORT |  |  |
| Fnct'l Class | Other Principal Arterial (OPA) | Milepost |  |
| Located On | US 40100 FT E OF HEFLIN ST RT |  |  |
| Loc On Alias | US 40 (INC) |  |  |
| County | MARION | FIPS County Code |  |
| Community | Cumberland | \# Lanes | 0 |
| Jurisdiction | 2 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Ctrl Section MP |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| WIM Station | No | Latitude | 39.776654 |
| Virtual | No | Longitude | -85.95322 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | indianapo LIS(MARION CO) (M21) | $\begin{array}{r} \text { State } \\ \text { Owned } \end{array}$ | Yes |
| Owner ID | indot | Rural/Urban | an |
| Screenline |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{0 0 1 9}}$ | $\underline{\mathbf{1 6 , 8 8 6}}$ |  |  |  |  |  |  |
| 2018 | 15,530 |  | 10 | 60 |  |  | Grown from <br> 2017 |
| 2017 | 15,468 |  | 10 | 60 |  |  | Grown from <br> 2016 |
| $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{1 5}, 330}$ | 1,544 | 10 | 60 |  |  |  |
| 2015 | 16,255 |  | 10 | 61 |  |  | Grown from <br> 2014 |
| 2014 | 15,905 | 1,615 | 10 | 61 |  |  | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{1 5 , 7 4 8}}$ | 1,599 | 10 | 61 |  |  |  |
| 2012 | 16,383 |  |  |  |  |  | Grown from <br> 2011 |
| $\mathbf{2 0 1 1}$ | $\underline{\mathbf{1 6 , 3 9 9}}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2019 | 16886 | $3.27 \%$ |
| 2016 | 15330 | $-0.89 \%$ |
| 2013 | 15748 | $-2.00 \%$ |
| 2011 | 16399 |  |

CAGR

| Compound |
| :---: |
| $2016-2019$ |
| $3.27 \%$ |

Compound 2013-2019


| Location ID | 491096 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 2000000040 <br> 0000001 | LRS Loc Pt. | 66.95619 |
| SF Group | U2_swg | Route Type | US Route |
| AF Group | U2_A | Route | 40 |
| GF Group | U2_swg | Active | Yes |
| Class Dist <br> Grp |  | Category |  |
| Seas CIss Grp |  |  |  |
| WIM Group |  |  |  |
| Qc Group | JUR2SHOR |  |  |
| Fnct' Class |  | Milepost |  |
| Located On |  | E OF GERMAN | AN CHURCH |
| $\underset{\text { Alias }}{\text { Loc On }}$ | US 40 (INC) |  |  |
| PR | MP | PT |  |
| 0 |  |  |  |
| Less Detail |  |  |  |
| County | IARION | $\left\|\begin{array}{r} \text { FIPS County } \\ \text { Code } \end{array}\right\|$ |  |
| Community | Cumberland | \# Lanes | 0 |
| Jurisdiction | 2 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Crrı Section |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT II |  |
| WIM Station | No | Latitude | 39.775872 |
| Virtual | No | Longitude | -85.969587 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | $\left\{\begin{array}{l} \text { INDIANAPO } \\ \text { LIS(MARION } \\ \text { CO) (M21) } \end{array}\right.$ | $\begin{gathered} \text { State } \\ \text { owned } \end{gathered}$ | Yes |
| Owner ID | indot | Ruralurban | Urban |
| Screenline <br> IDs |  |  |  |
| $\begin{aligned} & \text { Days Since } \\ & \text { Last Count } \\ & \text { Check } \end{aligned}$ |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{3 9 , 5 7 6}}$ |  |  |  | 38,300 <br> $(97 \%)$ | $1,275(3 \%)$ |  |
| 2018 | 18,767 |  | 10 | 56 |  |  | Grown from <br> 2017 |
| 2017 | 18,692 |  | 10 | 56 |  |  | Grown from <br> 2016 |
| $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{1 8 , 5 2 5}}$ | 1,886 | 10 | 56 |  |  |  |
| 2015 | 19,495 |  | 10 | 59 |  |  | Grown from <br> 2014 |
| 2014 | 19,075 | 1,847 | 10 | 59 |  |  | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{1 8 , 8 8 6}}$ | 1,829 | 10 | 59 |  |  | Grown from <br> 2011 |
| 2012 | 19,291 |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 1 1}}$ | $\underline{\mathbf{1 9 , 3 1 0}}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2019 | 39,576 | $\mathbf{2 8 . 7 9 \%}$ |
| 2016 | 18,525 | $-0.64 \%$ |
| 2013 | 18,886 | $-1.10 \%$ |
| 2011 | 19,310 |  |



| Location ID | 491095 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 2000000040 <br> 0000001 | LRS Loc Pt. | 66.82732 |
| SF Group | U2_swg | Route Type | US Route |
| AF Group | U2_A | Route | 40 |
| GF Group | U2_swg | Active | Yes |
| Class Dist Grp |  | Category |  |
| $\begin{array}{r}\text { Seas Clss } \\ \text { Grp } \\ \hline\end{array}$ |  |  |  |
| WIM Group |  |  |  |
| Qc Group | JUR2SHOR |  |  |
| Fnct' Class |  | Milepost |  |
| Located On |  | W OF GERMA | AN CHURCH |
| Loc On | US 40 (INC) |  |  |
| PR | MP | PT |  |
| 0 |  |  |  |
| Less Detail |  |  |  |
| County | MARION | $\left\|\begin{array}{r} \text { FIPS County } \\ \text { code } \end{array}\right\|$ |  |
| Community |  | \# Lanes | 0 |
| Jurisdiction | 2 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control |  | Crtr Section |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT II |  |
| WIM Station | No | Latitude | 39.775758 |
| Virtual | No | Longitude | -85.972004 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | $\left\{\begin{array}{l} \text { INDIANAPO } \\ \text { LIS(MARION } \\ \text { CO) (M21) } \end{array}\right.$ | $\begin{gathered} \text { State } \\ \text { owned } \end{gathered}$ | Yes |
| Owner ID | indot | Ruralurban | Urban |
| Screenline <br> IDs |  |  |  |
| $\begin{aligned} & \text { Days Since } \\ & \text { Last Count } \\ & \text { Check } \end{aligned}$ |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{2 8 , 4 5 7}}$ |  |  |  | 27,686 <br> $(97 \%)$ | 770 (3\%) |  |
| 2018 | 22,011 |  | 10 | 60 |  |  | Grown from <br> 2017 |
| 2017 | 21,923 |  | 10 | 60 |  |  | Grown from <br> 2016 |
| $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{2 1 , 7 2 7}}$ | 2,077 | 10 | 60 |  |  |  |
| 2015 | 22,790 |  | 9 | 59 |  |  | Grown from <br> 2014 |
| 2014 | 22,299 | 2,069 | 9 | 59 |  |  | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{2 2 , 0 7 8}}$ | 2,048 | 9 | 59 |  |  | Grown from <br> 2011 |
| 2012 | 22,134 |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 1 1}}$ | $\underline{\mathbf{2 2 , 1 5 6}}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2019 | 28,457 | $9.41 \%$ |
| 2016 | 21,727 | $-0.53 \%$ |
| 2013 | 22,078 | $-0.18 \%$ |
| 2011 | 22,156 |  |


| CAGR | US 40 (100' E |
| :---: | :---: |
|  | Compound |
| Compound | 2016-2019 |
| 2016-2019 | 3.27\% |
| 9.41\% |  |
|  | Compound |
|  | 2013-2019 |
|  | 1.17\% |


| Compound |
| :---: |
| 2011-2019 |
| $0.37 \%$ |



| Year | AADT | DHV-30 | K \% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{3 6 , 3 7 1}}$ |  |  |  | 35,343 <br> $(97 \%)$ | $1,027(3 \%)$ |  |
| 2018 | 28,115 |  | 9 | 58 | 27,235 <br> $(970)$ | $878(3 \%)$ | Grown <br> from 2017 |
| 2017 | 28,003 |  | 9 | 58 | 27,127 <br> $(97 \%)$ | $875(3 \%)$ | Grown <br> from 2016 |
| $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{2 7 , 7 5 3}}$ | 2,541 | 9 | 58 | 26,885 <br> $(97 \%)$ | $867(3 \%)$ |  |
| 2015 | 29,591 |  | 11 | 58 |  |  | Grown <br> from 2014 |
| 2014 | 28,954 | 3,155 | 11 | 58 |  |  | Grown <br> from 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{2 8 , 6 6 7}}$ | 3,124 | 11 | 58 |  |  | Grown <br> rom 2011 |
| 2012 | 22,386 |  |  |  |  |  | Grown <br> from 2010 |
| 2011 | 22,408 |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 1 0}}$ | $\underline{\mathbf{2 2 , 0 1 2}}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |  |
| :---: | :---: | :---: | :---: |
| 2019 | 36,371 | 9.43\% | Compound |
| 2016 | 27,753 | -1.07\% | 2016-2019 |
| 2013 | 28,667 | 9.20\% | 9.43\% |
|  |  |  |  |


| US 40 (100' |
| :---: |
| Compound |
| $2016-2019$ |
| $3.27 \%$ |
| Compound |
| $2013-2019$ |
| $1.17 \%$ |
| Compound |
| $2011-2019$ |
| $0.37 \%$ |


| Location ID | 491617 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 3490000016 1000001 | LRS Loc Pt. 2 | 2.632823 |
| SF Group | U__swg | Route Type | $\begin{gathered} \text { County } \\ \text { Road } \end{gathered}$ |
| AF Group | U3_A | Route | Local |
| GF Group | U2_swg | Active | Yes |
| Class Dist Grp |  | Category |  |
| Seas Clss <br> Grp |  |  |  |
| wim Group |  |  |  |
| QC Group | Default |  |  |
| Fnct'l Class | $\begin{aligned} & \text { Minor } \\ & \text { Arterial } \end{aligned}$ | Milepost |  |
| Located On |  | URCH RD 0.10 | OMINOFUS |
| $\begin{array}{\|l\|} \hline \text { Loc On } \\ \text { Alias } \end{array}$ | GERMAN CH | URCH RD (IR 1 | 161) |
| PR | MP | PT |  |
| 0 |  |  |  |
| Less Detail |  |  |  |
| County | MARION | FIPS County Code |  |
| Community |  | \# Lanes ${ }^{\text {d }}$ | 0 |
| Jurisdiction | 3 | Surface Type |  |
| District | Greenfield | Count Cycle ${ }^{3}$ | 3 |
| Control Section |  | $\begin{array}{\|c\|c\|} \hline \text { ctrl Section } \\ \text { MP } \end{array}$ |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| WIm Station | No | Latitude | 39.776252 |
| Virtual | No | Longitude- | -85.971259 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | indianapo LIS(MARION -CO) (M21) | $\begin{array}{r}\begin{array}{r}\text { State } \\ \text { Owned }\end{array} \\ \hline\end{array}$ | No |
| Owner ID | indot | Ruralurban | Urban |
| $\begin{gathered} \hline \text { Screenline } \\ \text { IDs } \end{gathered}$ |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{1 1 , 0 2 6}}$ |  |  |  | 10,772 <br> $(98 \%)$ | $253(2 \%)$ |  |
| 2018 | 10,438 |  | 10 | 51 | 10,925 <br> $(99 \%)$ | $112(1 \%)$ | Grown from <br> 2017 |
| 2017 | 10,396 |  | 10 | 51 | 10,283 <br> $(99 \%)$ | $112(1 \%)$ | Grown from <br> 2016 |
| 2016 | 10,303 |  | 10 | 51 | 10,191 <br> $(99 \%)$ | $111(1 \%)$ | Grown from <br> 2015 |
| 2015 | 10,272 |  | 10 | 51 | 10,160 <br> $(99 \%)$ | $111(1 \%)$ | Grown from <br> 2014 |
| 2014 | 10,051 | 959 | 10 | 51 | 9,941 <br> $(99 \%)$ | $109(1 \%)$ | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{9 , 9 5 1}}$ | 949 | 10 | 51 | 9,842 <br> $(99 \%)$ | $108(1 \%)$ |  |
| 2012 | 9,749 |  |  |  |  |  | Grown from <br> 2011 |
| $\underline{\mathbf{2 0 1 1}}$ | $\underline{\mathbf{9 , 7 5 9}}$ |  |  |  |  |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2019 | 11,026 | $\mathbf{1 . 7 2 \%}$ |
| 2013 | 9,951 | $0.98 \%$ |
| 2011 | 9,759 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2013-2019$ |
| $1.72 \%$ |


| Location ID | 49W303 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | $\begin{aligned} & 5490272004 \\ & 5000001 \\ & \hline \end{aligned}$ | LRS Loc Pt. | 0.3507135 |
| SF Group | U2_SWG | Route Type | City Street |
| AF Group | U3_A | Route | Local |
| GF Group | U2_SWG | Active Yes |  |
| $\begin{array}{\|r\|} \hline \text { Class Dist } \\ \text { Grp } \end{array}$ |  | Category |  |
| $\begin{array}{r} \hline \text { Seas Clss } \\ \text { Grp } \\ \hline \end{array}$ |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct'l Class | Major Collector | Milepost |  |
| Located On | MUESSING ST 0.20 MIN OF US 40 |  |  |
| $\begin{aligned} \hline \text { Loc On } \\ \text { Alias } \end{aligned}$ | MUESSING ST |  |  |
| County | Marion | FIPS County Code |  |
| Community | Cumberland | \# Lanes | 0 |
| Jurisdiction | 5 | $\begin{array}{r} \text { Surface } \\ \text { Type } \end{array}$ |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Ctrl Section MP |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| WIM Station | No | Latitude | 39.779472 |
| Virtual | No | Longitude | -85.957239 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | IndIANAPO LIS(MARION _CO) (M21) | $\begin{aligned} & \text { State } \\ & \text { Owned } \end{aligned}$ | No |
| Owner ID | indot | Rural/Urban | Urban |
| $\begin{array}{r} \hline \text { Screenline } \\ \text { IDs } \\ \hline \end{array}$ |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | No |  |  |


| Year | AADT | DHV-30 | K \% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 1 9}$ | $\mathbf{4 , 4 3 7}$ |  |  |  |  |  |  |
| 2018 | 3,945 |  | 11 | 57 |  |  | Grown from <br> 2017 |
| 2017 | 3,929 |  | 11 | 57 |  |  | Grown from <br> 2016 |
| 2016 | 3,894 |  | 11 | 57 |  |  | Grown from <br> 2015 |
| 2015 | 3,882 |  | 11 | 57 |  |  | Grown from <br> 2014 |
| 2014 | 3,798 | 432 | 11 | 57 |  |  | Grown from <br> 2013 |
| $\mathbf{2 0 1 3}$ | $\mathbf{3 , 7 6 0}$ | 428 | 11 | 57 |  |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2019 | 4437 | $\mathbf{2 . 8 0 \%}$ |
| 2013 | 3760 |  |
|  |  |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2013-2019$ |
| $2.80 \%$ |


| Location ID | 491639 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 3490000017 <br> 3000001 | LRS Loc Pt. | 1.49309 |
| SF Group | U2_swg | Route Type | $\begin{array}{\|l\|l} \text { County } \\ \text { Road } \end{array}$ |
| AF Group | U3_A | Route | ocal |
| GF Group | U2_SWg | Active | Yes |
| Class Dist Grp |  | Category |  |
| Seas Clss <br> Grp |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct'l Class | $\begin{array}{\|l} \text { Major } \\ \text { Collector } \end{array}$ | Milepost |  |
| Located On | Cumberlan | D RD 0.10 MI | S OFI70 |
| $\begin{array}{\|c} \text { Loc On } \\ \text { Alias } \end{array}$ | Cumberlan | In RD (IR 173) |  |
|  |  |  |  |
| Less Detail |  |  |  |
| County | MARION | FIPS County $\begin{array}{r}\text { Code }\end{array}$ |  |
| Community |  | \# Lanes | 0 |
| Jurisdiction | 3 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Ctrl Section |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| wim Station | No | Latitude | 39.804246 |
| Virtual | No | Longitude | -85.957543 |
| Mega-site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | indianapo LIS(MARION -Co) (M21) | $\begin{array}{r} \text { State } \\ \text { Owned } \end{array}$ | No |
| Owner ID | indot | Rurallurban | Urban |
| 5 Screentine |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | es |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{3,669}$ |  |  |  | 3,584 <br> $(98 \%)$ | $84(2 \%)$ |  |
| 2018 | 2,786 |  | 11 | 55 | 2,760 <br> $(99 \%)$ | $25(1 \%)$ | Grown from <br> 2017 |
| 2017 | 2,775 |  | 11 | 55 | 2,749 <br> $(99 \%)$ | $25(1 \%)$ | Grown from <br> 2016 |
| 2016 | 2,750 |  | 11 | 55 | 2,724 <br> $(99 \%)$ | $25(1 \%)$ | Grown from <br> 2015 |
| 2015 | 2,742 |  | 11 | 55 | 2,716 <br> $(99 \%)$ | $25(1 \%)$ | Grown from <br> 2014 |
| 2014 | 2,683 | 285 | 11 | 55 | 2,658 <br> $(99 \%)$ | $24(1 \%)$ | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{2 , 6 5 6}}$ | 282 | 11 | 55 | 2,631 <br> $(99 \%)$ | $24(1 \%)$ |  |
| $\underline{\mathbf{2 0 0 9}}$ | $\underline{\mathbf{3 , 1 1 6}}$ |  |  |  | 3,072 <br> $(99 \%)$ | $43(1 \%)$ |  |
| $\underline{\mathbf{2 0 0 6}}$ | $\underline{\mathbf{2 , 7 7 2}}$ |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 0 3}}$ | $\underline{\mathbf{2 , 9 2 9}}$ |  |  |  |  |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2019 | 3,669 | $5.53 \%$ |
| 2013 | 2,656 | $-3.91 \%$ |
| 2009 | 3,116 | $\mathbf{3 . 9 8 \%}$ |
| 2006 | 2,772 |  |

CAGR

| Compound |
| :---: |
| $2009-2019$ |
| $1.65 \%$ |


| Location ID | 300503 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPot | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 5300272014 4000001 | LRS Loc Pt. | 0.1134256 |
| SF Group | U2_swg | Route Type | City Street |
| AF Group | U3_А | Route | Local |
| GF Group | U2_swg | Active | Yes |
| Class Dist Grp |  | Category |  |
| Seas Clss <br> Grp |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct'l Class | $\begin{aligned} & \text { Minor } \\ & \text { Arterial } \end{aligned}$ | Milepost |  |
| Located On | W KNAPP LAKE RD or W 100 S or IR 24 |  |  |
| $\begin{array}{\|l\|} \hline \text { Loc On } \\ \text { Alias } \end{array}$ | N 600 W (MOUNT COMFORT RD) (IR11)11) |  |  |
|  |  |  |  |
| Less Detail |  |  |  |
| County | Hancock | FIPS County $\begin{array}{r}\text { Code }\end{array}$ |  |
| Community | Cumberland | \# Lanes | 0 |
| Jurisdiction | 5 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Ctrl Section MP |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| wIM Station | No | Latitude | 39.777654 |
| Virtual | No | Longitude | -85.914446 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | $\begin{array}{\|l} \mid \text { INDIANAPO } \\ \text { LIS(MARION } \\ \text { CO) (M21) } \end{array}$ | State Owned | No |
| Owner ID | indot | Rural/Urban | Urban |
| Screennme |  |  |  |
| Days Since <br> Last Count <br> Check |  |  |  |
| $\begin{gathered} \text { Collect } \\ \text { w/State? } \end{gathered}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 5,176 |  | 11 | 67 | 4,740 <br> $(92 \%)$ | $435(8 \%)$ | Grown from <br> 2017 |
| $\underline{\mathbf{2 0 1 7}}$ | $\underline{5,155}$ | 583 | 11 | 67 | 4,721 <br> $(92 \%)$ | $433(8 \%)$ |  |
| 2016 | 4,417 |  |  |  |  |  | Grown from <br> 2015 |
| 2015 | 4,404 |  |  |  |  |  | Grown from <br> 2014 |
| 2014 | 4,309 |  |  |  |  |  | Grown from <br> 2013 |
| 2013 | 4,266 |  |  |  |  |  | Grown from <br> 2012 |
| $\underline{\mathbf{2 0 1 2}}$ | $\underline{4,327}$ |  |  |  |  |  |  |
| 2011 | 4,654 |  |  |  | 4,522 <br> $(97 \%)$ | $130(3 \%)$ | Grown from <br> 2010 |
| $\underline{\mathbf{2 0 1 0}}$ | $\mathbf{4 , 5 7 2}$ |  |  |  | 4,443 <br> $(97 \%)$ | $128(3 \%)$ |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2017 | 5,155 | $\mathbf{3 . 5 6 \%}$ |
| 2012 | 4,327 | $\mathbf{- 2 . 7 2 \%}$ |
| 2010 | 4,572 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2012-2017$ |
| $3.56 \%$ |


| Location ID | 300608 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | $\begin{aligned} & 5300272014 \\ & 4000001 \\ & \hline \end{aligned}$ | LRS Loc Pt. | 0.2684403 |
| SF Group | U2_swg | Route Type | City Street |
| AF Group | U3_A | Route | Local |
| GF Group | U2_SWG | Active Yes |  |
| $\begin{array}{r} \hline \text { Class Dist } \\ \text { Grp } \end{array}$ |  | Category |  |
| $\begin{array}{\|c} \hline \text { Seas Clss } \\ \text { Grp } \end{array}$ |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct'l Class | $\left\lvert\, \begin{aligned} & \text { Minor } \\ & \text { Arterial } \end{aligned}\right.$ | Milepost |  |
| Located On | MT COMFORT RD (IR11) 100 N OFUS40 |  |  |
| $\begin{array}{r} \hline \text { Loc On } \\ \text { Alias } \\ \hline \end{array}$ | N 600 W (MOUNT COMFORT RD) (IR11 ) |  |  |
| County | Hancock | FIPS County Code |  |
| Community | Cumberland | \# Lanes | 0 |
| Jurisdiction | 5 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | Ctrl Section MP |  |
| $\begin{array}{r} \hline \text { Perm } \\ \text { Station } \\ \hline \end{array}$ | No | DOT ID |  |
| wIM Station | No | Latitude | 39.779901 |
| Virtual | No | Longitude | -85.914499 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | IndIANAPO LIS(MARION _CO) (M21) | $\begin{array}{r} \text { State } \\ \text { Owned } \end{array}$ | No |
| Owner ID | indot | Rural/Urban | Urban |
| $\begin{array}{r} \text { Screenline } \\ \text { IDs } \end{array}$ |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 11,165 |  | 11 | 68 | 9,190 <br> $(82 \%)$ | 1,974 <br> $(18 \%)$ | Grown from <br> 2017 |
| $\mathbf{2 0 1 7}$ | $\underline{\mathbf{1 1 , 1 2 1}}$ | 1,189 | 11 | 68 | 9,154 <br> $(82 \%)$ | 1,966 <br> $(18 \%)$ |  |
| $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{1 0 , 6 3 9}}$ | 1,138 | 11 | 70 | 9,364 <br> $(88 \%)$ | 1,274 <br> $(12 \%)$ |  |
| 2015 | 8,711 |  |  |  |  |  | Grown from <br> 2014 |
| 2014 | 8,523 |  |  |  |  |  | Grown from <br> 2013 |
| 2013 | 8,439 |  |  |  |  |  | Grown from <br> 2012 |
| $\underline{\mathbf{2 0 1 2}}$ | $\underline{\mathbf{8 , 5 5 9}}$ |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 1 1}}$ | $\underline{8,819}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2017 | 11121 | $4.53 \%$ |
| 2016 | 10639 |  |
| 2012 | 8,559 |  |
| 2011 | 8,819 |  |

CAGR


Compound 2011-2017
3.94\%

| Location ID | 300504 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 3300000001 1000001 | LRS Loc Pt. | 7.726175 |
| SF Group | R2_swGA | Route Type | $\begin{aligned} & \text { County } \\ & \text { Road } \\ & \hline \end{aligned}$ |
| AF Group | R2_SWGA | Route | Local |
| GF Group | R2_SWGA | Active\| Yes |  |
| Class Dist Grp |  | Category |  |
| $\begin{array}{r}\text { Seas Clss } \\ \text { Grp } \\ \hline\end{array}$ |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct' Class | Other Principal Arterial (OPA) | Milepost |  |
| Located On | MOUNT COMFORT RD 0.1 MI N of CR 200 S |  |  |
| $\begin{gathered} \text { Loc On } \\ \text { Alias } \end{gathered}$ | MOUNT COMFORT RD (IR 11) |  |  |
| PR | MP | PT |  |
| 0 |  |  |  |
| Less Detail |  |  |  |
| County | HANCOCK | $\left\|\begin{array}{r} \text { FIPS County } \\ \text { Code } \end{array}\right\|$ |  |
| Community |  | \# Lanes | 0 |
| Jurisdiction |  | Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | $\underset{\text { Ctrl Section }}{\text { MP }}$ |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | DOT ID |  |
| WIM Station | No | Latitude | 39.817026 |
| Virtual | No | Longitude | -85.915056 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTP | No |
| UAB Name |  | Swaned | No |
| Owner ID | indot | Rural/Urban | Rural |
| $\begin{array}{r}\text { Screenline } \\ \text { IDs } \\ \hline\end{array}$ |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{array}{r} \text { Collect } \\ \text { w/State? } \end{array}$ | Yes |  |  |


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | 13,080 |  | 11 | 78 | 11,743 <br> $(90 \%)$ | 1,336 <br> $(10 \%)$ | Grown from <br> 2017 |
| $\underline{\mathbf{2 0 1 7}}$ | $\underline{\mathbf{1 3}, 028}$ | 1,439 | 11 | 78 | 11,696 <br> $(90 \%)$ | 1,331 <br> $(10 \%)$ |  |
| 2016 | 12,308 |  |  |  |  |  | Grown from <br> 2015 |
| 2015 | 12,102 |  |  |  |  |  | Grown from <br> 2014 |
| 2014 | 11,876 |  |  |  |  |  | Grown from <br> 2013 |
| 2013 | 11,758 |  |  |  |  |  | Grown from <br> 2012 |
| $\underline{\mathbf{2 0 1 2}}$ | $\underline{\mathbf{1 1 , 6 7 6}}$ |  |  |  |  |  |  |
| $\underline{\mathbf{2 0 1 1}}$ | $\underline{\mathbf{1 2 , 8 9 3}}$ |  |  |  |  |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2017 | 13028 | $\mathbf{2 . 2 2 \%}$ |
| 2012 | 11676 | $\mathbf{- 9 . 4 4 \%}$ |
| 2011 | 12,893 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2012-2017$ |
| $2.22 \%$ |


| Compound |
| :---: |
| 2011-2017 |

011-2017


| Year | AADT | DHV-30 | K\% | D\% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{6 , 0 6 5}}$ |  |  |  |  |  |  |
| 2018 | 6,802 |  | 11 | 66 |  |  | Grown from <br> 2017 |
| 2017 | 6,775 |  | 11 | 66 |  |  | Grown from <br> 2016 |
| 2016 | 6,715 |  | 11 | 66 |  |  | Grown from <br> 2015 |
| 2015 | 6,695 |  | 11 | 66 |  |  | Grown from <br> 2014 |
| 2014 | 6,551 | 713 | 11 | 66 |  |  | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{6 , 4 8 6}}$ | 706 | 11 | 66 |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2019 | 6,065 | $\mathbf{- 1 . 1 1 \%}$ |
| 2013 | 6,486 |  |
|  |  |  |
|  |  |  |


| Compound |
| :---: |
| 2013-2019 |
| $-1.11 \%$ |



| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{3,070}$ |  |  |  | 3,006 <br> $(98 \%)$ | $63(2 \%)$ |  |
| $\underline{\mathbf{2 0 1 8}}$ | $\underline{3,377}$ | 337 | 10 | 54 | 3,313 <br> $(98 \%)$ | 63 (2\%) |  |
| 2017 | 3,841 |  |  |  |  |  | Grown <br> from 2016 |
| 2016 | 3,807 |  |  |  |  |  | Grown <br> from 2015 |
| 2015 | 3,796 |  |  |  |  |  | Grown <br> from 2014 |
| 2014 | 3,714 |  |  |  |  |  | Grown <br> from 2013 |
| 2013 | 3,677 |  |  |  |  |  | Grown <br> from 2012 |
| $\underline{\mathbf{2 0 1 2}}$ | $\underline{3,729}$ |  |  |  |  |  |  |


| Year | AADT | CAGR |
| ---: | ---: | ---: |
| 2019 | 3070 | $-9.09 \%$ |
| 2018 | 3377 | $-1.64 \%$ |
| 2012 | 3729 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| 2012-2019 |
| $-2.74 \%$ |



| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{5 , 7 6 4}}$ |  |  |  | 5,635 <br> $(98 \%)$ | $128(2 \%)$ |  |
| 2018 | 6,201 |  | 9 | 61 | 6,168 <br> $(99 \%)$ | $32(1 \%)$ | Grown from <br> 2017 |
| 2017 | 6,176 |  | 9 | 61 | 6,143 <br> $(99 \%)$ | $32(1 \%)$ | Grown from <br> 2016 |
| 2016 | 6,121 |  | 9 | 61 | 6,088 <br> $(99 \%)$ | $32(1 \%)$ | Grown from <br> 2015 |
| 2015 | 6,103 |  | 9 | 61 | 6,070 <br> $(99 \%)$ | $32(1 \%)$ | Grown from <br> 2014 |
| 2014 | 5,972 | 562 | 9 | 61 | 5,990 <br> $(99 \%)$ | $31(1 \%)$ | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{5 , 9 1 3}}$ | 556 | 9 | 61 | 5,881 <br> $(99 \%)$ | $31(1 \%)$ |  |
| $\underline{\mathbf{2 0 0 9}}$ | $\underline{\mathbf{9 , 2 5 1}}$ |  |  |  |  |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2019 | 5,764 | $-\mathbf{0 . 4 2 \%}$ |
| 2013 | 5,913 | $-10.59 \%$ |
| 2009 | 9,251 |  |
|  |  |  |


| Compound |
| :---: |
| 2013-2019 |
|  |



| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{1 0 , 3 6 7}}$ |  |  |  | 9,886 <br> $(95 \%)$ | $480(5 \%)$ |  |
| 2018 | 4,654 |  | 10 | 68 | 4,557 <br> $(98 \%)$ | $96(2 \%)$ | Grown from <br> 2017 |
| 2017 | 4,635 |  | 10 | 68 | 4,958 <br> $(98 \%)$ | $96(2 \%)$ | Grown from <br> 2016 |
| 2016 | 4,594 |  | 10 | 68 | 4,498 <br> $(98 \%)$ | $95(2 \%)$ | Grown from <br> 2015 |
| 2015 | 4,580 |  | 10 | 68 | 4,484 <br> $(98 \%)$ | $95(2 \%)$ | Grown from <br> 2014 |
| 2014 | 4,481 | 454 | 10 | 68 | 4,387 <br> $(98 \%)$ | $93(2 \%)$ | Grown from <br> 2013 |
| $\mathbf{2 0 1 3}$ | $\mathbf{4 , 4 3 7}$ | 450 | 10 | 68 | 4,644 <br> $(98 \%)$ | $92(2 \%)$ |  |


| Year | AADT |  |
| ---: | ---: | ---: |
| 2019 | CAGR |  |
| 2013 | 10,367 | $\mathbf{1 5 . 1 9 \%}$ |
|  |  |  |
|  |  |  |$\quad$| Compound |
| :---: |
| $2013-2019$ |
| $15.19 \%$ |

2.01\%


| Year | AADT | DHV-30 | K \% | D \% | PA | BC | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{1 4 , 9 9 5}}$ |  |  |  | 14,120 <br> $(94 \%)$ | $874(6 \%)$ |  |
| 2018 | 13,955 |  | 10 | 59 |  |  | Grown from <br> 2017 |
| 2017 | 13,899 |  | 10 | 59 |  |  | Grown from <br> 2016 |
| 2016 | 13,775 |  | 10 | 59 |  |  | Grown from <br> 2015 |
| 2015 | 13,734 |  | 10 | 59 |  |  | Grown from <br> 2014 |
| 2014 | 13,438 | 1,291 | 10 | 59 |  |  | Grown from <br> 2013 |
| $\underline{\mathbf{2 0 1 3}}$ | $\underline{\mathbf{1 3 , 3 0 5}}$ | 1,278 | 10 | 59 |  |  |  |


| Year |  | AADT |
| ---: | ---: | ---: |
| CAGR |  |  |
| 2019 | 14,995 | $\mathbf{2 . 0 1 \%}$ |
| 2013 | 13,305 |  |
|  |  |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| $2013-2019$ |
| $2.01 \%$ |



| Year | AADT | DHv-30 | к \% | D \% | PA | вс | Src |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{2019}$ | 3,779 |  |  |  | $\begin{aligned} & 3,637 \\ & (96 \%) \end{aligned}$ | 141 (4\%) |  |
| $\underline{2018}$ | 3,531 | 405 | 11 | 54 | $\begin{aligned} & \hline 3,386 \\ & (96 \%) \\ & \hline \end{aligned}$ | 144 (4\%) |  |
| 2017 | 2,608 |  |  |  | $\begin{aligned} & 2,589 \\ & (99 \%) \end{aligned}$ | 15 (1\%) | Grown from 2016 |
| 2016 | 2,585 |  |  |  | $\begin{aligned} & \hline 2,566 \\ & (99 \%) \\ & \hline \end{aligned}$ | 15 (1\%) | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Grown from } \\ 2015 \end{array} \\ \hline \end{array}$ |
| 2015 | 2,577 |  |  |  | $\begin{aligned} & \hline 2,558 \\ & (99 \%) \\ & \hline \end{aligned}$ | 15 (1\%) | $\begin{array}{\|c\|} \hline \text { Grown from } \\ 2014 \\ \hline \end{array}$ |
| 2014 | 2,522 |  |  |  | $\begin{aligned} & \hline 2,503 \\ & (99 \%) \\ & \hline \end{aligned}$ | 15 (1\%) | $\begin{array}{\|c} \hline \text { Grown from } \\ 2013 \\ \hline \end{array}$ |
| 2013 | 2,497 |  |  |  | $\begin{aligned} & \hline 2,478 \\ & (99 \%) \\ & \hline \end{aligned}$ | 15 (1\%) | $\begin{array}{\|c\|} \hline \text { Grown from } \\ 2012 \\ \hline \end{array}$ |
| 2012 | 2,532 |  |  |  | $\begin{aligned} & \hline 2,513 \\ & (99 \%) \\ & \hline \end{aligned}$ | 16 (1\%) | Grown from 2011 |
| 2011 | 2,535 |  |  |  | $\begin{aligned} & \hline 2,516 \\ & (99 \%) \\ & \hline \end{aligned}$ | 17 (1\%) | $\begin{array}{\|c} \hline \text { Grown from } \\ 2010 \\ \hline \end{array}$ |
| $\underline{2010}$ | 2,490 |  |  |  | $\begin{aligned} & 2,472 \\ & (99 \%) \\ & \hline \end{aligned}$ | 17 (1\%) |  |

CAGR

| Compound |
| :---: |
| 2013-2019 |
| $7.02 \%$ |


| Location ID | 300594 | MPO ID |  |
| :---: | :---: | :---: | :---: |
| Type | SPOT | HPMS ID |  |
| On NHS | No | On HPMS | No |
| LRS ID | 3300000000 <br> 5000001 | LRS Loc Pt. | 6.240165 |
| SF Group | U__swg | Route Type | $\begin{aligned} & \text { County } \\ & \text { Road } \end{aligned}$ |
| AF Group | U3_A | Route | Local |
| GF Group | U2_swg | Active | Yes |
| Class Dist <br> Grp |  | Category |  |
| Seas CIss Grp |  |  |  |
| WIM Group |  |  |  |
| QC Group | Default |  |  |
| Fnct' Class | Mino Collector | Milepost |  |
| Located On | CR700w 100 | N OF BR5385 | Ov 170 |
| $\begin{gathered} \text { Loc on } \\ \text { Alias } \end{gathered}$ | 700 W (1R 5) |  |  |
| PR | MP | PT) |  |
|  |  |  |  |
| Less Detail |  |  |  |
| County | HANCOCK | $\left\|\begin{array}{r\|l\|}  & \text { IPS County } \\ \text { code } \end{array}\right\|$ |  |
| Community |  | \# Lanes | 0 |
| Jurisdiction | 3 | Surface Type |  |
| District | Greenfield | Count Cycle | 3 |
| Control Section |  | $\left\|\begin{array}{\|c\|c\|} \text { ctrl Section } \\ \text { MP } \end{array}\right\|$ |  |
| $\begin{gathered} \text { Perm } \\ \text { Station } \end{gathered}$ | No | оот ID |  |
| wIM Station | No | Latitud | 39.814134 |
| Virtual | No | Longitude | -85.934126 |
| Mega-Site | No | Speed Limit |  |
| MPO | IMPO | LTPP | No |
| UAB Name | INDIANAPO LIS(MARION CO) (M21) | $\begin{array}{r} \text { State } \\ \text { Owned } \end{array}$ | No |
| Owner ID | indot | Ruralurban | Urban |
| $\begin{array}{r} \text { Screenline } \\ \text { IDs } \end{array}$ |  |  |  |
| Days Since Last Count Check |  |  |  |
| $\begin{gathered} \text { Collect } \\ \text { w/State? } \end{gathered}$ | Yes |  |  |


|  |  |  |
| ---: | ---: | ---: |
| Year | AADT | CAGR |
| 2019 | 3,779 | $7.02 \%$ |
| 2018 | 3,531 | $4.46 \%$ |
| 2010 | 2,490 |  |
|  |  |  |

CAGR

| Compound |
| :---: |
| 2010-2019 |
|  |

Two-Way Traffic Volumes (1-Hour Intervals)

| Date | Time | Hopkins - Beckley | Valley Brook - Lakeside | Brownstone - Sacramento |
| :---: | :---: | :---: | :---: | :---: |
| 6/25/2019 | 10:00:00 AM | 114 | 45 | 67 |
| 6/25/2019 | 11:00:00 AM | 64 | 35 | 45 |
| 6/25/2019 | 12:00:00 PM | 75 | 39 | 39 |
| 6/25/2019 | 1:00:00 PM | 99 | 38 | 58 |
| 6/25/2019 | 2:00:00 PM | 102 | 44 | 55 |
| 6/25/2019 | 3:00:00 PM | 123 | 61 | 77 |
| 6/25/2019 | 4:00:00 PM | 142 | 62 | 98 |
| 6/25/2019 | 5:00:00 PM | 125 | 55 | 85 |
| 6/25/2019 | 6:00:00 PM | 108 | 51 | 62 |
| 6/25/2019 | 7:00:00 PM | 96 | 51 | 68 |
| 6/25/2019 | 8:00:00 PM | 63 | 43 | 51 |
| 6/25/2019 | 9:00:00 PM | 48 | 25 | 32 |
| 6/25/2019 | 10:00:00 PM | 5 | 2 | 11 |
| 6/25/2019 | 11:00:00 PM | 6 | 5 | 11 |
| 6/26/2019 | 12:00:00 AM | 0 | 1 | 4 |
| 6/26/2019 | 1:00:00 AM | 3 | 3 | 3 |
| 6/26/2019 | 2:00:00 AM | 5 | 3 | 3 |
| 6/26/2019 | 3:00:00 AM | 9 | 3 | 7 |
| 6/26/2019 | 4:00:00 AM | 14 | 6 | 18 |
| 6/26/2019 | 5:00:00 AM | 41 | 21 | 41 |
| 6/26/2019 | 6:00:00 AM | 77 | 22 | 70 |
| 6/26/2019 | 7:00:00 AM | 70 | 31 | 49 |
| 6/26/2019 | 8:00:00 AM | 74 | 39 | 47 |
| 6/26/2019 | 9:00:00 AM | 87 | 29 | 56 |
| 6/26/2019 | 10:00:00 AM | 89 | 42 | 56 |
| 6/26/2019 | 11:00:00 AM | 117 | 53 | 62 |
| 6/26/2019 | 12:00:00 PM | 106 | 48 | 52 |
| 6/26/2019 | 1:00:00 PM | 104 | 48 | 70 |
| 6/26/2019 | 2:00:00 PM | 108 | 63 | 49 |
| 6/26/2019 | 3:00:00 PM | 123 | 64 | 82 |
| 6/26/2019 | 4:00:00 PM | 136 | 75 | 99 |
| 6/26/2019 | 5:00:00 PM | 147 | 57 | 82 |
| 6/26/2019 | 6:00:00 PM | 117 | 36 | 76 |
| 6/26/2019 | 7:00:00 PM | 99 | 57 | 62 |
| 6/26/2019 | 8:00:00 PM | 65 | 39 | 64 |
| 6/26/2019 | 9:00:00 PM | 36 | 12 | 34 |
| 6/26/2019 | 10:00:00 PM | 12 | 11 | 16 |
| 6/26/2019 | 11:00:00 PM | 12 | 10 | 7 |
| 6/27/2019 | 12:00:00 AM | 2 | 1 | 4 |
| 6/27/2019 | 1:00:00 AM | 0 | 1 | 6 |
| 6/27/2019 | 2:00:00 AM | - 2 | 0 | 2 |
| 6/27/2019 | 3:00:00 AM | 11 | 4 | 8 |
| 6/27/2019 | 4:00:00 AM | 20 | 9 | 20 |
| 6/27/2019 | 5:00:00 AM | 59 | 16 | 33 |
| 6/27/2019 | 6:00:00 AM | 64 | 33 | 67 |
| 6/27/2019 | 7:00:00 AM | 76 | 29 | 41 |
| 6/27/2019 | 8:00:00 AM | 78 | 34 | 51 |
| 6/27/2019 | 9:00:00 AM | 83 | 37 | 55 |
| 6/27/2019 | 10:00:00 AM | 71 | 34 | 44 |
| 6/27/2019 | 11:00:00 AM | 116 | 50 | 59 |

# BUCK CREEK CORRIDOR STUDY SPOT SPEED ANALYSIS 

## Speed Samples

Roadway: Location: Speed Limit:

Buck Creek Road (between Hopkins and Beckley) Cumberland, IN 35 mph

Date: $\quad 6 / 25-6 / 27 / 19$
By: BF\&S


SPEED TABLE

| MPH | FRQ. | MPH | FRQ. | MPH | FRQ. | MPH | FRQ. |
| :---: | :--- | :---: | :--- | :---: | :--- | :--- | :--- |
| 4 | 0 | 24 | 20 | 44 | 27 | 64 | 0 |
| 5 | 1 | 25 | 38 | 45 | 17 | 65 | 0 |
| 6 | 1 | 26 | 38 | 46 | 12 | 66 | 0 |
| 7 | 0 | 27 | 53 | 47 | 6 | 67 | 0 |
| 8 | 0 | 28 | 89 | 48 | 4 | 68 | 0 |
| 9 | 0 | 29 | 105 | 49 | 3 | 69 | 0 |
| 10 | 0 | 30 | 167 | 50 | 2 | 70 | 0 |
| 11 | 1 | 31 | 205 | 51 | 1 | 71 | 0 |
| 12 | 1 | 32 | 261 | 52 | 0 | 72 | 0 |
| 13 | 4 | 33 | 313 | 53 | 0 | 73 | 0 |
| 14 | 2 | 34 | 292 | 54 | 0 | 74 | 0 |
| 15 | 1 | 35 | 326 | 55 | 0 | 75 | 0 |
| 16 | 3 | 36 | 333 | 56 | 0 | 76 | 0 |
| 17 | 3 | 37 | 261 | 57 | 0 | 77 | 0 |
| 18 | 2 | 38 | 238 | 58 | 0 | 78 | 0 |
| 19 | 6 | 39 | 203 | 59 | 1 | 79 | 0 |
| 20 | 6 | 40 | 176 | 60 | 0 | 80 | 0 |
| 21 | 6 | 41 | 98 | 61 | 0 | 81 | 0 |
| 22 | 11 | 42 | 74 | 62 | 0 | 82 | 0 |
| 23 | 16 | 43 | 37 | 63 | 0 | 83 | 0 |

## STATISTICS

| 85th Percentile | 38.70 |
| :---: | :---: |
| 50th Percentile | 34.27 |
| Sample Size | 3464 |
| Average | 34.56 |
| Std. Deviation | 4.09 |
| Mode | 36 |
| Pace | 31 TO 40 |
| Percent > S/L | 43.10\% |
| Range | 5 TO 59 |

## BUCK CREEK CORRIDOR STUDY SPOT SPEED ANALYSIS

Speed Samples
Route:
Location:
Speed Limit:
Buck Creek Road (between Valley Brook and Lakeside)
Date: 6/25-6/27/19 Cumberland, IN

By: BF\&S


SPEED TABLE

| MPH | FRQ. | MPH | FRQ. | MPH | FRQ. | MPH | FRQ. |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 0 | 24 | 11 | 44 | 24 | 64 | 0 |
| 5 | 0 | 25 | 21 | 45 | 8 | 65 | 0 |
| 6 | 0 | 26 | 28 | 46 | 8 | 66 | 0 |
| 7 | 1 | 27 | 31 | 47 | 3 | 67 | 0 |
| 8 | 1 | 28 | 43 | 48 | 4 | 68 | 0 |
| 9 | 4 | 29 | 56 | 49 | 1 | 69 | 0 |
| 10 | 1 | 30 | 80 | 50 | 3 | 70 | 0 |
| 11 | 2 | 31 | 84 | 51 | 0 | 71 | 0 |
| 12 | 4 | 32 | 106 | 52 | 0 | 72 | 0 |
| 13 | 7 | 33 | 132 | 53 | 0 | 73 | 0 |
| 14 | 1 | 34 | 156 | 54 | 0 | 74 | 0 |
| 15 | 3 | 35 | 137 | 55 | 0 | 75 | 0 |
| 16 | 4 | 36 | 157 | 56 | 0 | 76 | 0 |
| 17 | 3 | 37 | 117 | 57 | 0 | 77 | 0 |
| 18 | 0 | 38 | 117 | 58 | 0 | 78 | 0 |
| 19 | 4 | 39 | 85 | 59 | 0 | 79 | 0 |
| 20 | 6 | 40 | 67 | 60 | 0 | 80 | 0 |
| 21 | 3 | 41 | 41 | 61 | 0 | 81 | 0 |
| 22 | 11 | 42 | 34 | 62 | 0 | 82 | 0 |
| 23 | 9 | 43 | 20 | 63 | 0 | 83 | 0 |

## STATISTICS

| 85th Percentile | $\underline{\mathbf{3 8 . 6 2}}$ |
| :--- | :--- |
| 50th Percentile | $\underline{\mathbf{3 4 . 0 5}}$ |
| Sample Size |  |
| Average |  |
| Std. Deviation | $\underline{\underline{1638}}$ |
| Mode <br> Pace | $\underline{\underline{\mathbf{3 6}}}$ |
| Percent $>$ S/L <br> Range | $\underline{\mathbf{4 0} \text { TO } 39}$ |
| $\underline{72.06 \%}$ |  |
| TO 50 |  |

# BUCK CREEK CORRIDOR STUDY SPOT SPEED ANALYSIS 

## Speed Samples

Route:
Location:
Speed Limit:
Buck Creek Road (between Brownstone and Sacramento)
Date: $\quad 6 / 25-6 / 27 / 19$ Cumberland, IN

By: BF\&S 35 mph


SPEED TABLE

| MPH | FRQ. | MPH | FRQ. | MPH | FRQ. | MPH | FRQ. |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 0 | 24 | 21 | 44 | 95 | 64 | 4 |
| 5 | 0 | 25 | 17 | 45 | 95 | 65 | 2 |
| 6 | 0 | 26 | 17 | 46 | 92 | 66 | 0 |
| 7 | 0 | 27 | 26 | 47 | 88 | 67 | 2 |
| 8 | 0 | 28 | 40 | 48 | 79 | 68 | 2 |
| 9 | 1 | 29 | 47 | 49 | 63 | 69 | 0 |
| 10 | 0 | 30 | 41 | 50 | 61 | 70 | 1 |
| 11 | 0 | 31 | 62 | 51 | 59 | 71 | 0 |
| 12 | 0 | 32 | 61 | 52 | 47 | 72 | 2 |
| 13 | 0 | 33 | 79 | 53 | 32 | 73 | 0 |
| 14 | 2 | 34 | 77 | 54 | 40 | 74 | 0 |
| 15 | 4 | 35 | 88 | 55 | 28 | 75 | 0 |
| 16 | 2 | 36 | 85 | 56 | 17 | 76 | 0 |
| 17 | 2 | 37 | 106 | 57 | 17 | 77 | 0 |
| 18 | 1 | 38 | 111 | 58 | 16 | 78 | 0 |
| 19 | 3 | 39 | 117 | 59 | 13 | 79 | 0 |
| 20 | 3 | 40 | 100 | 60 | 7 | 80 | 0 |
| 21 | 6 | 41 | 108 | 61 | 4 | 81 | 0 |
| 22 | 9 | 42 | 111 | 62 | 5 | 82 | 0 |
| 23 | 12 | 43 | 124 | 63 | 2 | 83 | 0 |

## STATISTICS

| 85th Percentile | 49.12 |
| :---: | :---: |
| 50th Percentile | $\underline{40.35}$ |
| Sample Size | 2356 |
| Average | $\underline{40.85}$ |
| Std. Deviation | 32.39 |
| Mode | 43 |
| Pace | 37 TO 46 |
| Percent > S/L | 73.64\% |
| Range | 9 TO 72 |



## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | 10th | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:17:19 PM | From | Washington Square | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Washington Cove Ln | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 2 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\10th St 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type | CoordinatedActuated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 0.66 | \% Heavy Vehicles | 2 | Base Sat. Flow Rate | 1950 |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type | INT <br> \# <br> Dir.Lanes |  | \% Right Turns |  | Left <br> Turn <br> Phasing |  | LT Storage Length | Left g/C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| Muessing St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Washington Cove Ln | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> \# <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 4675 | 6095 | 442 | 1 | 35 | 40 | None | No | N/A |
| 2 (to Muessing St) | 3960 | 6095 | 442 | 1 | 35 | 40 | None | No | N/A |
| 3 (to Washington Cove Ln) | 725 | 6095 | 442 | 1 | 30 | 35 | None | No | N/A |

## Automobile LOS

| Segment \# |  |  | Thru Mvmt Flow Rate |  | Adj. S Flow |  | v/c | Control Delay |  |  |  | e Ratio | Speed (mph) | $\begin{array}{\|c\|} \hline \text { Segment } \\ \text { Los } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) |  |  |  | 423 |  | 527 | 0.629 | 29.31 |  | C |  | 0.19 | 28.53 | A |
| 2 (to Muessing St) |  |  |  | 480 |  | 1229 | 0.977 | 65.17 |  | E |  | 0.00 | 20.09 | C |
| 3 (to Washington Cove Ln) |  |  |  | 480 |  | 193 | 1.007 | 53.42 |  | D |  | 0.00 | 7.50 | F |
| Arterial Length | 1.8068 | Weighted g/C |  | 0.41 | FFS Delay | 159.63 |  | Threshold Delay | 0.00 |  |  | 20.27 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | C |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is $\mathbf{1 0 0 0}$ veh/h/ln.


* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | 10th | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:17:19 PM | From | Washington Square | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Washington Cove Ln | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 2 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\10th St 2040.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type | CoordinatedActuated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 0.66 | \% Heavy Vehicles | 2 | Base Sat. Flow Rate | 1950 |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type | INT <br> \# <br> Dir.Lanes |  | \% Right Turns | Left <br> Turn <br> Lanes | Left <br> Turn <br> Phasing |  | LT <br> Storage <br> Length | Left g/C | Right <br> Turn <br> Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| Muessing St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Washington Cove Ln | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | $\begin{array}{\|\|c\|} \hline \text { SEG } \\ \# \\ \text { Dir.Lanes } \\ \hline \end{array}$ | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 4675 | 6769 | 491 | 1 | 35 | 40 | None | No | N/A |
| 2 (to Muessing St) | 3960 | 6769 | 491 | 1 | 35 | 40 | None | No | N/A |
| 3 (to Washington Cove Ln) | 725 | 6769 | 491 | 1 | 30 | 35 | Restrictive | No | N/A |

## Automobile LOS



## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is $\mathbf{1 0 0 0}$ veh/h/ln.


* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | 21st St | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:32:25 PM | From | Mitthoeffer <br> Rd | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Mt Comfort Rd | Program | ARTPLAN 2012 |
| Area Type | Large Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\21st St 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.09 | PHF | 0.92 | Control Type | FullyActuated |
| :--- | ---: | ---: | :--- | :--- | :--- |
| $\mathbf{D}$ | 0.61 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |  |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. <br> Type |  | $\begin{gathered} \hline \% \\ \text { Left } \\ \text { Turns } \end{gathered}$ | \% <br> Right <br> Turns | Left Turn Lanes | Left <br> Turn Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT <br> Storage <br> Length | Left g/C | $\begin{array}{\|l\|} \hline \text { Right } \\ \text { Turn } \\ \text { Lanes } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 70 | 0.15 | Yes |
| Muessing St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Buck Creek Rd | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| CR 700 W | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Mt Comfort Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 5280 | 5793 | 318 | 1 | 40 | 45 | None | No | N/A |
| 2 (to Muessing St) | 3960 | 5793 | 318 | 1 | 40 | 45 | None | No | N/A |
| 3 (to Buck Creek Rd) | 3975 | 3085 | 169 | 1 | 40 | 45 | None | No | N/A |
| 4 (to CR 700 W ) | 2640 | 3085 | 169 | 1 | 40 | 45 | None | No | N/A |
| 5 (to Mt Comfort Rd) | 5280 | 3085 | 169 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate | v/c | Control Delay | Int. Approach LOS | Queue Ratio | Speed <br> (mph) | Segment LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 263 | 1528 | 0.391 | 22.85 | C | 0.45 | 34.31 | B |
| 2 (to Muessing St) | 346 | 1279 | 0.675 | 32.28 | C | 0.00 | 28.81 | C |

Page 2 of 3

| 3 (to Buck Creek Rd) |  |  | 184 |  |  | 0.365 | 25.40 |  | c | 0.00 | 31.32 | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 (to CR 7 | W) |  | 184 |  |  | 0.365 | 25.45 |  | C | 0.00 | 27.26 | C |
| 5 (to Mt Comfort Rd) |  |  | 184 |  |  | 0.332 | 22.15 |  | C | 0.00 | 34.83 | B |
| Arterial Length | 4.0597 | Weighted g/C | 0.41 | FFS Delay |  | 40.92 | Threshold Delay | 0.00 | Auto Speed | 31.69 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | B |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | Annual Average Daily Trafic |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | 21st St | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:32:25 PM | From | Mitthoeffer <br> Rd | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Mt Comfort Rd | Program | ARTPLAN 2012 |
| Area Type | Large Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\21st St 2040.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.09 | PHF | 0.92 | Control Type | FullyActuated |
| :--- | ---: | ---: | :--- | :--- | :--- |
| $\mathbf{D}$ | 0.61 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |  |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. <br> Type |  | $\begin{gathered} \hline \% \\ \text { Left } \\ \text { Turns } \end{gathered}$ | \% <br> Right <br> Turns | Left Turn Lanes | Left <br> Turn Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT <br> Storage <br> Length | Left g/C | $\begin{array}{\|l\|} \hline \text { Right } \\ \text { Turn } \\ \text { Lanes } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 70 | 0.15 | Yes |
| Muessing St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Buck Creek Rd | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| CR 700 W | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| Mt Comfort Rd | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 5280 | 6465 | 355 | 1 | 40 | 45 | None | No | N/A |
| 2 (to Muessing St) | 3960 | 6465 | 355 | 1 | 40 | 45 | None | No | N/A |
| 3 (to Buck Creek Rd) | 3975 | 3410 | 187 | 1 | 40 | 45 | None | No | N/A |
| 4 (to CR 700 W ) | 2640 | 3410 | 187 | 1 | 40 | 45 | None | No | N/A |
| 5 (to Mt Comfort Rd) | 5280 | 3410 | 187 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate | v/c | Control Delay | Int. Approach LOS | Queue Ratio | Speed (mph) | Segment LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 293 | 1533 | 0.435 | 23.42 | C | 0.50 | 34.06 | B |
| 2 (to Muessing St) | 386 | 1285 | 0.751 | 35.81 | D | 0.00 | 27.73 | C |

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| 3 (to Buck Creek Rd) |  |  | 203 |  | 61 | 0.403 | 25.86 |  | c | 0.00 | 31.13 | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 (to CR 700 W ) |  |  | 203 |  |  | 0.403 | 25.93 |  | C | 0.00 | 27.04 | C |
| 5 (to Mt Comfort Rd) |  |  | 203 | 1261 |  | 0.366 | 22.57 |  | C | 0.00 | 34.66 | B |
| Arterial Length | 4.0597 | $\begin{gathered} \text { Weighted } \\ \text { g/C } \\ \hline \end{gathered}$ | 0.41 | FFS Delay |  | 47.02 | Threshold Delay | 0.00 |  | 31.28 | Auto <br> LOS | B |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | Annual Average Daily Trafic |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


# ARTPLAN 2012 Conceptual Planning Analysis 

Project Information

| Analyst | BF\&S | Arterial Name | 30th St | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/22/2020 10:21:50 AM | From | Mitthoeffer <br> Rd | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | CR 700 W | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\30th St 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.1 | PHF | 0.92 | Control Type | FullyActuated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 0.59 | \% Heavy Vehicles | 2 | Base Sat. Flow Rate | 1950 |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  | $\begin{gathered} \hline \% \\ \text { \%eft } \\ \text { Turns } \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \\ \hline \end{array}$ | Left <br> Turn <br> Phasing | \# Left Turn Lanes | LT <br> Storage <br> Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 130 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| CR 700 W | 130 | 0.4 | 3 | 1 | 20 | 20 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> \# <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 5280 | 10576 | 624 | 1 | 40 | 45 | None | No | N/A |
| 2 (to CR 700 W ) | 11616 | 10576 | 624 | 1 | 40 | 45 | None | No | N/A |

## Automobile LOS

| Segment \# |  |  | Thru Mvmt Flow Rate |  | Adj. Sat Flow Rat |  | v/c | \| Control | Int. App |  |  | Ratio | Speed (mph) | $\begin{array}{\|c} \hline \begin{array}{c} \text { Segment } \\ \text { LOS } \end{array} \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) |  |  |  | 597 | 16 |  | 0.841 | 36.23 |  | D |  | 0.28 | 30.00 | C |
| 2 (to CR 700 W ) |  |  |  | 407 | 13 |  | 0.729 | 34.85 |  | C |  | 0.49 | 36.11 | B |
| Arterial Length | 3.2227 | Weighted g/C |  | 0.42 | FFS Delay | 85.82 |  | Threshold Delay | 0.00 |  |  | 33.94 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | B |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 780 | 820 | *** | *** |
| 2 | ** | 1590 | 1680 | *** | *** |
| 3 | ** | 2420 | 2520 | *** | *** |
| 4 | ** | 3240 | 3380 | *** | *** |
| * | ** | 780 | 820 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 1150 | 1220 | *** | *** |
| 4 | ** | 2340 | 2470 | *** | *** |
| 6 | ** | 3560 | 3720 | *** | *** |
| 8 | ** | 4770 | 4980 | *** | *** |
| * | ** | 1150 | 1220 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 11500 | 12200 | *** | *** |
| 4 | ** | 23400 | 24700 | *** | *** |
| 6 | ** | 35600 | 37200 | *** | *** |
| 8 | ** | 47700 | 49800 | *** | *** |
| * | ** | 11500 | 12200 | *** | *** |

[^0]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | 30th St | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/22/2020 10:21:50 AM | From | Mitthoeffer <br> Rd | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | CR 700 W | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class |  |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\30th St 2040.xap} |  |  |  |  |  |
| User Notes | Unreasonable growth in recent years for 20 year projection. Using growth rate on 30th west of Mitthoeffer instead (2.01\%). |  |  |  |  |

## Arterial Data

| K | 0.1 | PHF | 0.92 | Control Type |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| $\mathbf{D}$ | 0.59 | $\%$ Heavy Vehicles | 2 | Fase Sat. Flow Rate |  |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. <br> Type |  | $\begin{gathered} \begin{array}{c} \text { \% } \\ \text { Left } \\ \text { Turns } \end{array} \end{gathered}$ | \% Right Turns | Left Turn Lanes | Left <br> Turn <br> Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Right } \\ \text { Turn } \\ \text { Lanes } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| German Church Rd | 130 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| CR 700 W | 130 | 0.4 | 3 | 1 | 20 | 20 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) | 5280 | 15757 | 930 | 1 | 40 | 45 | None | No | N/A |
| 2 (to CR 700 W ) | 11616 | 15757 | 930 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# |  |  |  | Mvmt Rate | Adj. Sa Flow Ra |  | v/c | $\left\lvert\, \begin{gathered} \text { Control } \\ \text { Delay } \end{gathered}\right.$ | $\begin{array}{r} \hline \text { Int. Appr } \\ \text { LOS } \end{array}$ |  |  | Ratio | Speed (mph) | Segment LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to German Church Rd) |  |  |  | 890 |  |  | 1.053 | 65.58 |  | E |  | 0.42 | 23.69 | C |
| 2 (to CR 700 W ) |  |  |  | 607 |  |  | 1.061 | 72.53 |  | E |  | 0.64 | 30.40 | C |
| Arterial Length | 3.2227 | Weighted g/C |  | 0.42 | FFS <br> Delay | 159.53 |  | Threshold Delay | 0.00 | Auto Speed |  | 27.92 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | C |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 680 | 810 | *** | *** |
| 2 | ** | 1390 | 1620 | 1680 | *** |
| 3 | ** | 2100 | 2450 | 2540 | *** |
| 4 | ** | 2820 | 3280 | 3380 | *** |
| * | ** | 680 | 810 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 1160 | 1380 | *** | *** |
| 4 | ** | 2360 | 2750 | 2860 | *** |
| 6 | ** | 3560 | 4160 | 4300 | *** |
| 8 | ** | 4780 | 5560 | 5750 | *** |
| * | ** | 1160 | 1380 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 11600 | 13800 | *** | *** |
| 4 | ** | 23600 | 27500 | 28600 | *** |
| 6 | ** | 35600 | 41600 | 43000 | *** |
| 8 | ** | 47800 | 55600 | 57500 | *** |
| * | ** | 11600 | 13800 | *** | *** |

[^1]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information


## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| $\mathbf{D}$ | 0.61 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |  |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type | INT <br> \# <br> Dir.Lanes | $\begin{gathered} \hline \% \\ \text { \%eft } \\ \text { Turns } \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \end{array}$ | Left <br> Turn <br> Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valley Brook Dr | 90 | 0.35 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 21st St | 90 | 0.35 | 3 | 1 | 12 | 12 | No | Protected | N/A | N/A | N/A | No |
| I-70 | 90 | 0.35 | 3 | 1 | 12 | 12 | No | Protected | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> \# <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Valley Brook Dr) | 4925 | 1542 | 103 | 1 | 35 | 40 | None | No | N/A |
| 2 (to 21st St) | 3690 | 1000 | 67 | 1 | 40 | 45 | None | No | N/A |
| 3 (to I-70) | 4225 | 1036 | 70 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS


## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is $\mathbf{1 0 0 0}$ veh/h/ln.


* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information


## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type |
| :--- | ---: | :--- | ---: | ---: |
| $\mathbf{D}$ | 0.61 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type | INT <br> \# <br> Dir.Lanes | $\begin{gathered} \hline \% \\ \text { \%eft } \\ \text { Turns } \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \end{array}$ | Left <br> Turn <br> Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valley Brook Dr | 120 | 0.35 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 21st St | 120 | 0.35 | 3 | 1 | 12 | 12 | No | Protected | N/A | N/A | N/A | No |
| I-70 | 120 | 0.35 | 3 | 1 | 12 | 12 | No | Protected | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> $\#$ <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Valley Brook Dr) | 4925 | 2934 | 197 | 1 | 35 | 40 | None | No | N/A |
| 2 (to 21st St) | 3690 | 1378 | 92 | 1 | 40 | 45 | None | No | N/A |
| 3 (to I-70) | 4225 | 1975 | 133 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate |  | Adj. Sat. Flow Rate | v/c | Control Delay | Int. Approach LOS |  |  | Queue Ratio |  | Speed (mph) | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Segment } \\ \text { LOS } \end{array} \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Valley Brook Dr) |  | 214 | 1196 | 0.512 | 34.64 |  |  | C |  | 0.00 | 28.03 | A |
| 2 (to 21st St) |  | 100 | 1218 | 0.235 | 28.71 |  |  | C |  | 0.00 | 29.59 | A |
| 3 (to I-70) |  | 145 | 1224 | 0.338 | 30.83 |  |  | C |  | 0.00 | 30.18 | A |
| Arterial <br> Length 2.4659 | $\begin{aligned} & \text { Weighted } \\ & \text { g/C } \end{aligned}$ | 0.35 | FFS Delay | 100.61 | Thresho Delay |  | 0.00 |  | uto peed | 29.16 | Auto LOS | A |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | 210 | 410 | 440 | *** | *** |
| 2 | 500 | 850 | 880 | *** | *** |
| 3 | 810 | 1280 | 1320 | *** | *** |
| 4 | 1130 | 1720 | 1760 | ** | *** |
| * | 210 | 410 | 440 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | 350 | 680 | 710 | *** | *** |
| 4 | 820 | 1400 | 1440 | *** | *** |
| 6 | 1330 | 2100 | 2160 | *** | *** |
| 8 | 1860 | 2820 | 2890 | *** | *** |
| * | 350 | 680 | 710 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | 3200 | 6200 | 6500 | *** | *** |
| 4 | 7500 | 12700 | 13100 | *** | *** |
| 6 | 12100 | 19100 | 19700 | *** | *** |
| 8 | 16900 | 25700 | 26300 | *** | *** |
| * | 3200 | 6200 | 6500 | *** | *** |

[^2]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | CR 700 W | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/22/2020 10:35:39 AM | From | W 200 S | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | W 300 N | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\CR 700 W 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| $\mathbf{K}$ | 0.11 | PHF | 0.92 | Control Type |
| :--- | ---: | ---: | ---: | :--- |
| $\mathbf{D}$ | 0.54 | $\%$ Heavy Vehicles | 2 | Fase Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle <br> Length | Thru g/C | Arr. Type | INT <br> \# <br> Dir.Lanes |  | \% <br> Right <br> Turns | Left Turn Lanes | Left <br> Turn <br> Phasing | \# Left <br> Turn <br> Lanes | LT Storage Length | Left g/C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 250 | 0.15 | No |
| $\begin{aligned} & \text { CR100 N (21st } \\ & \text { St) } \end{aligned}$ | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| W 300 N | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 7920 | 3958 | 235 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l\|l} \hline \mathbf{2} \text { (to CR100 N } \\ \text { (21st St)) } \\ \hline \end{array}$ | 3500 | 3958 | 235 | 1 | 45 | 50 | None | No | N/A |
| 3 (to W 300 N ) | 7285 | 3958 | 235 | 1 | 45 | 50 | None | No | N/A |

## Automobile LOS

| Segment \# |  |  |  | Mvmt Rate | Adj. Sat. Flow Rate | v/c | Control Delay | Int. App LOS |  |  | Ratio | $\begin{array}{\|l\|} \hline \text { Speed } \\ \text { (mph) } \end{array}$ | $\begin{array}{\|c} \hline \begin{array}{c} \text { Segment } \\ \text { LOS } \end{array} \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) |  |  |  | 225 | 1592 | 0.321 | 22.00 |  | C |  | 0.09 | 40.97 | A |
| 2 (to CR100 N (21st St)) |  |  |  | 255 | 1277 | 0.500 | 27.27 |  | C |  | 0.00 | 31.50 | B |
| 3 (to W 300 N ) |  |  |  | 255 | 1277 | 0.455 | 23.70 |  | C |  | 0.00 | 39.83 | B |
| Arterial Length | 3.5767 | Weighted g/C |  | 0.42 | FFS Delay | $80.53$ | Threshold Delay | 0.00 | Auto Speed |  | 38.37 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | B |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | 50 | 500 | 540 | *** | *** |
| 2 | 120 | 1050 | 1080 | *** | *** |
| 3 | 190 | 1620 | *** | *** | *** |
| 4 | 260 | 2160 | *** | ** | *** |
| * | 50 | 500 | 540 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | 100 | 930 | 990 | *** | *** |
| 4 | 230 | 1950 | 2000 | *** | *** |
| 6 | 360 | 3000 | *** | *** | *** |
| 8 | 490 | 4010 | *** | *** | *** |
| * | 100 | 930 | 990 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | 900 | 8500 | 9000 | *** | *** |
| 4 | 2100 | 17700 | 18200 | *** | *** |
| 6 | 3200 | 27300 | *** | *** | *** |
| 8 | 4400 | 36500 | *** | *** | *** |
| * | 900 | 8500 | 9000 | *** | *** |

[^3]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | CR 700 W | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/22/2020 10:35:39 AM | From | W 200 S | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | W 300 N | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\CR 700 W 2040.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| $\mathbf{K}$ | 0.11 | PHF | 0.92 | Control Type |
| :--- | ---: | ---: | ---: | :--- |
| $\mathbf{D}$ | 0.54 | $\%$ Heavy Vehicles | 2 | Fase Sat. Flow Rate |

Automobile Intersection Data

| Cross Street | Cycle Length | $\begin{aligned} & \text { Thru } \\ & \text { g/C } \end{aligned}$ | Arr. <br> Type |  | $\begin{gathered} \hline \% \\ \text { Left } \\ \text { Turns } \\ \hline \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \end{array}$ | Left <br> Turn <br> Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT <br> Storage <br> Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 250 | 0.15 | No |
| $\begin{array}{\|l} \hline \text { CR100 N (21st } \\ \text { St) } \\ \hline \end{array}$ | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| W 300 N | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 7920 | 10004 | 594 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l\|l} \hline \mathbf{2} \text { (to CR100 N } \\ \text { (21st St)) } \\ \hline \end{array}$ | 3500 | 10004 | 594 | 1 | 45 | 50 | None | No | N/A |
| 3 (to W 300 N ) | 7285 | 10004 | 594 | 1 | 45 | 50 | None | No | N/A |

## Automobile LOS

|  | ment \# |  |  | Mvmt Rate | Adj. Sat. Flow Rat |  | v/c | Control Delay | $\begin{array}{r} \text { Int. Appr } \\ \text { LOS } \\ \hline \end{array}$ |  | Que | Ratio | Speed (mph) | $\begin{array}{\|c} \hline \begin{array}{c} \text { Segment } \\ \text { Los } \end{array} \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) |  |  |  | 568 | 165 |  | 0.783 | 31.46 |  | C |  | 0.23 | 37.48 | B |
| 2 (to CR100 N (21st St)) |  |  |  | 646 | 133 |  | 1.103 | 96.26 |  | F |  | 0.00 | 16.47 | E |
| 3 (to W 300 N ) |  |  |  | 646 | 1331 |  | 1.103 | 85.57 |  | F |  | 0.00 | 26.32 | C |
| Arterial Length | 3.5767 | Weighted g/C |  | 0.44 | FFS <br> Delay |  |  | Threshold Delay | 0.00 | Auto Speed |  | \#\#\# | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | \#\#\# |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | 70 | 540 | 580 | *** | *** |
| 2 | 160 | 1120 | 1180 | *** | *** |
| 3 | 250 | 1700 | 1800 | *** | *** |
| 4 | 340 | 2290 | 2400 | *** | *** |
| * | 70 | 540 | 580 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | 130 | 1000 | 1090 | *** | *** |
| 4 | 300 | 2080 | 2210 | *** | *** |
| 6 | 470 | 3150 | 3330 | *** | *** |
| 8 | 630 | 4250 | 4440 | ** | *** |
| * | 130 | 1000 | 1090 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | 1200 | 9100 | 9900 | *** | *** |
| 4 | 2700 | 18900 | 20100 | *** | *** |
| 6 | 4300 | 28700 | 30300 | *** | *** |
| 8 | 5800 | 38600 | 40400 | *** | *** |
| * | 1200 | 9100 | 9900 | *** | *** |

[^4]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | German Church Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 10:20:30 AM | From |  | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | 30th St | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Southbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\German Church Rd 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | $0.1 \mid$ | PHF | 0.92 | Control Type |
| :--- | ---: | :--- | ---: | :--- |
| $\mathbf{D}$ | 0.51 | $\%$ Heavy Vehicles | 2.3 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  | $\begin{gathered} \hline \% \\ \text { \%eft } \\ \text { Turns } \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \\ \hline \end{array}$ | Left <br> Turn <br> Phasing | \# Left Turn Lanes | LT <br> Storage <br> Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| 10th St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| 21st St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| 30th St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 7400 | 11216 | 572 | 1 | 40 | 45 | None | No | N/A |
| 2 (to 10th St) | 2470 | 11216 | 572 | 1 | 40 | 45 | None | No | N/A |
| 3 (to 21st St) | 5280 | 11216 | 572 | 1 | 40 | 45 | None | NO | N/A |
| 4 (to 30th St) | 5280 | 11216 | 572 | 1 | 40 | 45 | None | No | N/A |

## Automobile LOS

| Segmen |  | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate |  | v/c |  | Control Delay |  | Int. Approach Los |  | Queue Ratio |  | $\begin{aligned} & \hline \text { Speed } \\ & \text { (mph) } \end{aligned}$ | $\begin{gathered} \text { Segment } \\ \text { LOS } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) |  | 547 |  | 589 | 0.78 |  |  | . 55 |  |  |  | 0.24 | 33.98 | B |
| 2 (to 10th |  | 547 |  | 589 | 0.78 |  |  | . 55 |  |  |  | 0.24 | 23.90 | C |
| 3 (to 21st |  | 473 |  | 519 | 0.70 |  |  | . 88 |  |  |  | 0.24 | 32.05 | B |
| 4 (to 30th |  | 547 |  | 589 | 0.78 |  |  | 2.14 |  |  |  | 0.24 | 31.16 | B |
| Arterial Length | 3.9148 | $\begin{gathered} \text { Weighted } \\ \text { g/C } \end{gathered}$ | 0.44 |  |  |  | 2.78 |  | shold lay | 0.00 | Auto Speed | 31.16 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | B |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 580 | 820 | *** | *** |
| 2 | ** | 1230 | 1660 | *** | *** |
| 3 | ** | 1920 | 2500 | *** | *** |
| 4 | ** | 2610 | 3340 | *** | *** |
| * | ** | 580 | 820 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 1140 | 1600 | *** | *** |
| 4 | ** | 2420 | 3250 | *** | *** |
| 6 | ** | 3770 | 4900 | *** | *** |
| 8 | ** | 5120 | 6550 | *** | *** |
| * | ** | 1140 | 1600 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 11400 | 16000 | *** | *** |
| 4 | ** | 24200 | 32500 | *** | *** |
| 6 | ** | 37700 | 49000 | *** | *** |
| 8 | ** | 51200 | 65500 | *** | *** |
| * | ** | 11400 | 16000 | *** | *** |

[^5]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | German Church Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 10:20:30 AM | From | Prospect St | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | 30th St | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\German Church Rd 2040 (NB).xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | $0.1 \mid$ | PHF | 0.92 | Control Type |
| :--- | ---: | :--- | ---: | :--- |
| $\mathbf{D}$ | 0.51 | $\%$ Heavy Vehicles | 2.3 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  | $\begin{gathered} \hline \% \\ \text { \%eft } \\ \text { Turns } \end{gathered}$ | \% Right Turns | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Lanes } \\ \hline \end{array}$ | Left <br> Turn <br> Phasing | \# Left Turn Lanes | LT <br> Storage <br> Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 20 | 12 | Yes | ProtPerm | 1 | 600 | 0.15 | No |
| 10th St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| 21st St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |
| 30th St | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted <br> Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 7400 | 15789 | 805 | 1 | 40 | 45 | None | No | N/A |
| 2 (to 10th St) | 2470 | 15789 | 805 | 1 | 40 | 45 | None | No | N/A |
| 3 (to 21st St) | 5280 | 15789 | 805 | 1 | 40 | 45 | None | NO | N/A |
| 4 (to 30th St) | 5280 | 15789 | 805 | 1 | 40 | 45 | None | No | N/A |

## Automobile LOS

| Segment |  | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate |  | v/c |  | Control Delay |  | Int. Approach LOS |  | Queue Ratio |  | $\begin{aligned} & \hline \hline \text { Speed } \\ & \text { (mph) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Segment } \\ & \text { LOS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) |  | 700 |  | 615 | 0.98 |  |  | . 04 |  |  |  | 0.23 | 31.20 | B |
| 2 (to 10th St) |  | 770 |  | 616 | 0.99 |  |  | . 54 |  |  |  | 0.34 | 20.27 | D |
| 3 (to 21st St) |  | 770 |  | 611 | 0.95 |  |  | .64 |  |  |  | 0.31 | 29.65 | C |
| 4 (to 30th St) |  | 770 |  | 608 | 0.93 |  |  | . 32 |  |  |  | 0.30 | 29.55 | C |
| Arterial Length | 3.9148 | Weighted g/C | 0.44 |  |  |  | 84.61 |  | shold elay | 0.00 | Auto Speed | 28.52 | Auto LOS | C |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is $\mathbf{1 0 0 0}$ veh/h/ln.


* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | Mt Comfort Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:57:35 PM | From | Broken Arrow Dr | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | $\begin{aligned} & \text { I-70 EB } \\ & \text { Ramp } \\ & \hline \end{aligned}$ | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| \bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\Mt Comfort Rd 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type |
| :--- | ---: | :--- | :--- | :--- |
| D | 0.68 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  |  | \% Right Turns | Left Turn Lanes | Left <br> Turn <br> Phasing | \# Left Turn Lanes | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| $\begin{array}{\|l} \hline \text { 21st St (CR100 } \\ \text { N) } \\ \hline \end{array}$ | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 370 | 0.15 | No |
| CR 225 N | 120 | 0.44 | 3 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 110 | 0.15 | No |
| I-70 EB Ramp | 120 | 0.44 | 3 | 2 | 0 | 20 | No | None | N/A | N/A | N/A | Yes |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> \# <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 3825 | 5726 | 428 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l} \hline \mathbf{2} \text { (to 21st St } \\ (\text { CR100 N) }) \\ \hline \end{array}$ | 7020 | 12703 | 950 | 1 | 55 | 60 | None | No | N/A |
| 3 (to CR 225 N) | 6440 | 13914 | 1041 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l\|} \hline 4 \text { (to I-70 EB } \\ \text { Ramp) } \\ \hline \end{array}$ | 800 | 13914 | 1041 | 2 | 45 | 50 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate | v/c | Control Delay | Int. Approach LOS | Queue Ratio | Speed (mph) | Segment LoS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 354 | 1554 | 0.517 | 24.62 | C | 0.18 | 33.29 | B |
| 2 (to 21st St (CR100 N)) | 909 | 1810 | 1.022 | 69.18 | E | 0.26 | 30.89 | C |
| 3 (to CR 225 N ) | 996 | 3322 | 0.677 | 26.90 | C | 0.86 | 35.96 | B |
| 4 (to I-70 EB Ramp) | 905 | 2796 | 0.736 | 29.23 | C | 0.00 | 13.56 | F |


| Arterial Length | 3.4706 | Weighted g/C | 0.44 | FFS Delay | 171.68 | Threshold Delay | 0.00 | Auto Speed | 31.05 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 780 | 820 | *** | *** |
| 2 | ** | 1560 | *** | *** | *** |
| 3 | ** | 2360 | *** | *** | *** |
| 4 | ** | 3160 | *** | *** | *** |
| * | ** | 900 | *** | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 1390 | 1440 | *** | *** |
| 4 | ** | 2780 | *** | *** | *** |
| 6 | ** | 4190 | *** | *** | *** |
| 8 | ** | 5590 | *** | *** | *** |
| * | ** | 1600 | *** | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 15400 | 16000 | *** | *** |
| 4 | ** | 30800 | *** | *** | *** |
| 6 | ** | 46500 | *** | *** | *** |
| 8 | ** | 62200 | *** | *** | *** |
| * | ** | 17800 | *** | *** | *** |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | Mt Comfort Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 4:57:35 PM | From | Broken Arrow Dr | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | $\begin{aligned} & \text { I-70 EB } \\ & \text { Ramp } \\ & \hline \end{aligned}$ | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| \bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\Mt Comfort Rd 2040.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type |
| :--- | ---: | :--- | :--- | :--- |
| D | 0.68 | $\%$ Heavy Vehicles | 2 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | $\begin{aligned} & \text { Thru } \\ & \text { g/C } \end{aligned}$ | Arr. <br> Type |  | \% Left Turns | \% <br> Right <br> Turns | Left Turn Lanes | Left <br> Turn <br> Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| $\begin{array}{\|l} \hline \text { 21st St (CR100 } \\ \hline \text { N) } \\ \hline \end{array}$ | 120 | 0.44 | 3 | 1 | 12 | 12 | Yes | ProtPerm | 1 | 370 | 0.15 | No |
| CR 225 N | 120 | 0.44 | 3 | 2 | 6 | 12 | Yes | ProtPerm | 1 | 110 | 0.15 | NO |
| I-70 EB Ramp | 120 | 0.44 | 3 | 2 | 0 | 20 | No | None | N/A | N/A | N/A | YeS |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG <br> \# <br> Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 3825 | 11536 | 863 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l} \hline \mathbf{2} \text { (to 21st St } \\ (\text { CR100 N) }) \\ \hline \end{array}$ | 7020 | 30816 | 2305 | 1 | 55 | 60 | None | No | N/A |
| 3 (to CR 225 N) | 6440 | 21564 | 1613 | 1 | 45 | 50 | None | No | N/A |
| $\begin{array}{\|l\|} \hline 4 \text { (to I-70 EB } \\ \text { Ramp) } \\ \hline \end{array}$ | 800 | 21564 | 1613 | 2 | 45 | 50 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate | Adj. Sat. Flow Rate | v/c | Control Delay | Int. Approach LOS | Queue Ratio | Speed (mph) | Segment LoS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 713 | 1614 | 1.004 | 44.70 | D | 0.36 | 26.00 | C |
| 2 (to 21st St (CR100 N)) | 2205 | 1827 | 2.090 | 724.21 | F | 0.68 | 5.39 | F |
| 3 (to CR 225 N ) | 1648 | 3414 | 0.999 | 40.31 | D | 0.49 | 31.81 | B |
| 4 (to I-70 EB Ramp) | 1403 | 2871 | 1.111 | 87.82 | F | 0.00 | 5.75 | F |


| Arterial Length | 3.4706 | Weighted g/C | 0.44 | FFS Delay | 1008.86 | Threshold Delay | 545.39 | Auto Speed | \#\#\# | Auto LOS | \#\#\# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | Annual Average Daily Trafic |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | Muessing St / Cumberland Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/29/2020 3:38:06 PM | From | Saxon St | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | 30th St | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 2 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\Muessing St 2020.xap} |  |  |  |  |  |
| User Notes | AADT south of US 40 assumed to be $1 / 3$ of traffic volumes north of US 40 . |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type | CoordinatedActuated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 0.57 | \% Heavy Vehicles | 2 | Base Sat. Flow Rate | 1950 |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. <br> Type | INT <br> \# <br> Dir.Lanes | $\begin{gathered} \begin{array}{c} \text { \% } \\ \text { Left } \\ \text { Turns } \end{array} \end{gathered}$ | \% Right Turns | Left Turn Lanes | Left Turn Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 10th St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 21st St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 30th St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 530 | 1520 | 95 | 1 | 30 | 35 | None | No | N/A |
| 2 (to 10th St) | 2230 | 4561 | 286 | 1 | 30 | 35 | None | No | N/A |
| 3 (to 21st St) | 5280 | 4561 | 286 | 1 | 30 | 35 | None | No | N/A |
| 4 (to 30th St) | 5280 | 3729 | 234 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# | Thru Mvmt Flow Rate | Adj. Sat.  <br> Flow Rate v/c | Control Delay | Int. Approach LOS | Queue Ratio | Speed (mph) | $\begin{gathered} \substack{\text { Segment } \\ \text { LOS }} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 0 | 0 |  |  |  |  |  |
| 2 (to 10th St) | 0 | 0 |  |  |  |  |  |
| 3 (to 21st St) | 0 | 0 |  |  |  |  |  |
| 4 (to 30th St) | 0 | 0 |  |  |  |  |  |
| Arterial Length 2.5680 | Weighted g/C | FFS <br> Delay |  | reshold Delay | Auto Speed | $\begin{aligned} & \text { Auto } \\ & \text { LoSS } \end{aligned}$ |  |

Page 2 of 3

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | Annual Average Daily Trafic |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | Muessing St / Cumberland Rd | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/29/2020 3:38:06 PM | From | Saxon St | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | 30th St | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Northbound | Version Date | 12/12/2012 |
| Arterial Class | 2 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\Muessing St 2040.xap} |  |  |  |  |  |
| User Notes | AADT south of US 40 assumed to be $1 / 3$ of traffic volumes north of US 40 . |  |  |  |  |

## Arterial Data

| K | 0.11 | PHF | 0.92 | Control Type | CoordinatedActuated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | 0.57 | \% Heavy Vehicles | 2 | Base Sat. Flow Rate | 1950 |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. <br> Type | INT <br> \# <br> Dir.Lanes | $\begin{gathered} \begin{array}{c} \text { \% } \\ \text { Left } \\ \text { Turns } \end{array} \end{gathered}$ | \% Right Turns | Left Turn Lanes | Left Turn Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \end{aligned}$ | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 40 | 120 | 0.44 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 10th St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 21st St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |
| 30th St | 120 | 0.4 | 3 | 1 | 12 | 12 | No | None | N/A | N/A | N/A | No |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG \# Dir.Lanes | Posted <br> Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) | 530 | 2642 | 166 | 1 | 30 | 35 | None | NO | N/A |
| 2 (to 10th St) | 2230 | 7925 | 497 | 1 | 30 | 35 | None | No | N/A |
| 3 (to 21st St) | 5280 | 7925 | 497 | 1 | 30 | 35 | None | No | N/A |
| 4 (to 30th St) | 5280 | 5168 | 324 | 1 | 40 | 45 | None | No | N/A |

Automobile LOS

| Segment \# |  | Thru Mvmt Flow Rate |  | Adj. Sat. Flow Rate |  | v/c |  | Control Delay |  | Int. Approach Los |  | Queue Ratio |  | Speed (mph) | $\begin{gathered} \text { Segment } \\ \text { LOS } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to US 40) |  |  | 180 |  | 157 | 0.3 |  |  | . 12 |  |  |  | 0.00 | 10.46 | E |
| 2 (to 10th St) |  |  | 540 |  | 201 |  |  |  | . 09 |  |  |  | 0.00 | 9.44 | F |
| 3 (to 21st St) |  |  | 540 |  | 201 |  |  |  | . 29 |  |  |  | 0.00 | 17.57 | C |
| 4 (to 30th St) |  |  | 352 |  | 250 |  |  |  | . 84 |  |  |  | 0.00 | 31.96 | A |
| Arterial Length | 2.5682 |  | Weighted g/C | 0.41 | FFS <br> Delay |  | 288.26 |  | Threshold Delay |  | 0.00 | Auto Speed | \#\#\# | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | \#\#\# |

Page 2 of 3

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 950 veh/h/In.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 400 | 480 | *** | *** |
| 2 | ** | 880 | 980 | *** | *** |
| 3 | ** | 1350 | 1460 | *** | *** |
| 4 | 50 | 1820 | 1960 | *** | *** |
| * | ** | 400 | 480 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 710 | 850 | *** | *** |
| 4 | ** | 1550 | 1710 | *** | *** |
| 6 | ** | 2370 | 2580 | *** | *** |
| 8 | 90 | 3200 | 3450 | *** | *** |
| * | ** | 710 | 850 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 6400 | 7700 | *** | *** |
| 4 | ** | 14100 | 15600 | *** | *** |
| 6 | ** | 21600 | 23500 | *** | *** |
| 8 | 800 | 29100 | 31400 | *** | *** |
| * | ** | 6400 | 7700 | *** | *** |

[^6]
## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | US 40 (E Washington St) | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 10:20:30 AM | From |  | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Mt Comfort <br> Rd | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\US 40 2020.xap} |  |  |  |  |  |
| User Notes |  |  |  |  |  |

## Arterial Data

| K | 0.09 | PHF | 0.92 | Control Type |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| $\mathbf{D}$ | 0.56 | $\%$ Heavy Vehicles | 2.3 | Base Sat. Flow Rate | FullyActuated |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  | $\begin{gathered} \hline \text { \% } \\ \text { Left } \\ \text { Turns } \end{gathered}$ | \% Right Turns | Left Turn Lanes | $\begin{array}{\|c\|} \hline \text { Left } \\ \text { Turn } \\ \text { Phasing } \\ \hline \end{array}$ | \# Left Turn <br> Lanes | LT Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mitthoeffer Rd | 140 | 0.45 | 5 | 3 | 12 | 12 | Yes | Protected | 2 | 400 | 0.15 | YeS |
| Washington Square | 140 | 0.45 | 5 | 3 | 12 | 12 | Yes | ProtPerm | 1 | 290 | 0.15 | Yes |
| Kroger | 140 | 0.45 | 5 | 3 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| Walmart | 140 | 0.45 | 4 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| German Church Rd | 140 | 0.45 | 4 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 280 | 0.15 | Yes |
| Hugo St | 140 | 0.45 | 4 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 200 | 0.15 | Yes |
| Muessing St | 140 | 0.45 | 3 | 2 | 5 | 12 | Yes | ProtPerm | 1 | 100 | 0.15 | No |
| CR 700 W | 140 | 0.45 | 3 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 400 | 0.15 | Yes |
| Mt Comfort Rd | 140 | 0.45 | 3 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 300 | 0.15 | Yes |

Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG $\#$ Dir.Lanes | Posted Speed | Free <br> Flow Speed | Median Type | On-Street Parking | Parking <br> Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Mitthoeffer Rd) | 1100 | 31571 | 1591 | 3 | 40 | 45 | Restrictive | No | N/A |
| 2 (to Washington Square) | 800 | 31571 | 1591 | 3 | 40 | 45 | Restrictive | No | N/A |
| 3 (to Kroger) | 1615 | 31571 | 1591 | 3 | 40 | 45 | Restrictive | No | N/A |
| 4 (to Walmart) | 1030 | 24717 | 1246 | 3 | 40 | 45 | Non-Restrictive | No | N/A |
| 5 (to German Church Rd) | 1925 | 21074 | 1062 | 2 | 45 | 50 | Non-Restrictive | No | N/A |
| 6 (to Hugo St) | 1465 | 17439 | 879 | 2 | 45 | 50 | Non-Restrictive | No | N/A |
|  |  |  |  |  |  |  |  |  |  |


| 7 (to Muessing St) | 2500 | 17439 | 879 | 2 | 45 | 50 | Restrictive | No | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 (to CR 700 W ) | 6700 | 13106 | 661 | 2 | 45 | 50 | Non-Restrictive | No | N/A |
| 9 (to Mt Comfort Rd) | 5280 | 16128 | 813 | 2 | 45 | 50 | None | No | N/A |

Automobile LOS

| Segment \# |  |  |  | u Mvmt w Rate | Adj. Sa Flow Ra |  | v/c | $\begin{array}{\|c\|} \hline \text { Control } \\ \text { Delay } \end{array}$ | $\begin{array}{r} \hline \hline \text { Int. Appr } \\ \text { LOS } \end{array}$ |  | Que | Ratio | Speed (mph) | $\begin{array}{\|c\|} \hline \text { Segment } \\ \text { Los } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Mitthoeffer Rd) |  |  |  | 1314 |  | 50 | 0.615 | 12.16 |  | B |  | 0.24 | 24.89 | C |
| 2 (to Washington Square) |  |  |  | 1314 |  | 50 | 0.615 | 12.16 |  | B |  | 0.72 | 21.29 | D |
| 3 (to Kroger) |  |  |  | 1314 |  | 50 | 0.615 | 12.16 |  | B |  | 0.89 | 28.95 | C |
| 4 (to Walmart) |  |  |  | 1029 |  | 81 | 0.719 | 22.94 |  | C |  | 0.66 | 17.95 | E |
| 5 (to German Church Rd) |  |  |  | 877 |  | 52 | 0.599 | 20.43 |  | C |  | 0.46 | 27.43 | C |
| 6 (to Hugo St) |  |  |  | 726 |  | 22 | 0.501 | 19.09 |  | B |  | 0.53 | 25.00 | C |
| 7 (to Muessing St) |  |  |  | 908 |  | 97 | 0.577 | 28.89 |  | C |  | 0.42 | 26.64 | C |
| 8 (to CR 700 W ) |  |  |  | 546 |  | 87 | 0.381 | 25.60 |  | C |  | 0.19 | 38.35 | B |
| 9 (to Mt Comfort Rd) |  |  |  | 672 |  | 51 | 0.489 | 27.25 |  | C |  | 0.33 | 35.53 | B |
| Arterial Length | 4.3475 | Weighted g/C |  | 0.45 | FFS <br> Delay | 206.76 |  | Threshold Delay | 0.00 | Auto Speed |  | 30.14 | $\begin{aligned} & \text { Auto } \\ & \text { LOS } \end{aligned}$ | C |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 |  |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | Annual Average Daily Trafic |  |  |  |  |
| 4 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 8 |  |  |  |  |  |
| * |  |  |  |  |  |

* Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
** Cannot be achieved based on input data provided.
*** Not applicable for that level of service letter grade. See generalized tables notes for more details.
\# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
\#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.


## ARTPLAN 2012 Conceptual Planning Analysis

Project Information

| Analyst | BF\&S | Arterial Name | $\text { US } 40 \text { (E }$ <br> Washington <br> St) | Study Period | Kother |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date Prepared | 1/21/2020 10:20:30 AM | From |  | Modal Analysis | Auto Only |
| Agency | Town of Cumberland | To | Mt Comfort Rd | Program | ARTPLAN 2012 |
| Area Type | Other Urbanized | Peak Direction | Eastbound | Version Date | 12/12/2012 |
| Arterial Class | 1 |  |  |  |  |
| File Name | { |  |  |  |  |
| bfsnt241\jobs5\635100.0000\ProjDevelopment\Traffic\Analysis\w PHF\US 402040 (EB w 8\% Blue Line).xap} |  |  |  |  |  |
| User Notes | 8\% volume reduction applied to area covered by Blue Line |  |  |  |  |

## Arterial Data

| K | 0.09 | PHF | 0.92 | Control Type |
| :--- | ---: | ---: | ---: | ---: |
| $\mathbf{D}$ | 0.56 | $\%$ Heavy Vehicles | 2.3 | Base Sat. Flow Rate |

## Automobile Intersection Data

| Cross Street | Cycle Length | Thru g/C | Arr. Type |  | $\begin{gathered} \hline \% \\ \text { Left } \\ \text { Turns } \\ \hline \end{gathered}$ | \% <br> Right <br> Turns | Left Turn Lanes | Left Turn Phasing | $\begin{aligned} & \hline \text { \# Left } \\ & \text { Turn } \\ & \text { Lanes } \\ & \hline \end{aligned}$ | Storage Length | $\begin{aligned} & \text { Left } \\ & \text { g/C } \end{aligned}$ | Right Turn Lanes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mitthoeffer Rd | 140 | 0.45 | 5 | 3 | 12 | 12 | Yes | Protected | 2 | 400 | 0.15 | Yes |
| Washington Square | 140 | 0.45 | 5 | 3 | 5 | 12 | Yes | ProtPerm | 1 | 290 | 0.15 | Yes |
| Kroger | 140 | 0.45 | 5 | 3 | 5 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| Walmart | 140 | 0.45 | 4 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 235 | 0.15 | Yes |
| German Church Rd | 140 | 0.45 | 4 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 280 | 0.15 | Yes |
| Hugo St | 140 | 0.45 | 4 | 2 | 5 | 12 | Yes | ProtPerm | 1 | 200 | 0.15 | Yes |
| Muessing St | 140 | 0.45 | 3 | 2 | 5 | 5 | Yes | ProtPerm | 1 | 100 | 0.15 | No |
| CR 700 W | 140 | 0.45 | 3 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 400 | 0.15 | Yes |
| Mt Comfort Rd | 140 | 0.45 | 3 | 2 | 12 | 12 | Yes | ProtPerm | 1 | 300 | 0.15 | Yes |

## Automobile Segment Data

| Segment \# | Length | AADT | Hourly Vol. | SEG $\#$ Dir.Lanes | Posted Speed | Free Flow Speed | Median Type | On-Street Parking | Parking Activity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Mitthoeffer Rd) | 1100 | 32092 | 1617 | 3 | 40 | 45 | Restrictive | No | N/A |
| 2 (to Washington Square) | 800 | 32092 | 1617 | 3 | 40 | 45 | Restrictive | No | N/A |
| 3 (to Kroger) | 1615 | 32092 | 1617 | 3 | 40 | 45 | Restrictive | No | N/A |
| 4 (to Walmart) | 1030 | 32092 | 1617 | 3 | 40 | 45 | Non-Restrictive | No | N/A |
| 5 (to German Church Rd) | 1925 | 32092 | 1617 | 2 | 45 | 50 | Non-Restrictive | No | N/A |


| 6 (to Hugo St) | 1465 | 30563 | 1540 | 2 | 45 | 50 | Non-Restrictive | No | N/A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 (to Muessing St) | 2500 | 30563 | 1540 | 2 | 45 | 50 | Restrictive | No | N/A |
| 8 (to CR 700 W ) | 6700 | 14483 | 730 | 2 | 45 | 50 | Non-Restrictive | No | N/A |
| 9 (to Mt Comfort Rd) | 5280 | 17820 | 898 | 2 | 45 | 50 | None | No | N/A |

Automobile LOS

| Segment \# |  |  |  | u Mvmt w Rate | Adj. Sat. <br> Flow Rate | v/c | Control Delay | Int. App LOS | ach |  | Ratio | Speed (mph) | Segment LOS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (to Mitthoeffer Rd) |  |  |  | 1336 | 4754 | 0.624 | 12.25 |  | B |  | 0.25 | 24.81 | C |
| 2 (to Washington Square) |  |  |  | 1459 | 4778 | 0.678 | 12.87 |  | B |  | 0.27 | 20.75 | D |
| 3 (to Kroger) |  |  |  | 1459 | 4778 | 0.678 | 12.82 |  | B |  | 0.34 | 28.45 | C |
| 4 (to Walmart) |  |  |  | 1336 | 3243 | 0.915 | 32.16 |  | C |  | 0.90 | 14.64 | F |
| 5 (to German Church Rd) |  |  |  | 1336 | 3347 | 0.887 | 26.98 |  | C |  | 0.72 | 23.94 | C |
| 6 (to Hugo St) |  |  |  | 1389 | 3358 | 0.919 | 29.33 |  | C |  | 0.37 | 19.85 | D |
| 7 (to Muessing St) |  |  |  | 1590 | 3657 | 0.966 | 43.28 |  | D |  | 0.73 | 21.59 | D |
| 8 (to CR 700 W ) |  |  |  | 603 | 3198 | 0.419 | 26.11 |  | C |  | 0.21 | 38.11 | B |
| 9 (to Mt Comfort Rd) |  |  |  | 742 | 3064 | 0.538 | 28.15 |  | C |  | 0.36 | 35.13 | B |
| Arterial Length | 4.3475 | Weighted g/C |  | 0.45 | FFSDelay $\quad 252.84$ |  | Threshold Delay | 0.00 |  |  | 27.68 | Auto LOS | C |

## Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lanes | Hourly Volume In Peak Direction |  |  |  |  |
| 1 | ** | 360 | 820 | 860 | *** |
| 2 | ** | 710 | 1670 | 1740 | *** |
| 3 | ** | 1100 | 2540 | 2620 | *** |
| 4 | ** | 1470 | 3410 | 3500 | *** |
| * | ** | 760 | 1740 | *** | *** |
| Lanes | Hourly Volume In Both Directions |  |  |  |  |
| 2 | ** | 650 | 1470 | 1530 | *** |
| 4 | ** | 1270 | 2990 | 3100 | *** |
| 6 | ** | 1970 | 4540 | 4670 | *** |
| 8 | ** | 2630 | 6090 | 6240 | *** |
| * | ** | 1360 | 3100 | *** | *** |
| Lanes | Annual Average Daily Traffic |  |  |  |  |
| 2 | ** | 7200 | 16300 | 17000 | *** |
| 4 | ** | 14100 | 33200 | 34400 | *** |
| 6 | ** | 21900 | 50400 | 51900 | *** |
| 8 | ** | 29200 | 67700 | 69300 | *** |
| * | ** | 15100 | 34400 | *** | *** |

[^7]

## APPENDIX C

## Blue Line Handout

## INDYGO BLUE LINE

## SUMMARY

The 24 mile Blue Line Rapid Transit Line will travel along BLUE Washington Street from Cumberland west to the Airport. The Blue Line will replace the existing route 8 local service. IndyGo welcomes input, requests for meetings, and questions at IndyGo.net.

## STATS

Stations: 38 stations (2 paired stations at West \& Capitol); Level boarding Station Spacing: 1/2-1 mile Distance:

Cumberland to Airport: 24 miles Amenities:
»» Purchase Tickets at the Station
»» Real Time Arrival Information
»» Seating, Shelter, Cameras, WiFi
Fleet: 60 ft . battery electric vehicles
Features: 70\& dedicated/semi-dedicated lanes




## APPENDIX D

## Zoning Map




## APPENDIX E

## Complete Streets Checklist

## COMPLETE STREETS CHECKLIST

The Town of Cumberland Complete Streets Checklist is a tool used by applicants for planning and internally by Planning and DPW Staff to evaluate projects and implement the Complete Streets Policy, as detailed in the Transportation Master Plan. This checklist empowers Staff, community partners and developers to understand the design elements that contribute to the health, safety, welfare, environmental and equity benefits generated by complete streets.

## Complete Streets Definition

Complete Streets are roadways designed to safely and comfortably accommodate all users, of all ages and abilities, including but not limited to motorists, cyclists, pedestrians, transit users, school bus riders, delivery and service personnel, freight haulers, and emergency responders. The Complete Streets policy recognizes that depending on context, streets may serve diverse activities, functions, and intensity of uses.

## How to Use This Checklist

Outside of the Town of Cumberland's internal processes, this Checklist can be a tool for planners, designers, project managers, engineers and local partners and representatives as an aid for guidance during project scoping. Applying the checklist from concept development through final design will ensure that all transportation projects are in compliance with the Complete Streets Policy.

## When does this Checklist Apply?

The Complete Street Policy applies to all Town owned streets and land within public Right-of-Ways (ROW). Projects must be coordinated between applicable Town of Cumberland departments including Public Works, Planning \& Development and other departments as needed, as well as with utility companies. New private projects that include improvements within the public ROW are required to comply with the Complete Streets policy. Owners of private streets are required to adhere to the policy.

New construction and reconstruction of local and state roads, including but not limited to intersection projects, capacity projects, safety projects, bridges, and other transportation facilities are required to comply with the Complete Streets Policy. Funding provided for these projects including but not limited to FHWA, MPO, and INDOT funds are also required to comply with the Complete Streets Policy.

## When is the check list completed?

The checklist is part of the project review process, typically during subdivision platting and development plan review. The checklist may be revisited and revised accordingly to ensure the Complete Streets Policy is being followed and allows for modifications if an issue is identified through the checklist. Staff will include the checklist in presentations to the Plan Commission and/or Town Council when applicable.

## COMPLETE STREETS CHECKLIST SECTION 1: General Info

## Applicant/Owner:

$\qquad$
Project Name: $\qquad$
Project Location: $\qquad$
Project Representative: $\qquad$ Contact:

Project Description:

1. Street Classification (Arterial, Minor, Collector, etc.):
2. Location:
3. Is the project located in the National Road Overlay?
4. Additional Street/Corridor Information (i.e. on The Blue line, adjacent to trails or parks, etc):
5. Average Daily Traffic Info: $\qquad$
6. Existing ROW Width $\qquad$
7. Proposed ROW Width (if changing)
8. Existing Cross Section (if applicable): - Attach as separate drawing, if it doesn't exist include cross section typical of project area or where project will connect into existing infrastructure.
9. Proposed Cross Section (if applicable): - Attach as separate drawing
10. Which road type and typical section from the 2020 Transportation Master Plan does the proposed project correspond to? $\qquad$

## COMPLETE STREETS CHECKLIST

SECTION 2: Pre-Project (Existing) Conditions
Check appropriate answer for each section. When choosing 'No' or 'N/A' reference why this need is currently not being addressed on site. Reference any applicable community plans or documents. Use additional sheet for responses as needed:

| COMPLETE <br> STREET <br> USER TYPE | CONSIDERATION | YES | NO | N/A | REFERENCE |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A. Pedestrian | Are there accommodations, including <br> ADA compliance, along the project <br> site? |  |  |  |  |
|  | Are there accommodations, including <br> ADA compliance, crossing the <br> project site? |  |  |  |  |
| B. Bicyclists | Are there accommodations for <br> bicycles along the project site? |  |  |  |  |
|  | Are there accommodations for <br> bicycles crossing the project site? |  |  |  |  |
|  | Are there other access <br> considerations, including ADA? |  |  |  |  |
|  | Are there schools, hospitals, <br> libraries, parks, community centers <br> or municipal buildings within or <br> adjacent to the project area? |  |  |  |  |
|  | Has the level of service for walking <br> and biking been evaluated? |  |  |  |  |
|  | Have conditions affecting service <br> and use been evaluated? (i.e. safety <br> issues, lighting, volume, treatments) |  |  |  |  |
| Is the area used for bike and <br> pedestrian transportation? |  |  |  |  |  |
| Is the area used for bike and <br> pedestrian recreation? |  |  |  |  |  |
| Are there impediments to bike or <br> pedestrian use in the project area? |  |  |  |  |  |
| Are there a high number of crashes <br> in the project area? |  |  |  |  |  |
| Is there information regarding <br> crossings at intersections, mid-block <br> and nighttime available for the area? |  |  |  |  |  |


| COMPLETE STREET USER TYPE | CONSIDERATION | YES | NO | N/A | REFERENCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| E. Transit | Are there existing transit stops in the project area? |  |  |  |  |
|  | Is the project site on a transit route? |  |  |  |  |
| F. Motor Vehicles | Are there concerns with motor vehicle safety? |  |  |  |  |
|  | Does the project site meet current Transportation Master Plan Road Standards? |  |  |  |  |
|  | Is there on-street parking? |  |  |  |  |
|  | Are there documented or perceived speeding concerns? |  |  |  |  |
| G. Delivery | Are there concerns with trucks, freight or delivery access? |  |  |  |  |
|  | Is the project site a freight/delivery corridor? |  |  |  |  |
| H. Emergency | Is there emergency vehicle access? |  |  |  |  |
| I. General Land Use | Have the predominant land uses within the area been identified? (within 500' of project boundary) |  |  |  |  |
|  | Are there population groups with higher than average pedestrian/bike/ transit needs? (zero car, youth, senior, etc.) |  |  |  |  |
|  | Are there any major sites or destinations within the project area? (commercial, , recreation, civic, public spaces, etc.) |  |  |  |  |

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## COMPLETE STREETS CHECKLIST <br> SECTION 3: Final Design Checklist

## General Project Info

Applicant/Owner: $\qquad$
Project Name: $\qquad$
Project Location: $\qquad$
Project Representative: $\qquad$ Contact: $\qquad$

Streets within project:
Project's Purpose/Need:
Note any updates or changes from Pre-Project Form:
$\square$

|  | EXISTING | PROPOSED |
| :--- | :--- | :--- |
| Right of Way (ROW) Width |  |  |
| Pavement Width |  |  |
| Number of Drive Lanes |  |  |
| 2-Way Center Turn Lane |  |  |
| Shoulder Width |  |  |
| Bike Lane Width |  |  |
| Multi-Use Path Width |  |  |
| Sidewalk Width |  |  |
| Controlled Pedestrian Crosswalks |  |  |
| Mid-block Crossings |  |  |
| On-Street Parking (note type parallel or angle) |  |  |
| Speed Limit |  |  |
| Transit Stops |  |  |

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Department of Public Works

## COMPLETE STREETS CHECKLIST: Final Design

Check appropriate answer for each section. When choosing 'No' or 'N/A' reference why this need was not addressed through the proposed project, i.e. multi-use trail in lieu of a sidewalk. Reference any applicable community plans or documents. Use additional sheet for responses as needed:

## COMPLETE STREET USER TYPE

A. Pedestrians and Cyclists

| Does the final design include |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| accommodations for pedestrians |  |  |  |  |
| per the Complete Streets |  |  |  |  |
| Policy recommendations and |  |  |  |  |
| the Transportation Master Plan |  |  |  |  |
| recommendations and design |  |  |  |  |
| standards? |  |  |  |  |.

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| COMPLETE STREET USER TYPE | CONSIDERATION | YES | NO | N/A | REFERENCE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| B. Transit | Does the proposed design address future or anticipated transit needs? Has the project been discussed with IndyGo? |  |  |  |  |
|  | Are ADA transit facilities provided? |  |  |  |  |
|  | Are transit amenities provided? |  |  |  |  |
| C. Motor vehicles \& Safety | Does the proposed project address future motor vehicle needs and conditions in the area (i.e. volume, access connections, use relative to street type) and reduction of negative impacts of motor vehicle use (i.e. noise, air pollution)? |  |  |  |  |
|  | Is on-street parking included in the design? If so, is this supported by the overall design and Transportation Master Plan? |  |  |  |  |
|  | Has a traffic study been conducted? |  |  |  |  |
|  | Is the proposed speed consistent with current and future land use? |  |  |  |  |
|  | Is the proposed speed consistent with the level of pedestrian and bicycle activity (i.e. comfortable for non motor vehicles)? |  |  |  |  |
|  | Does the project include emergency vehicle access? |  |  |  |  |
|  | Overall does the project balance motor vehicle use with other street users? |  |  |  |  |
| D. Land Use | Is the project compatible with predominant existing and future land uses? |  |  |  |  |
|  | Does the project support major sites or destinations within the project area? (commercial, employment, recreation, civic, public spaces, etc.) |  |  |  |  |

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| COMPLETE <br> STREET <br> USER TYPE | CONSIDERATION | YES | NO | N/A | REFERENCE |
| :--- | :--- | :--- | :--- | :--- | :--- |
| E. Design <br> -Streetscape | Does the project follow Cumberland <br> Design standards for streetscaping, <br> street trees, buffer strips, planters <br> and other enhancements? |  |  |  |  |
|  | Does the streetscape allow/maintain <br> visibility for all users, particularly at <br> intersections? |  |  |  |  |
| F. Design - <br> Complete <br> Streets | Does the project follow appropriate <br> national and state design guidelines <br> for bicycle and pedestrian uses? |  |  |  |  |

Sign-Off:

| COMPLIANCE | YES | NO | If not, describe |
| :--- | :--- | :--- | :--- |
| The project conceptual plan, proposal, engineering |  |  |  |
| and other documents as presented accommodate |  |  |  |
| pedestrians, bicyclists and transit users of all ages and |  |  |  |
| abilities as it pertains to the Town of Cumberland's |  |  |  |
| Complete Streets Policy. |  |  |  |


[^0]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
    \#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

[^1]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
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    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
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[^2]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
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[^3]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
    \#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

[^4]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
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[^5]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
    \#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

[^6]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
    \#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

[^7]:    * Service Volumes for the specific facility being analyzed, based on \# of lanes from the intersection and segment data screens.
    ** Cannot be achieved based on input data provided.
    *** Not applicable for that level of service letter grade. See generalized tables notes for more details.
    \# Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
    \#\# Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct. \#\#\# Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

