McCorcleville Bike and Pedestrian Master Plan



December 10, 2019



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McCordsville Bike and Pedestrian Master Plan



SUMMARY

Town of McCordsville

Tonya Galbraith - Town Manager Ryan Crum - Director of Planning and Building

Stakeholders

Maria Bond - Director of Community Relations / Mt. Vernon Schools Stephanie Miller - Principal / McCordsville Elementary Bridgette Cook-Jones - Hancock County Tourism Director Christine

Bridgette Cook-Jones - Hancock County Tourism Director Christine Owens - Cumberland Assistant Town Manager & Planner Adam

Zaklikowski - Fortville Planning Administrator

Steve Long - Hancock Health Randy Sorrell - HEDC Director

Flory May - Vernon Township Trustee

Mel Branson - Buck Creek Township Trustee

Bob Bronson - IN DNR

Jason Taylor - Fishers City Engineer Susan Bodkin - County Surveyor

Keith Lash - Residential developer - VP Lennar Homes Tom Willey - Commercial Developer - Reliant Partners

Aimee Ector - Business owner - Second Stories

John Jokantas - Resident, trail supporter, County E911 Director

Anna Gremling - Metropolitan Planning Organization

City of Lawrence representative

Aletha Dunston - Ft. Ben Re-use Authority Director

Joe Mitchell - Executive Minister / Outlook Christian Church

Scott McCain - Resident & real estate agent

Ariel Schoen - Resident & biker

Mary Gibble - Hancock Community Foundation Director

Mary Anne Wietbrock - Pennsy Trail Group

Anna Bergmann - Resident

Jen Higginbotham - Metropolitian Planning Organization

Steering Committee

Ann Kloc Brianne Schneckenberger Amanda Everidge Mark Witsman Ron Crider Ryan Crum Tonya Galbraith

Design Team



CONTEXT DESIGN Project Lead, Landscape Architects

- Joe Mayes, Project Manager
- Ben Kay, Project Manager Support



CMT Engineering

- Cassie Reiter, Project Engineer
- Scott Hanson, Project Planner

Executive Summary

The McCordsville Bike and Pedestrian Master Plan booklet documents the process and proposes a comprehensive system within the Town, as well as connecting to adjacent communities and systems.

The Town of McCordsville is a fast-growing bedroom community outside of Indianapolis and is the second largest municipality in Hancock County, Indiana. McCordsville is located in the northwest corner of Hancock County just south of Geist Reservoir, bordering both the City of Lawrence in Marion County and the City of Fishers in Hamilton County. The Town is conveniently located along State Highway 67 and is less than 10 minutes from I-70, I-69, I-465, and State Road 234.

Due to the town's rapid growth and development, elected officials, Town staff, and citizens have increasingly voiced interest in and support of creating a walkable and bikeable vision for the town. The design team worked with Town staff and the Indianapolis Metropolitan Planning Organization to create a process to collect, propose, and implement the plan. The goals of which are as follows:

- Analyze existing facilities, assets, programs, and uses for strengths, weaknesses, opportunities, and threats to inform the planning process.
- Facilitate a public engagement process that is collaborative with Town staff, steering committee members, stakeholders, residents, schools, neighborhoods, and Town leaders in a meaningful, innovative dialogue.
- Utilize technology and graphics to bring life to the storytelling of the existing conditions, gather information, and present the plan.
- Envision a bold plan that beautifully balances safety, maintenance, recreational needs, and access, while encouraging the increase of pedestrians and bicyclists in the town.
- Develop a realistic implementation plan that prioritizes action steps and creates strategies, short- and long-term phases of development, and real-world costs.

The proposed plan for this system includes improvements to 12 main corridors and proposing six new greenways. Specifically, the goals that will be accomplished by implementing this plan include the following:

- Increase the number of people walking and biking for everyday transportation purposes by creating a trail plan that connects people to destinations.
- Increase the number of people walking and biking for recreation by creating a trail plan that provides highly accessible and desirable recreation opportunities.
- Establish priorities for future bike/pedestrian projects.
- Evaluate the feasibility of multi-use trails along riparian corridors.
- Establish safe and functional routes for bicycles and pedestrians between community destinations.
- Identify "branded" trails within the system that can have additional interest, design elements, and sources of community pride.
- Recommend policy changes and action steps for a successful implementation.



PUBLIC INPUT

Summary

Public Engagement Events

The design team attended and organized a variety of strategies to gain public input on the McCordsville Bike and Pedestrian Master Plan. Two of the plan's overall goals specifically relate to public engagement:

- Facilitate a public engagement process that is collaborative with Town staff, steering committee members, stakeholders, residents, schools, neighborhoods, and Town leaders in a meaningful, innovative dialogue.
- Utilize technology and graphics to bring life to the storytelling of the existing conditions, gather information, and present the plan.

To meet these goals, the design team utilized the following means to engage the public and display the design process:

- Steering Committee a group of Town staff, Town officials, interest groups and private citizens to help guide the design team.
- Stakeholder Group a group of individuals from interest groups, business entities, and adjacent municipalities to provide input and guidance in the overall plan.
- Pop-up Engagement a booth set up at the McCordsville Pathway to Fitness 5K to engage citizens and gather input.
- Project Website a 24/7 portal for citizens to visit, see current materials, and provide input.
- Online Survey published through an online portal that gathered over 220 results.
- Public Approval Process a public forum to formally adopt the plan for the Town of McCordsville's use.

McCordsville Path To Fitness 5K



Steering Committee Meetings









Website



PUBLIC INPUT

Survey Results

McCordsville Bike and Pedestrian Master Plan

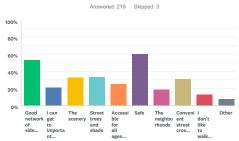
Q1 When bike and pedestrian facilities are in place, are you more likely to walk or bike within McCordsville?"



ANSWER CHOICES	RESPONSES	
Bike	19.44%	42
Walk	25.93%	56
Both	54.63%	118
TOTAL		216

McCordsville Bike and Pedestrian Master Plan

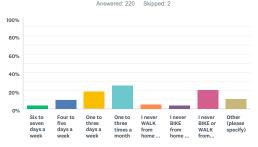
Q2 What do you like MOST about walking and biking in McCordsville? (Choose 4)



		ugcom	Wathin	
ANSWER CHOICES			RESPONSES	
Good network of sidewalk, trails,	and paths.		53.42%	117
I can get to important destinations	and events		21.00%	46
The scenery			32.88%	72
Street trees and shade			33.33%	73
Accessible for all ages and physic	al capabilities		25.57%	56
Safe			60.27%	132
The neighborhoods			19.18%	42
Convenient street crossings			31.05%	68
I don't like to walk or bike McCord	sville		12.79%	28
Other			8.22%	18
Total Respondents: 219				

McCordsville Bike and Pedestrian Master Plan

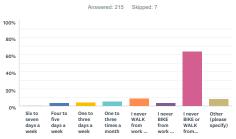
Q3 How often do you walk or bike from HOME to another destination?



One to three days a week 19.09% One to three times a month 25.91%	VER CHOICES	RESPONSES	
One to three days a week 19.09% One to three times a month 25.91% I never WALK from home to a destination 5.00%	seven days a week	4.09%	9
One to three days a week One to three times a month I never WALK from home to a destination 5.00%	o five days a week	10.00%	22
I never WALK from home to a destination 5.00%	three days a week	19.09%	42
Theref walk from nome to a desunation	three times a month	25.91%	57
I never BIKE from home to a destination 4.09%	r WALK from home to a destination	5.00%	11
	r BIKE from home to a destination	4.09%	9
I never BIKE or WALK from home to a destination 20.91%	r BIKE or WALK from home to a destination	20.91%	46
Other (please specify) 10.91%	(please specify)	10.91%	24
TOTAL 2:	L		220

McCordsville Bike and Pedestrian Master Plan

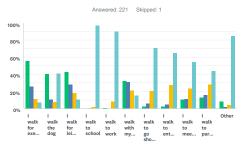
Q4 How often do you walk or bike from WORK or SCHOOL to another destination?



ANSWER CHOICES	RESPONSES	
Six to seven days a week	0.47%	1
Four to five days a week	3.72%	8
One to three days a week	4.65%	10
One to three times a month	5.58%	12
I never WALK from work or school to a destination	8.84%	19
I never BIKE from work or school to a destination	4.19%	9
I never BIKE or WALK from work or school to a destination	64.19%	138
Other (please specify)	8.37%	18
TOTAL		215

McCordsville Bike and Pedestrian Master Plan

Q5 Please tell us about the types of WALKING trips you take and how often:

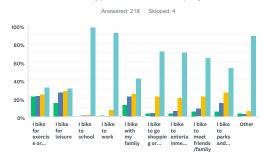


Several times per week Several times per month Fewer than 1 to 2 times per month N/A

	SEVERAL TIMES PER WEEK	SEVERAL TIMES PER MONTH	FEWER THAN 1 TO 2 TIMES PER MONTH	N/A	TOTAL RESPONDENTS
I walk for exercise or personal fitness	55.35% 119	26.05% 56	11.63% 25	6.98% 15	215
I walk the dog	40.40% 80	10.61% 21	8.08% 16	40.91% 81	198
I walk for leisure	43.20% 89	28.16% 58	18.45% 38	10.68% 22	206
I walk to school	0.00%	0.53% 1	2.13% 4	97.34% 183	188
I walk to work	1.08%	0.00%	8.60% 16	90.32% 168	186
I walk with my family	32.68% 67	31.22% 64	20.98% 43	15.61% 32	205
I walk to go shopping or errands	2.63% 5	5.79% 11	20.53% 39	71.05% 135	190
I walk to entertainment or restaurants	2.59% 5	5.18% 10	27.46% 53	64.77% 125	193
I walk to meet friends/family	10.77% 21	11.28% 22	23.59% 46	54.36% 106	195
I walk to parks and recreational amenities	12.81% 26	15.76% 32	28.08% 57	43.84% 89	203
Other	8.49% 9	1.89% 2	4.72% 5	84.91% 90	106

McCordsville Bike and Pedestrian Master Plan

Q6 Please tell us about the types of BIKING trips you take and how often:



Several times per week Several times per month Fewer than 1 to 2 times per month N/A

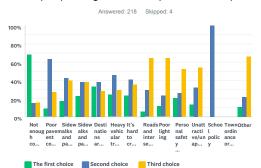
	SEVERAL TIMES PER WEEK	SEVERAL TIMES PER MONTH	FEWER THAN 1 TO 2 TIMES PER MONTH	N/A	TOTAL
I bike for exercise or personal fitness	21.96% 47	22.43% 48	23.83% 51	31.78% 68	214
I bike for leisure	15.20% 31	26.47% 54	27.94% 57	30.39% 62	204
I bike to school	0.00% 0	1.05% 2	1.58% 3	97.37% 185	190
I bike to work	1.05% 2	0.53% 1	6.84% 13	91.58% 174	190
I bike with my family	12.38% 25	21.78% 44	24.26% 49	41.58% 84	202
I bike to go shopping or errands	3.06% 6	4.08% 8	21.94% 43	70.92% 139	196
I bike to entertainment or restaurants	3.11% 6	6.22% 12	20.73% 40	69.95% 135	193
I bike to meet friends/family	5.61% 11	8.67% 17	21.94% 43	63.78% 125	196
I bike to parks and recreational amenities	5.53% 11	15.08% 30	26.63% 53	52.76% 105	199
Other	3.36% 4	2.52%	5.88% 7	88.24% 105	119

PUBLIC INPUT

Survey Results

McCordsville Bike and Pedestrian Master Plan

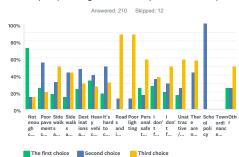
Q7 What factors DISCOURAGE WALKING in McCordsville? Select your top 3 (1 being the most important reason)



	THE FIRST CHOICE	SECOND CHOICE	THIRD CHOICE	TOTAL	WEIGHTED AVERAGE
Not enough connected paths and sidewalks	68.32% 110	15.53% 25	16.15% 26	161	1.48
Poor pavement conditions	9.09% 1	63.64% 7	27.27% 3	11	2.18
Sidewalks and paths are too close to the road	17.50% 7	42.50% 17	40.00% 16	40	2.23
Sidewalks and paths are too narrow	23.08% 3	38.46% 5	38.46% 5	13	2.15
Destinations are too far away to walk to	33.33% 33	38.38% 38	28.28% 28	99	1.95
Heavy vehicular traffic and speeding traffic	24.35% 28	46.09% 53	29.57% 34	115	2.05
It's hard to cross busy roads	23.47% 23	40.82% 40	35.71% 35	98	2.12
Roads and intersections too wide to cross	5.88% 1	29.41% 5	64.71% 11	17	2.59
Poor lighting	11.76% 2	23.53% 4	64.71% 11	17	2.53
Personal safety is a concern - I don't like to walk alone	21.05% 4	26.32% 5	52.63% 10	19	2.32
Unattractive/unappealing scenery (no trees, nothing of interest to explore)	13.51% 5	32.43% 12	54.05% 20	37	2.41
School policy	0.00%	100.00% 1	0.00%	1	2.00
Town ordinance or code	0.00%	0.00%	0.00%	0	0.00
Other	11.11% 1	22.22% 2	66.67% 6	9	2.56

McCordsville Bike and Pedestrian Master Plan

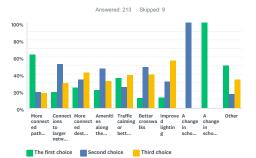
Q8 What factors DISCOURAGE BIKING in McCordsville? Select your top 3 (1 being the most important reason)



	THE FIRST CHOICE	SECOND CHOICE	THIRD CHOICE	TOTAL	WEIGHTED AVERAGE
Not enough connected paths and sidewalks	71.74% 99	14.49% 20	13.77% 19	138	1.42
Poor pavement conditions	25.00% 5	55.00% 11	20.00% 4	20	1.95
Sidewalks and paths are too close to the road	18.18% 4	31.82% 7	50.00% 11	22	2.32
Sidewalks and paths are too narrow	14.29% 2	42.86% 6	42.86% 6	14	2.29
Destinations are too far away to bike to	23.40% 11	46.81% 22	29.79% 14	47	2.06
Heavy vehicular traffic and speeding traffic	33.60% 42	40.00% 50	26.40% 33	125	1.93
It's hard to cross busy roads	18.60% 16	50.00% 43	31.40% 27	86	2.13
Roads and intersections too wide to cross	0.00%	12.50% 1	87.50% 7	8	2.88
Poor lighting	0.00%	12.50% 1	87.50% 7	8	2.88
Personal safety is a concern - I don't like to bike alone	25.00% 3	16.67% 2	58.33% 7	12	2.33
I don't feel comfortable riding in the road	27.12% 16	35.59% 21	37.29% 22	59	2.10
I don't feel comfortable riding with young/inexperienced family members	20.00% 4	30.00% 6	50.00% 10	20	2.30
Unattractive/unappealing scenery (no trees, nothing of interest to explore)	16.67% 4	25.00% 6	58.33% 14	24	2.42
There are no places to safely store/lock my bicycle at my destination	0.00%	42.86% 6	57.14% 8	14	2.57
School policy	0.00%	100.00% 1	0.00%	1	2.00
Town ordinance or code	0.00%	0.00%	0.00%	0	0.00
Other	25.00% 2	25.00% 2	50.00% 4	8	2.25

McCordsville Bike and Pedestrian Master Plan

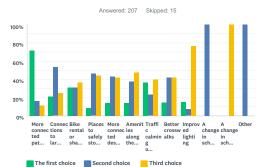
Q9 What factors ENCOURAGE an increase of WALKING in McCordsville? Select your top 3 (1 being the most important reason)



	THE FIRST CHOICE	SECOND CHOICE	THIRD CHOICE	TOTAL	WEIGHTED AVERAGE
More connected paths and sidewalks	63.06% 99	19.11% 30	17.83% 28	157	1.55
Connections to larger networks outside of McCordsville	19.12% 13	51.47% 35	29.41% 20	68	2.10
More connected destinations	24.56% 28	33.33% 38	42.11% 48	114	2.18
Amenities along the trail and paths (seating, drinking water, interpretation signage, fitness nodes)	21.43% 18	46.43% 39	32.14% 27	84	2.11
Traffic calming or better protected paths, trails and sidewalks	35.65% 41	25.22% 29	39.13% 45	115	2.03
Better crosswalks	12.07% 7	48.28% 28	39.66% 23	58	2.28
Improved lighting	12.50% 2	31.25% 5	56.25% 9	16	2.44
A change in school/work policy	0.00%	100.00%	0.00%	3	2.00
A change in school/work facilities (showers, ect)	100.00% 1	0.00%	0.00%	1	1.00
Other	50.00%	16.67% 1	33.33% 2	6	1.83

McCordsville Bike and Pedestrian Master Plan

Q10 What factors ENCOURAGE an increase of BIKING in McCordsville? Select your top 3 (1 being the most important reason)



	THE FIRST CHOICE	SECOND CHOICE	THIRD CHOICE	TOTAL	WEIGHTED AVERAGE
More connected paths and sidewalks	72.19%	16.56%	11.26%		
	109	25	17	151	1.39
Connections to larger networks outside of McCordsville	21.59%	53.41%	25.00%		
	19	47	22	88	2.03
Bike rental or share program	31.58%	31.58%	36.84%		
	6	6	7	19	2.05
Places to safely store/lock my bicycle at my destination	8.89%	46.67%	44.44%		
	4	21	20	45	2.36
More connected destinations	14.43%	43.30%	42.27%		
	14	42	41	97	2.28
Amenities along the trail and paths (seating, drinking water,	14.55%	38.18%	47.27%		
interpretation signage, fitness nodes)	8	21	26	55	2.33
Traffic calming or better protected paths, trails and sidewalks	36.89%	23.30%	39.81%		
	38	24	41	103	2.03
Better crosswalks	15.15%	42.42%	42.42%		
	5	14	14	33	2.27
Improved lighting	15.38%	7.69%	76.92%		
	2	1	10	13	2.62
A change in school/work policy	0.00%	100.00%	0.00%		
	0	2	0	2	2.00
A change in school/work facilities (bike parking, showers, ect)	0.00%	0.00%	100.00%		
	0	0	1	1	3.00
Other	0.00%	100.00%	0.00%		
	0	2	0	2	2.00

Survey Results

McCordsville Bike and Pedestrian Master Plan

Q11 What locations need the most pedestrian and biking improvements?



Substantial improvements needed Some improvements needed No Improvements needed N/A or Don't know

	SUBSTANTIAL IMPROVEMENTS NEEDED	SOME IMPROVEMENTS NEEDED	NO IMPROVEMENTS NEEDED	N/A OR DON'T KNOW	TOTAL	WEIGHTED AVERAGE
Neighborhoods	16.33% 32	44.90% 88	31.63% 62	7.14% 14	196	2.30
The Old Town neighborhood	43.65% 86	26.90% 53	4.57% 9	24.87% 49	197	2.11
Intersections and crosswalks	54.08% 106	38.27% 75	4.08% 8	3.57% 7	196	1.57
Bridges	26.42% 51	32.12% 62	8.81% 17	32.64% 63	193	2.48
Along major streets	63.86% 129	31.68% 64	2.97% 6	1.49% 3	202	1.42
Rail road crossings	56.92% 111	30.77% 60	3.59% 7	8.72% 17	195	1.64
Near park and recreation facilities	29.84% 57	47.64% 91	7.85% 15	14.66% 28	191	2.07
Near schools	26.42% 51	29.53% 57	10.88% 21	33.16% 64	193	2.51
Near destinations	49.48% 96	33.51% 65	4.64% 9	12.37% 24	194	1.80
Connections to larger trail and path networks outside of McCordsville	56.16% 114	33.50% 68	4.93% 10	5.42% 11	203	1.60
Other	20.00% 14	2.86%	1.43% 1	75.71% 53	70	3.33

McCordsville Bike and Pedestrian Master Plan

Q13 Enter up to five (5) places to bike and walk to within the Town of McCordsville.

Answered: 139 Skipped: 83

many Neighborhoods Center Grif McCordsville (No School Park

shops Los agaves Tim Scadel Lane Park & Meijer Kinsey CVS Olo

Pendleton Pike neighborhoods Town Hall Pazza Meijer Tim Bakery Olio

town chicago pizza bike trail Broadway plaza Town Hall Tims

Hancock Wellness Center Scarlet Lane Grill Meijer seth Olio wask CVS Kinsey Park stopping connecting Ford office Los Agaves

Shops Past Office Broadway Geist Olio along Restaurants from CVS Center Meller Scarlet Lane park area Grill Pendeton Pike Town Hall McCordsville Bike and Pedestrian Master Plan

Q12 Enter up to five (5) intersections, streets, corridors, neighborhoods, locations or areas that you would like to become more PEDESTRIAN and/or BICYCLE friendly? (Please be detailed in your description.)

Answered: 169 Skipped: 53

McCordsville near path walk W N pike N W intersection Mt Comfort

comfort Rd Need 96th bike Road 600W Broadway

96th street Olio trail Pendleton Pike sidewalks N

east Connect park Crossing downtown south 750N W McCordsville Elementary Fortville Carrott Road Along

area road bike N W Crossing Carroll Road town McCordaville Carroll Rd

West W 600w Pendleton Pike N Broadway

South Olio trail along Sidewalks connect Street path Pandelson Meijer

neighborhood Pendleton plike 96th area W North N downtown along town Olio

Connect Broadway East School street road path 600W

south Town Half Rd bike Olio along new at path

N W Emerald Springs Connect downtown Neighborhood take Woodhaven Carroll

Road Railroad tracks N street Mt Comfort McCordsville W

Mt Comfort Rd Broadway Carroll Road Olio Bay Creek

Pendleton Pike Rd Crossing Carrol 96th town

600W downtown McCordsville Carroll Rd 96th st West 86th north street

McCordsville Bike and Pedestrian Master Plan

Q14 Enter up to five (5) places to bike and walk to outside of the Town of McCordsville.

Answered: 137 Skipped: 85

Oaklandon Restaurants Fishers Rd Park Greenfield Fortville 96th Olio Geist Reservoir Geist new

fishers Fox Olio School Geist Marina Geist shopping

Fishers Marina Fortville Park Shopping St

Geist area Rd Hamilton Town Center Geist Marina Flat Fork Creek Olio

Park

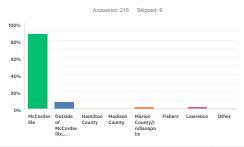
Broadway bridge Olio yalls area Downtown Geist Reservoir

Flat Fork Creek Geist Shopping Fortville & Fishers

Road Geist Marina town Restaurants Fort Harrison Park

McCordsville Bike and Pedestrian Master Plan

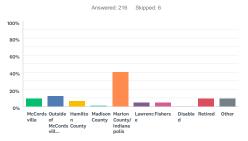
Q15 Where do you live?



ANSWER CHOICES	RESPONSES	
McCordsville	87.50%	189
Outside of McCordsville, but in Hancock County	7.87%	17
Hamilton County	0.46%	1
Madison County	0.00%	0
Marion County/Indianapolis	2.31%	5
Fishers	0.00%	0
Lawrence	1.85%	4
Other	0.00%	0
TOTAL		216

McCordsville Bike and Pedestrian Master Plan

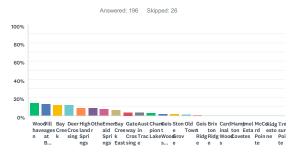
Q17 Where do you work?



ANSWER CHOICES	RESPONSES	
McCordsville	9.26%	20
Outside of McCordsville, but in Hancock County	12.50%	27
Hamilton County	6.48%	14
Madison County	1.39%	3
Marion County/Indianapolis	40.74%	88
Lawrence	5.09%	11
Fishers	5.09%	11
Disabled	0.46%	1
Retired	9.26%	20
Other	9.72%	21
TOTAL		216

McCordsville Bike and Pedestrian Master Plan

Q16 If you are a McCordsville resident, in what neighborhood or general area do you live?



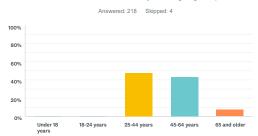
ANSWER CHOICES	RESPONSES	
Woodhaven	13.78%	27
Villages at Brookside	12.76%	25
Bay Creek	12.24%	24
Deer Crossing	12.24%	24
Highland Springs	8.67%	17
Other	8.67%	17
Emerald Springs	7.65%	15
Bay Creek East	6.63%	13
Gateway Crossing	4.08%	8
Austin Trace	3.57%	7
Champion Lake	3.06%	6
Geist Woods Estates	2.04%	4
Stone Grove	2.04%	4
Old Town	1.53%	3
Geist Ridge	1.02%	2
Brixton Ridge	0.00%	0
Cardinal Woods	0.00%	0
Hampton Cove	0.00%	0
Imel Estates	0.00%	0
McCord Pointe	0.00%	0
Ridgestone	0.00%	0
Treasure Pointe	0.00%	0
TOTAL		196

PUBLIC INPUT

Survey Results

McCordsville Bike and Pedestrian Master Plan

Q19 Please indicate your age group



ANSWER CHOICES	RESPONSES	
Under 18 years	0.46%	1
18-24 years	0.46%	1
25-44 years	48.17%	105
45-64 years	43.58%	95
65 and older	7.34%	16
TOTAL		218

McCordsville Bike and Pedestrian Master Plan

Q20 How many children (0- 18 years) live at your residence?



ANSWER CHOICES	RESPONSES	
Over 3	1.84%	4
3	11.06%	24
2	21.20%	46
1	22.12%	48
0	43.78%	95
TOTAL		217

McCordsville Bike and Pedestrian Master Plan

Q21 What is your big idea for the bike and pedestrian plan?

able walk Lawrence build will want community nice Setter Olio triendly along major roads

Answered: 155 Skipped: 67

Connectivity etc crossing Monon family work neighborhoods tove destinations without traffic also walking safety town see make able safe need paths side connect connect neighborhood trails connection bike similar parks center McCordsville Flat Fork Croek areas Geist Fishers indy road use bike restaurants connect Fortville Way interested paths one existing Fortville ride pedestrian Walk bike ride road sidewalks busy roads people going wide places

McCordsville Bike and Pedestrian Master Plan

Q22 What is the biggest opportunity for the bike and pedestrian plan?

Answered: 123 Skipped: 99

Family live bike parks businesses draws safe outside destinations takes make place areas active go new town center Connect people McCordsville walk bike Community

Connecting neighborhoods town increase paths walking trails

Biking walking exercise Connectivity create Utilize neighborhoods kids building Na traffic new will instead able

Conclusions

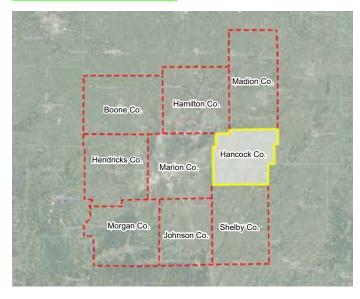
The public input process guided the design team in the following ways:

- Identified known issues and patterns of use within the town that are not readily visible by site visits.
- Confirmed and noted problem areas and use patterns.
- Provided insight into the community's culture and opinions of how the plans would be received.
- Confirmed interest from the community to create an improved system within the town.
- Defined destinations, high-use corridors, and connection needs to surrounding communities.
- Identified priority needs and areas within the system.
- Defined the best bicycle facilities (refer to pages 69-70) to be successfully adopted and used within the community.

This input informed the design team and helped develop the Existing Conditions and Proposed Conditions displayed in the following chapters.



Indiana Counties Map



Description

McCordsville is located in the northwest corner of Hancock County, which is one of the eight "donut" counties that surround Marion County.

McCordsville is 30 minutes northeast of Indianapolis, the county seat of Marion County and the capital of Indiana.

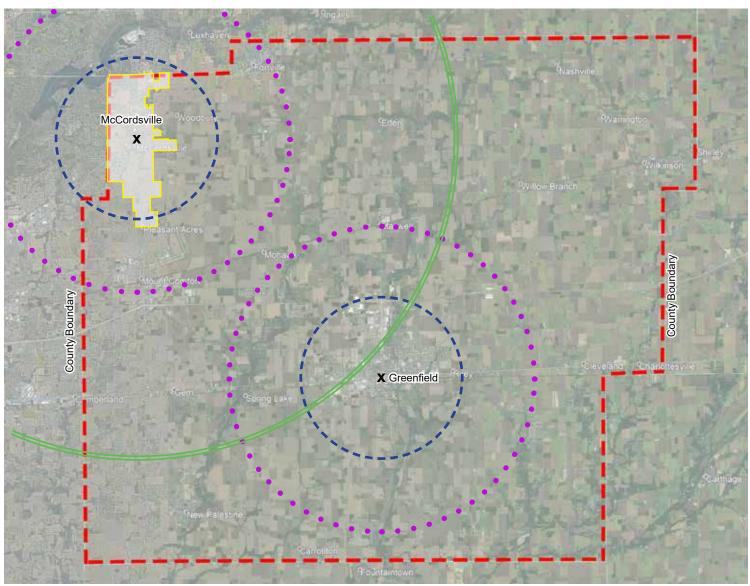
It is also 23 minutes northwest from Greenfield, the county seat of Hancock County.

Maps are not to scale

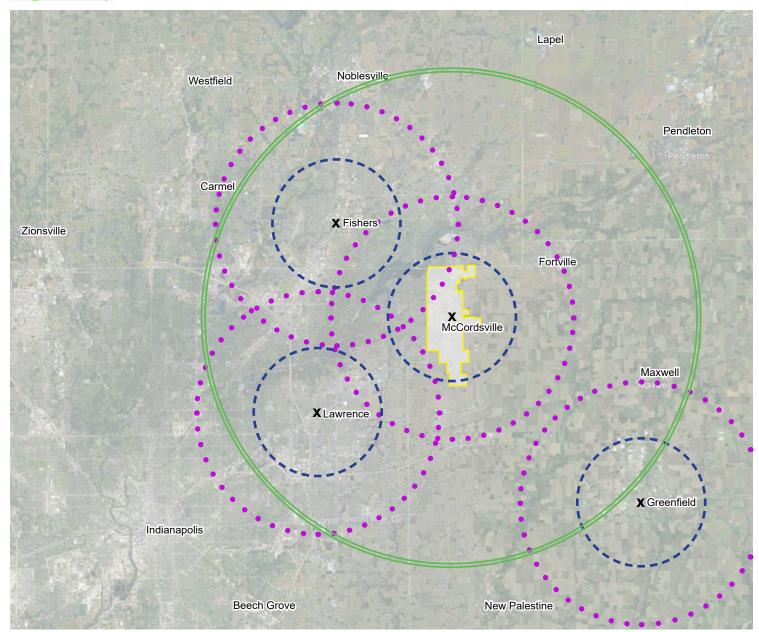
Legend

15 minute bike radius 30 minute bike radius 60 minute bike radius

ancock County Map



Regional Map



Description

The map above shows biking radii to and from McCordsville and the surrounding cities.

These radii assume an average biking speed of 10 mph.

Average walking speed is roughly 3 mph*, therefore, it can be assumed that a pedestrian will walk roughly 1/3 the distance a biker will ride in the same time frame.

Legend

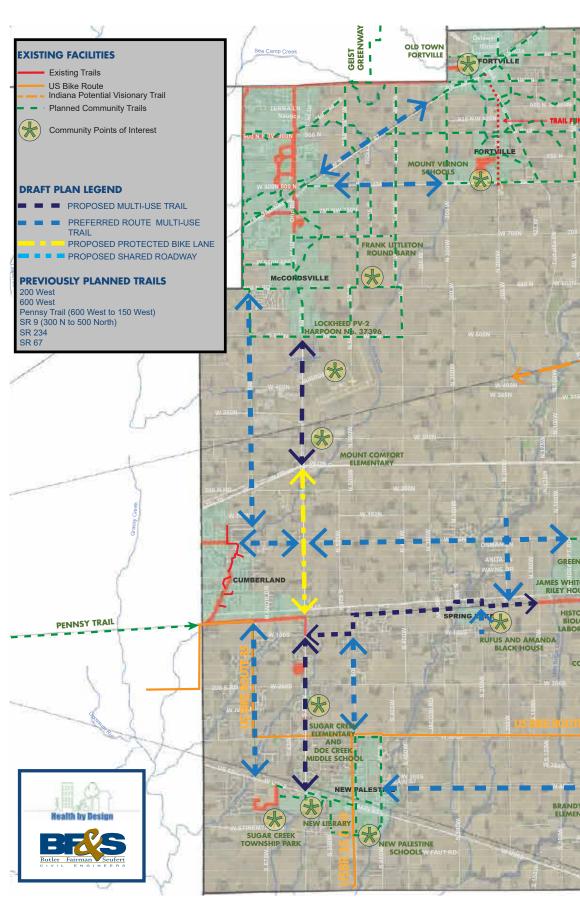
15 minute bike radius 30 minute bike radius 60 minute bike radius

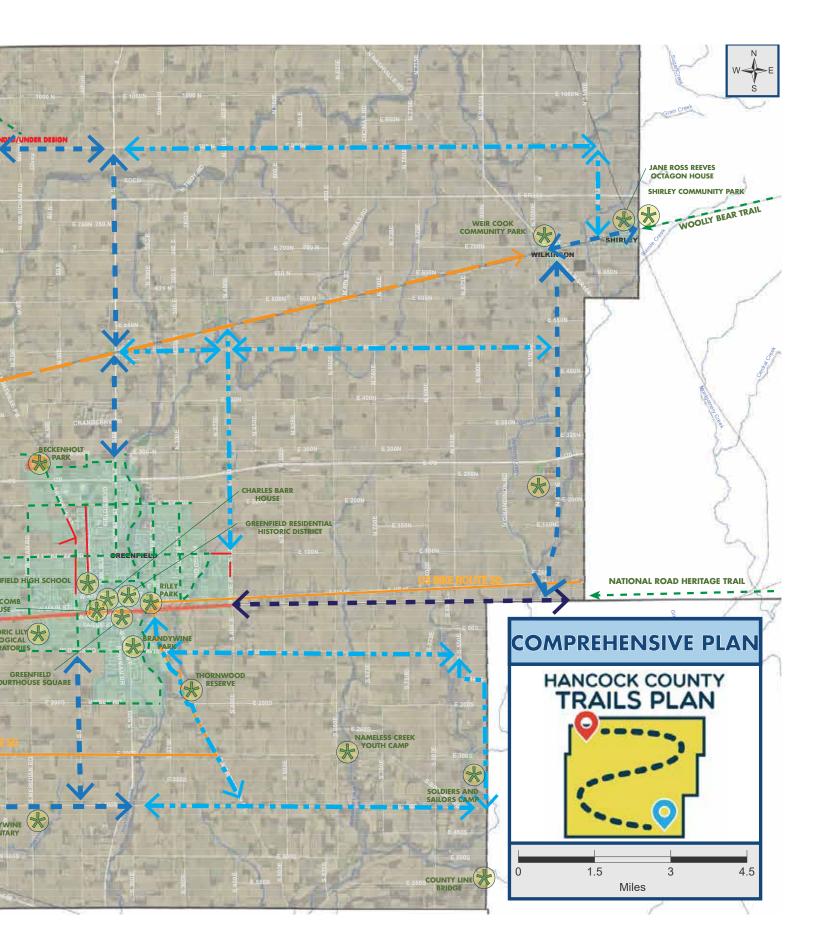
Hancock County Trails Plan

The map to the right shows the Comprehensive Plan graphic of the Hancock County Trails Plan, prepared in November 2018 by Butler, Fairman, & Seufert, Inc. and Health by Design.

The map lays out existing and proposed trails and community points of interest for Hancock County. Many of these trails connect to routes that lead in and out of McCordsville.

Consideration was taken by the design team to connect the future bike and pedestrian routes in McCordsville to those outside the town boundaries, as noted in the Hancock County Trails Plan, in an effort to create an elaborate and cohesive network of trails & amenities county-wide.





Legend

Main Road Corridor

Waterway

Public Park

ubilo i urk

Town Boundary

Area of Interest

5 minute bike radius

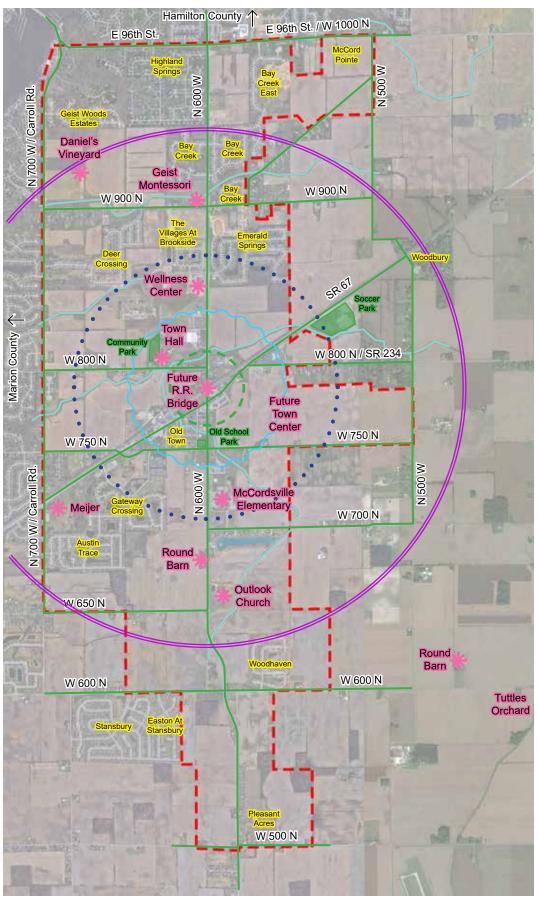
10 minute bike radius

5 minute walk radius

10 minute walk radius

Neighborhood XXX

Town Map





Legend

Existing Bike / Pedestrian Facility

Strava Heat Map overlaid to show amateur cyclist routes:

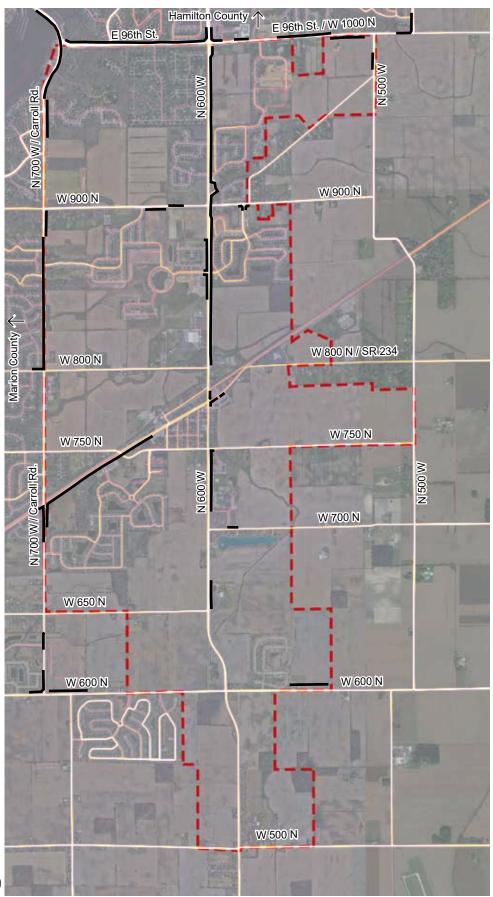
High Use

Medium Use

Low Use

Town Boundary

Existing Trail and Sidewalk Facilities



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Bike Lane

Separated Walk and

Bike Path

Neighborhood

Bridge Waterway

Train Tracks

Section (refer to

On-site Photo

Topography

Narrow R.O.W.

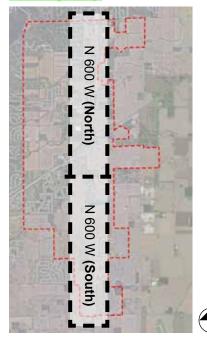
page 27)



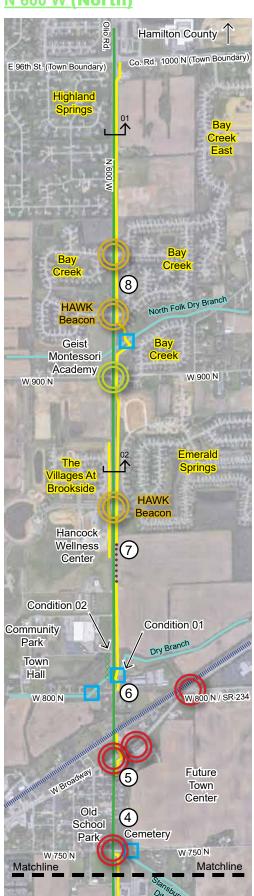
.....

XXX

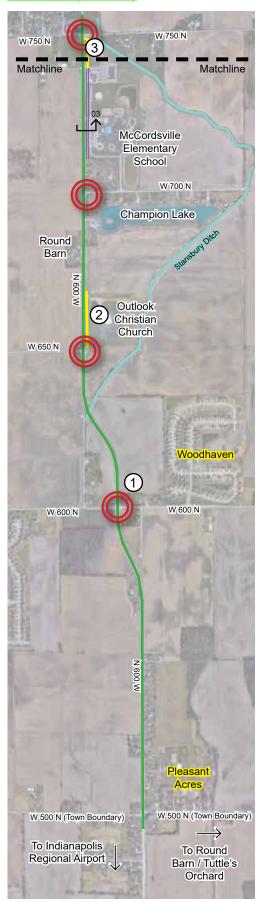
Vicinity Map



N 600 W (North)



N 600 W (South)













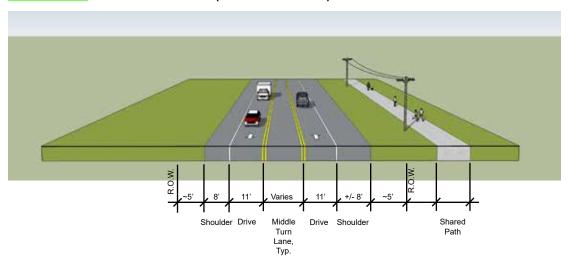




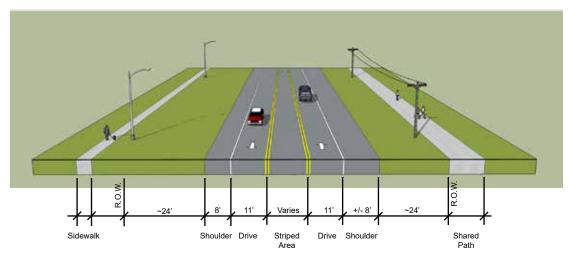


All images are oriented north.

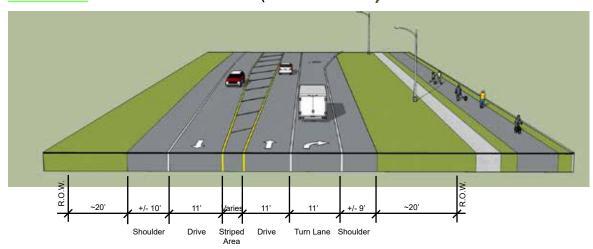
Section 01 - N 600 W / Olio Rd. (North of W 900 N)



Section 02 - N 600 W / Olio Rd. (North of W 800 N)



Section 03 - N 600 W / Mt. Comfort Rd. (South of W 750 N)



Analysis & Summary of Findings for N 600 W

Speed Limits:

W 500 N - W 600 N: 55 MPH W 600 N - Church St.: 50 MPH Church St. - School: 40 MPH School - W 800 N: 30 MPH W 800 N - E 96th St.: 40 MPH

R.O.W. Widths:

150' at N 600 W road curves south of Church 120' at subdivisions on N 600 W (North) (see section 02, page 27) 100' at school & wellness center (see section 03, page 27) 80' at train tracks 60' through rest of corridor (see section 01, page 27) 45' at Old Town Neighborhood

Existing Street Condition for N 600 W

Description:

The conditions along N 600 W are roughly 30'-42'-wide, two-lane road (with shoulders) with a significant number of sidewalks, trails, and bike & pedestrian facilities.

Condition 01 (refer to page 25): Riding north, where the bike trail begins, accessing the trail from N 600 W is at a driveway. The drive has a lip between the asphalt / road and the drive. This condition should be avoided, as a bike tire can get caught on this lip and cause a fall.

Condition 02 (refer to page 25): When riding south on N 600 W, there is a good shoulder until you reach the bridge. At this point, the road narrows, curb + gutter (and storm inlet structures) are added, forcing cyclists into the travel lane. Avoid abrupt changes in riding conditions.

Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Lane

Separated Sidewalk and Trail

Neighborhood

Bridge

XXX

.....

Waterway
Train Tracks

Section (refer to

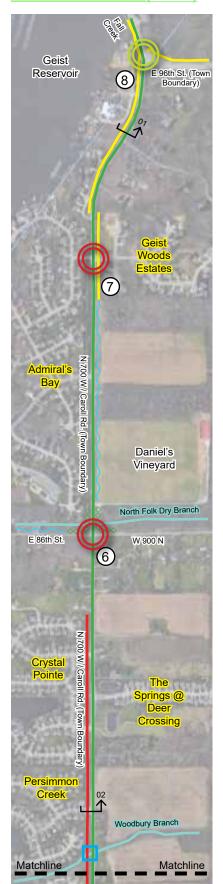
page 31)

On-site Photo

Topography

Narrow R.O.W.

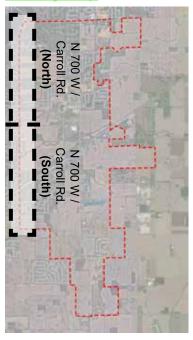
N 700 W / Carroll Rd. (North)



N 700 W / Carroll Rd. (South)



Vicinity Map















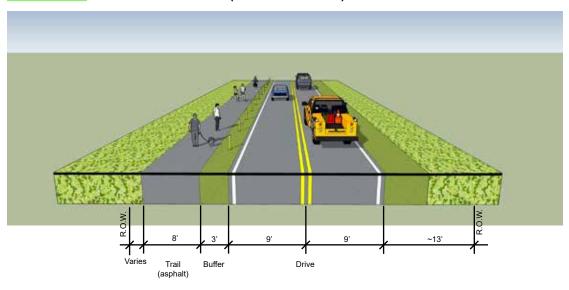




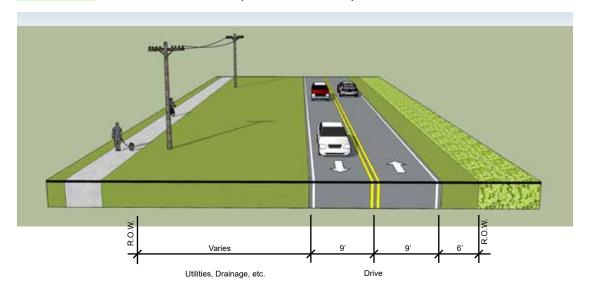


*All images are oriented north.

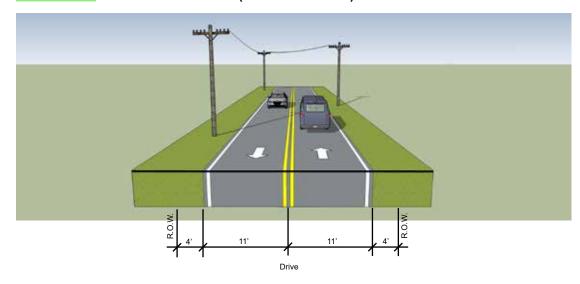
Section 01 - N 700 W / Carroll Rd. (North of W 900 N)



Section 02 - N 700 W / Carroll Rd. (North of W 800 N)



Section 03 - N 700 W / Carroll Rd. (North of W 650 N)



Analysis & Summary of Findings for N 700 W / Carroll Rd.

Speed Limits:

W 650 N - E 96th St.: 40 MPH

R.O.W. Widths:

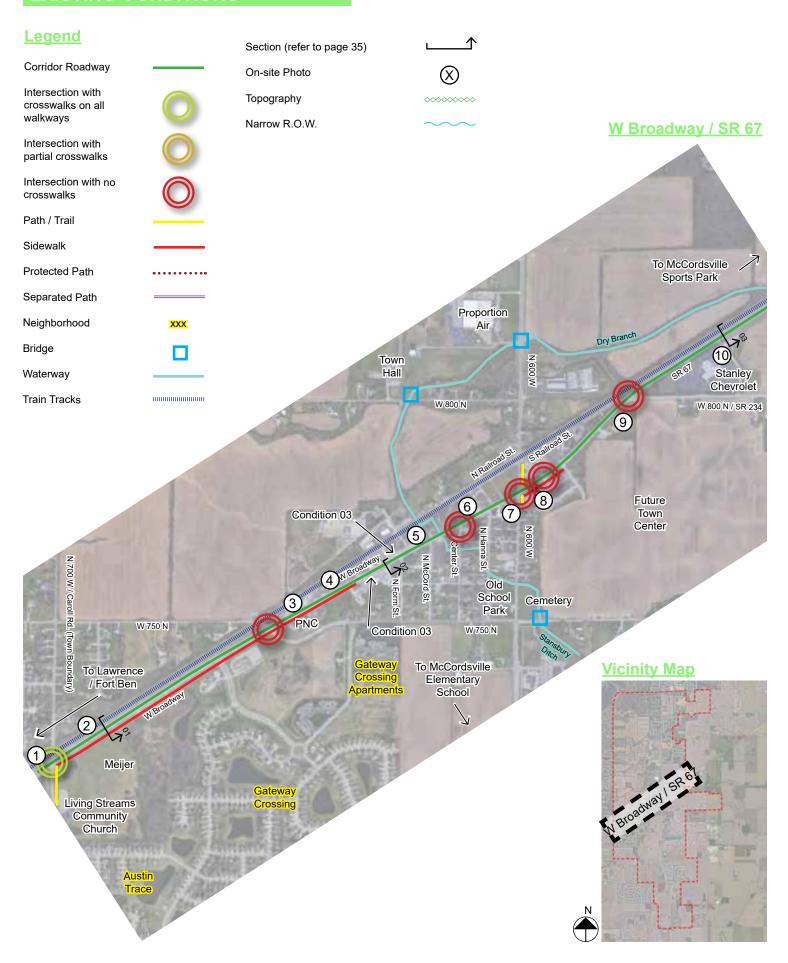
70' at Springs at Deer Crossing 60' at Geist Woods Estates 50' at Meijer 45' at Austin Trace (see section 01, page 31) 30' through rest of corridor (see sections 02 & 03, page 31)

Existing Street Condition for N 700 W / Carroll Rd.

Description:

The conditions along N 700 W are roughly 22'-wide, two-lane road with sidewalks and trails provided near Meijer and Geist Estates / Geist Reservoir. No other curbing, side walks, trails, or bike / pedestrian facilities are provided.

Sidewalks exist on the west side of the road, but that is Marion County's jurisdiction and no designated crosswalks are provided.



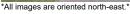














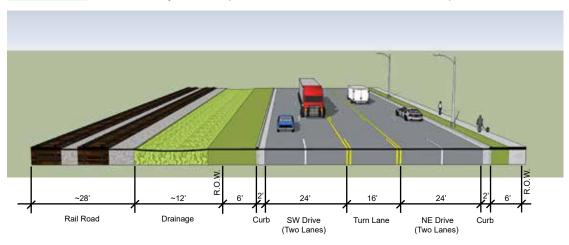




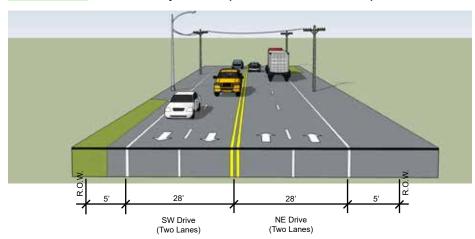




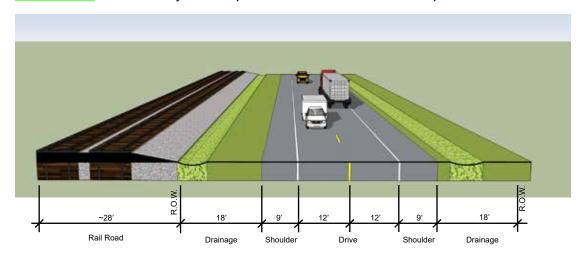
Section 01 - W Broadway / SR 67 (North-east of W 700 N / Carroll Rd.)



Section 02 - W Broadway / SR 67 (North-east of W 750 N)



Section 03 - W Broadway / SR 67 (North-east of W 800 N / SR 234)



Analysis & Summary of Findings for W Broadway / SR 67

Speed Limits:

Caroll Rd / N 700 W - W 750 N : 45 MPH W 750 N - Chevrolet Dealership: 40 MPH Chevrolet Dealership - N 500 W: 55 MPH

R.O.W. Widths:

100' near PNC / N 800 W 80' at Meijer (see section 01, page 35) 80' from Stanley Chevrolet to N 500 W (see section 03, page 35) 60' through rest of corridor (see section 02, page 35)

Existing Street Condition for W Broadway / SR 67

Description:

The conditions along W Broadway vary between a 36-62'-wide four-lane (with shoulders) road and a 42' wide two lane (with shoulders) road. Sidewalks are provided only on the south side of the road by the PNC bank and the CVS. These two sections of walk are not connected.

Certain areas of W Broadway have a center turn lane while others have no turn lane. Certain areas have a shoulder condition while others have shoulders that are indistinguishable from the adjacent parking lots because curb cuts are not well defined.

Condition 03 (refer to page 33): When parking areas do not have defined driveway entrances / exits, it makes it difficult to anticipate what a driver is going to do. This creates a lot of space for potential conflicts between vehicles and cyclists.

W Broadway / SR 67 (Old-Town Zoom-In)

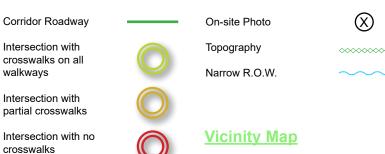


Legend

Path / Trail Sidewalk

Protected Path

Separated Path Neighborhood









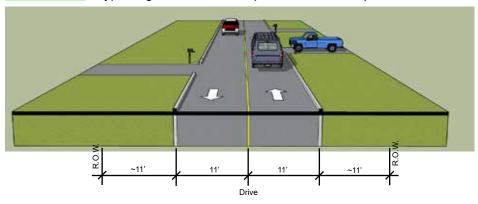
.....

Bridge
Waterway
Train Tracks

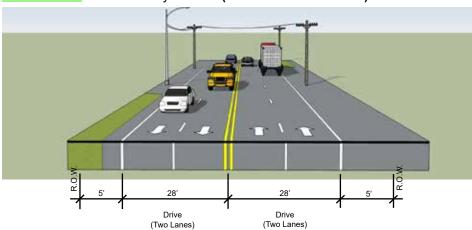




Section 01 - Typ. Neighborhood Street (North of W 750 N)



Section 02 - W Broadway / SR 67 (North-east of W 750 N)



Analysis & Summary of Findings for Old Town

Speed Limits:

Side Streets (Old Town): 30 MPH

W Broadway: 40 MPH

R.O.W. Widths:

100' near PNC 60' through the rest of Old Town along W Broadway (see section 02 this page) 45' Old Town Neighborhood along streets (see section 01 this page)

Existing Street Condition for Old Town

Description:

The conditions along the streets in the Old Town Neighborhood are approximately 22'-wide with no curbing, side walks, trails, or other bike / pedestrian facilities.

W Broadway is a major corridor that runs through the center of the Old Town Neighborhood but only has a side walk on the south side of the road near the PNC bank and the CVS. These two sections are not connected.

Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no

crosswalks

Path / Trail Sidewalk

Protected Path

Separated Path

Neighborhood

Bridge

Waterway

Train Tracks

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Section (refer to page 40)

On-site Photo

Topography

Narrow R.O.W.

Vicinity Map



N 500 W (North)



N 500 W (South)



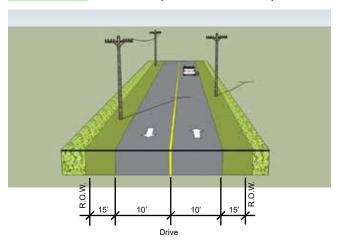






All images are oriented north.

Section 01 - N 500 W (North of W 700 N)









Analysis & Summary of Findings for N 500 W

Speed Limits:

W 700 N - E 96th St. / W 1000 N: 45 MPH

R.O.W. Width:

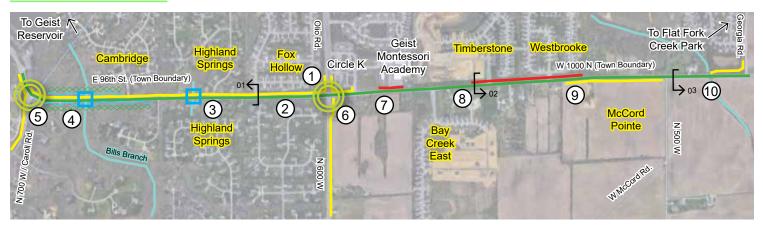
30' through entire corridor (see section this page)

Existing Street Condition for N 500 W

Description:

The condition along N 500 W is a roughly 20'-wide, two-lane road with no curbing, side walks, trails, or other bike & pedestrian facilities.

E 96th St. / W 1000 N



Legend

Corridor Roadway Intersection with crosswalks on all

walkways
Intersection with

partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Path

Separated Path

Neighborhood

XXX

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3

Bridge Waterway

Train Tracks

Section (refer to page 43)

On-site Photo

Topography

Narrow R.O.W.



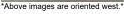














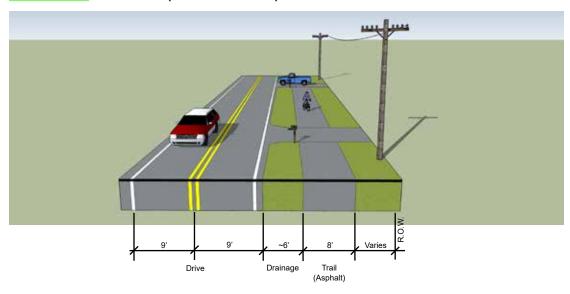




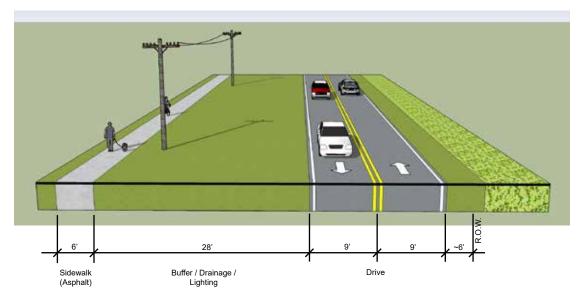




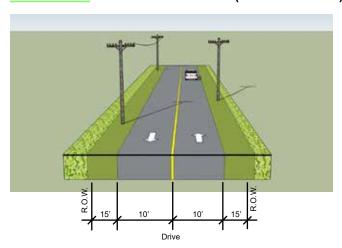
Section 01 - E 96th St. (West of N 600 W)



Section 02 - E 96th St. / W 1000 N (East of N 600 W)



Section 03 - E 96th St. / W 1000 N (East of N 500 W)



Analysis & Summary of Findings for E 96th St. / W 1000 N

Speed Limits:

E 96th St. - N 500 W: 40 MPH

R.O.W. Widths:

Measurements are taken from the C.L. of E 96th St. / W 1000 N to the southern border of the R.O.W.

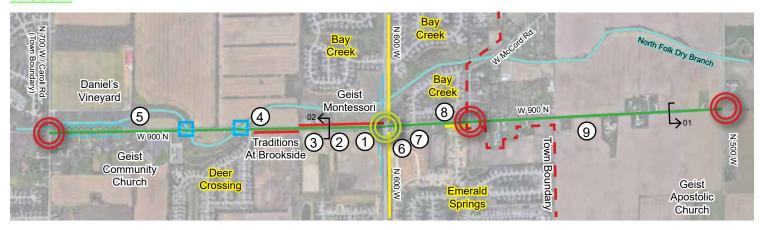
60' at Bay Creek East 55' at McCord Pointe 40' at residences near E 96th & N 700 W 25' through rest of corridor (see section 03, page 43)

Existing Street Condition for E 96th St. / W 1000 N

Description:

The conditions along E 96th St. are roughly 20'-wide, two-lane road with a healthy amount of existing sidewalks, trails, and curbing. There are a couple segments that lack bike / pedestrian infrastructure, but they are mainly limited to the east half of the E 96th St. corridor where developments have not yet been established.

W 900 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail Sidewalk

Protected Path

Separated Path

XXX

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Neighborhood

Bridge

Waterway

Train Tracks

Section (refer to page 47)

On-site Photo

Topography

Narrow R.O.W.













*Above images are oriented west."



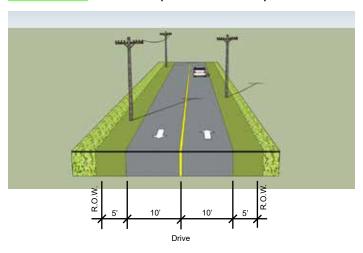




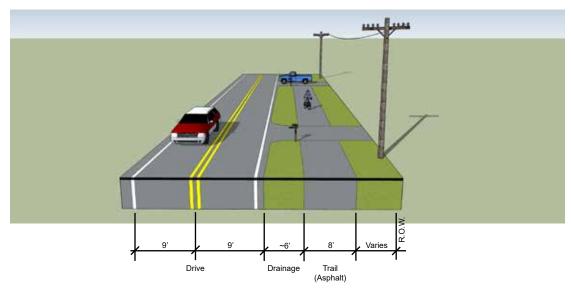


Above images are oriented east.

Section 01 - W 900 N (East of N 600 W)



Section 02 - W 900 N (West of N 600 W)



Analysis & Summary of Findings for W 900 N

Speed Limits:

N 700 W - N 500 W: 45 MPH

R.O.W. Widths:

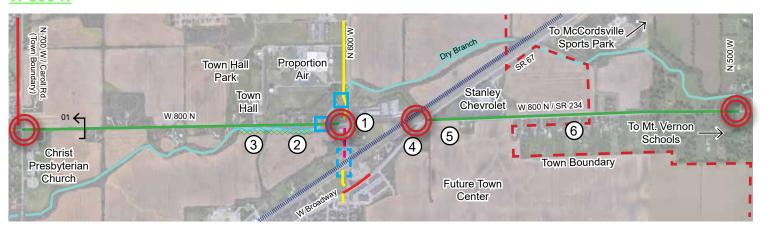
80' at Traditions at Brookside 60' at Fallingwater 55' between bridges of Dry Branch 30' through rest of corridor (see sections this page).

Existing Street Condition for W 900 N

Description:

The conditions along W 900 N are roughly 20'-wide, two-lane road with sidewalks existing north of Traditions at Brookside and south of Falling Water, with no other curbing, side walks, trails, or bike & pedestrian facilities.

W 800 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail Sidewalk

Protected Path

Separated Path

Neighborhood

XXX

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Bridge Waterway

Train Tracks

Section (refer to page 50)

On-site Photo

Topography

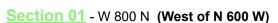
Narrow R.O.W.

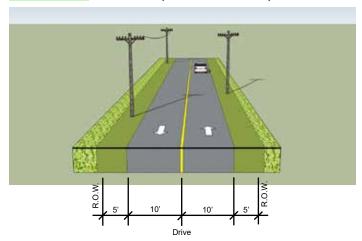


















Analysis & Summary of Findings for W 800 N

Speed Limits:

N 700 W - N 600 W: 40 MPH W Broadway - N 500 W: 55 MPH

R.O.W. Widths:

75' from W Broadway - N 500 W. 30' from N 700 W to N 600 W (see section this page).

Existing Street Condition for W 800 N

Description:

The condition along W 800 N is a roughly 20'-wide, two-lane road with no curbing, side walks, trails, or other bike & pedestrian facilities.

W 750 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

.....

Path / Trail Sidewalk

Protected Path

Separated Path

Neighborhood

XXX

.....

Bridge

Waterway

Train Tracks

Section (refer to page 52)

On-site Photo

Topography

Narrow R.O.W.









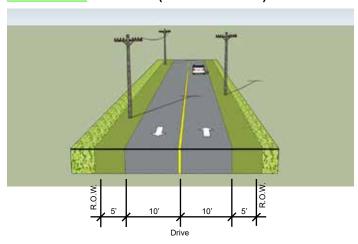








Section 01 - W 750 N (East of N 600 W)



Analysis & Summary of Findings for W 750 N

Speed Limits:

N 700 W - N 500 W: 30 MPH

R.O.W. Widths:

100' near road curve at PNC bank 70' at specific residences 45' at Gateway Crossing Apartments 30' through rest of corridor (see section this page).

Existing Street Condition for W 750 N

Description:

The condition along W 750 N is a roughly 20'-wide, two-lane road with no curbing, side walks, trails, or other bike & pedestrian facilities.

W 700 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Path

Separated Path

XXX

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Neighborhood

Bridge

Waterway

Train Tracks

Section (refer to page 54)

On-site Photo

Topography

Narrow R.O.W.





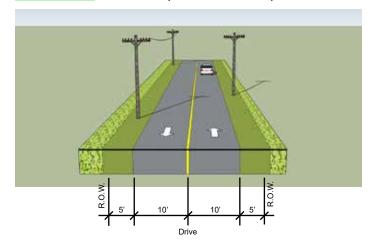




W 700 N @ East of Lake 3



Section 01 - W 700 N (East of N 600 W)



Analysis & Summary of Findings for W 700 N

Speed Limits:

N 600 W - School: 30 MPH School - N 500 W: 40 MPH

R.O.W. Widths:

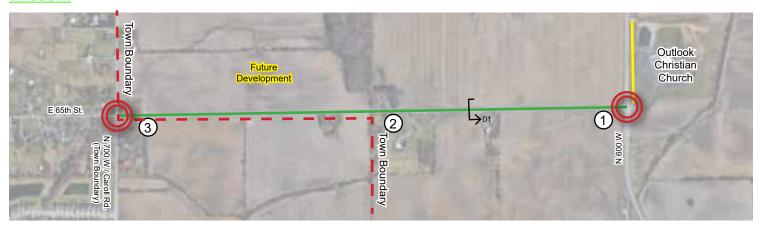
45' at Champion Lake residences. 30' through rest of corridor (see section this page).

Existing Street Condition for W 700 N

Description:

The condition along W 700 N is a roughly 20'-wide, two-lane road with a sidewalk existing directly south of McCordsville Elementary School with no other curbing, side walks, trails, or bike & pedestrian facilities.

W 650 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Path

Separated Path

XXX

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Neighborhood

Bridge

Waterway

Train Tracks

Section (refer to page 56)

On-site Photo

Topography

Narrow R.O.W.



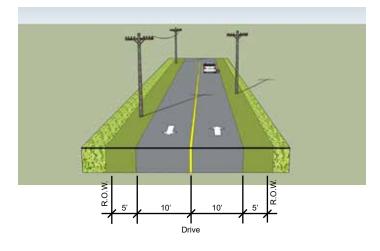








Section 01 - W 650 N (West of N 600 W)



Analysis & Summary of Findings for W 650 N

Speed Limits:

N 700 W - N 600 W : UNKNOWN (Likely 30 or 40 MPH)

R.O.W. Widths:

30' through entire corridor (see section this page).

Existing Street Condition for W 650 N

Description:

The condition along W 650 N is a roughly 20'-wide, two-lane road with no curbing, side walks, trails, or other bike & pedestrian facilities.

W 600 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Path

Separated Path

Neighborhood

XXX

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3

Bridge Waterway

Train Tracks

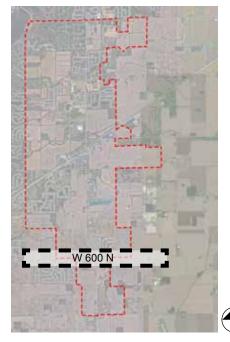
Section (refer to

page 58)

On-site Photo

Topography

Narrow R.O.W.



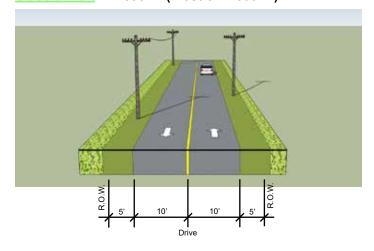






Above images are oriented east.

Section 01 - W 600 N (West of N 600 W)







Above images are oriented west.

Analysis & Summary of Findings for W 600 N

Speed Limits:

N 700 W - N 600 W : 45 MPH N 600 W - N 500 W: 50 MPH

R.O.W. Widths:

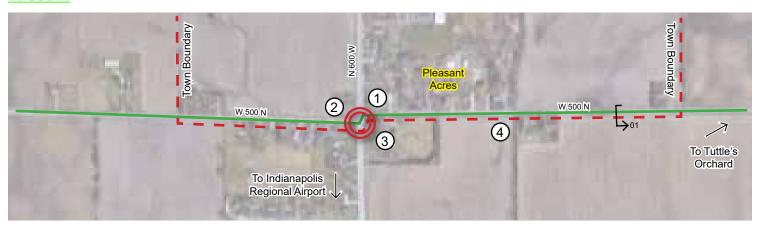
55-65' at subdivisions. 30' through rest of corridor (see section this page).

Existing Street Condition for W 600 N

Description:

The condition along W 600 N is a roughly 20'-wide, two-lane road with a sidewalk existing directly south of Sage Brook, with no other curbing, side walks, trails, or bike & pedestrian facilities.

W 500 N



Legend

Corridor Roadway

Intersection with crosswalks on all walkways

Intersection with partial crosswalks

Intersection with no crosswalks

Path / Trail

Sidewalk

Protected Path

Separated Path

Neighborhood

XXX

.....

Bridge Waterway

Train Tracks

Section (refer to page 60)

On-site Photo

Topography

Narrow R.O.W.

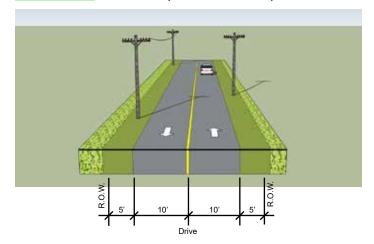




Above image is oriented north.*



Section 01 - W 500 N (East of N 600 W)







Above images are oriented east.

Analysis & Summary of Findings for W 500 N

Speed Limits:

N 700 W - N 500 W: 50 MPH

R.O.W. Width:

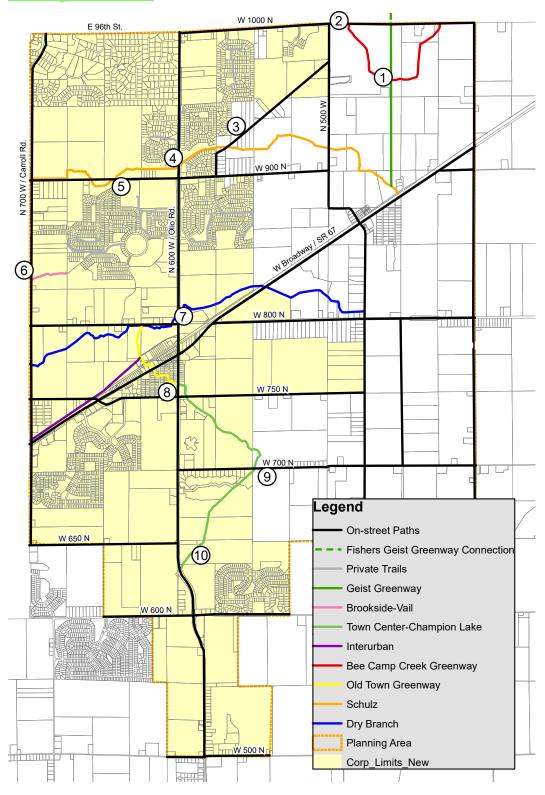
30' through entire corridor (see section this page).

Existing Street Condition for W 500 N

Description:

The condition along W 500 N is a roughly 20'-wide, two-lane road with no curbing, side walks, trails, or other bike & pedestrian facilities.

Drainage Corridors



Existing Drainage Corridor Condition

Description:

There are multiple drainage corridors in McCordsville that have no recreational value and provide no paths / trails.

There are certain areas along W 900 N and W 800 N where these drainage corridors interact with the roads in such a way that future "pocket parks" could create nodes for bikers and pedestrians to gather & socialize.

















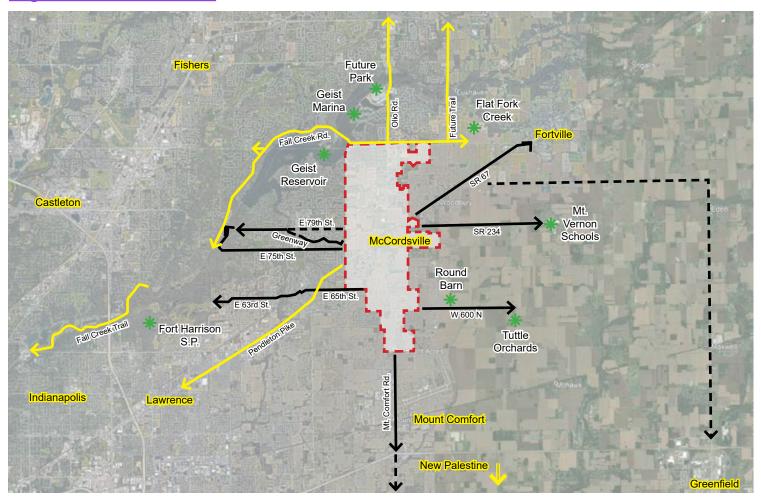






PROPOSED CONDITIONS

Regional Connections Plan



Legend

McCordsville Town Boundary - - - -

Existing Bike / Pedestrian
Facility

Proposed Bike / Pedestrian Facility

Community Points of Interest

Description

Existing bike & pedestrian facilities currently exist along three major corridors leading in and out of McCordsville:

- Pendleton Pike leading southwest towards Lawrence.
- Olio Road leading north towards Hamilton Town Center in Noblesville.
- Fall Creek leading north-west / west towards Fishers.

Bike & pedestrian facilities enhancing regional connectivity are proposed along six major corridors leading in and out of McCordsville:

- E 75th St. leading west towards Castleton.
- E 63rd St. leading west / southwest towards Fort Harrison State Park.
- Mt. Comfort Rd. leading south towards Mt. Comfort.
- W 600 N leading east towards the round barn & Tuttle's Orchards.
- SR 234 leading east towards Mt. Vernon Schools.
- SR 67 leading north-east towards Fortville.

Additional considerations include connecting to the proposed Hancock County Trails Plan, which identifies bike & pedestrian connections southeast to Greenfield and south to New Palestine along N & S 600 W.

Within the Town planning boundary, recommendations include improvements to 12 main corridors and new greenways. Specifically, the goals to be accomplished by implementing this plan include the following:

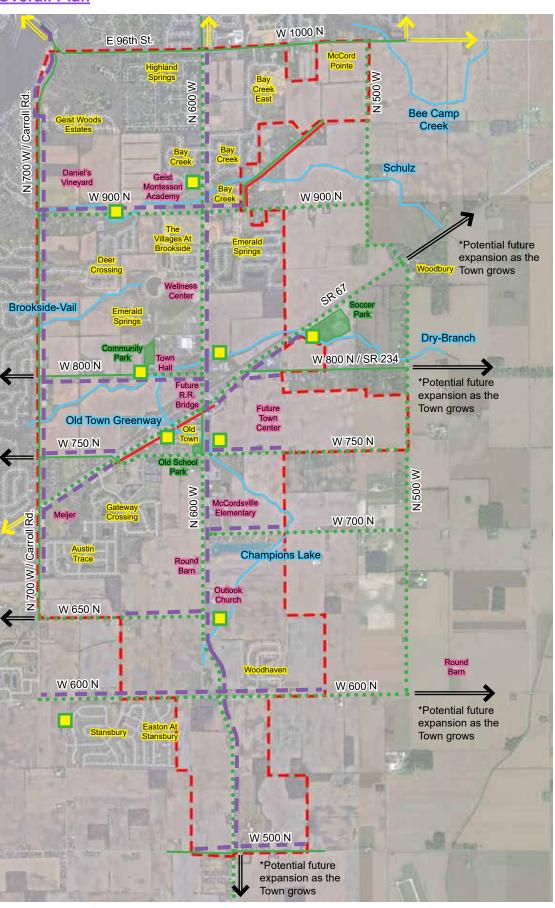
- Increase the number of people walking and biking for everyday transportation purposes by ensuring the trails connect people to destinations.
- Increase the number of people walking and biking for recreation by creating trails plan provide highly accessible and desirable recreation opportunities.
- Provide priorities for future bike/pedestrian projects.
- Provide feasibility of multi-use trails along riparian corridors.
- Establish safe and functional routes for bicycles and pedestrians between community destinations.
 Identify "branded" trails within the system that can have additional interest, design elements and sources of community pride.
- Recommend policy changes and action steps for a successful implementation.

Legend

Overall Plan

Town Boundary Corridor Roadway Bike Route Neighborhood Destination Waterway Proposed Sidewalk Proposed Protected Lane Proposed Separated Path **Proposed Sharrow** Trail Head Proposed Regional Connection Existing Regional Connection

See pages 69-70 for bike & pedestrian facilities definitions / imagery



PROPOSED CONDITIONS

Description

The branded trails / greenways in McCordsville are as follows:

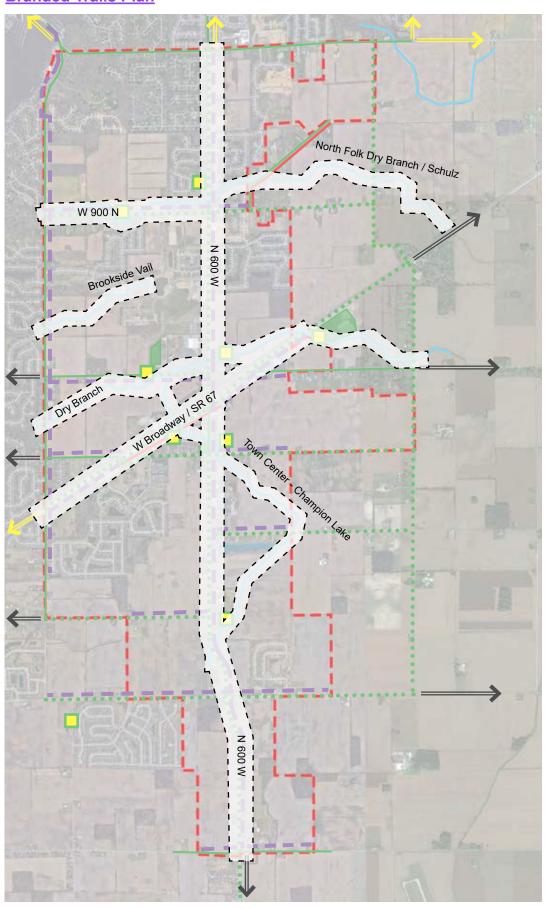
Trails:

- W 900 N (west)
- N 600 W (north & south)
- W Broadway

Greenways:

- North Folk Dry Branch / Schulz
- Dry Branch Town Center Champion Lake
- Brookside Vail

Branded Trails Plan



Description

The roads / corridors that shall be designated as "bike routes" are as follows.

- W 900 N
- W 800 N (From N 600 W to Park) W 750 N (From W Broadway to N
- W 700 N W 650 N
- W 600 N
- N 600 W
- N 500 W
- W Broadway

Bike Routes Plan



PROPOSED CONDITIONS

Separated Paths







Description:

Separated Paths are considered any paved path that supports multiple types of transportation, including walkers, bikers, roller bladders, and skateboarders but does not support motorized vehicles.

Separated Paths can be asphalt, concrete, or paver surfaces and in specified areas will have signage / branding elements and amenities, such as benches, litter receptacles, and decorative lighting.

Sharrows / Bike Route







Description:

Sharrows are street markings combining a bicycle and an arrow that indicate in the roadway where people should preferably cycle. The use can be mainly in the Old Town corridors and along the rural county roads as a first phase of development prior to sidewalks and shared paths being implemented.

Bike Routes are signed roadways that are used by amateur cyclists and bike groups frequently. This provides routes for advanced riders that would not utilize the shared paths or greenways. Signage includes: "Bike Route", "Share the Road", or "Bicycles can Take the Whole Lane" verbiage.

Greenways







Description:

Greenways are considered any paved path or trail that connects users to nature by giving them a biking or walking route away from roads and other types of development.

Greenways can be located along several of the water ways and drainage ditches that pass through McCordsville. Refer to the overall plan for suggested trail head locations. Amenities can include signage, way-finding, interpretive signage, site furnishings, and naturalized plantings.

Refer to pages 97-98 for recommended alignments and proposed sections for greenways.

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Legend

Corridor Roadway

Bike Route

Intersection Improvements

Existing Bike /

Pedestrian Facility

Neighborhood

Bridge

Waterway
Train Tracks

Section (refer to page 72)

Proposed Sidewalk

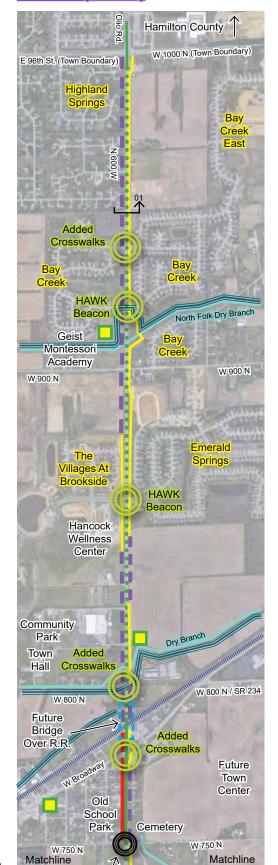
Proposed Protected Path

Proposed Separated Path

Proposed Sharrow
Proposed Greenway

Trail Head

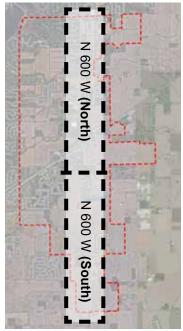
N 600 W (North)



N 600 W (South)



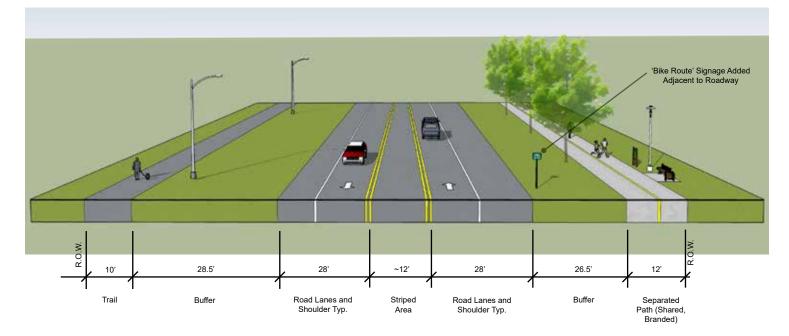
Vicinity Map





Future Roundabout

Proposed Section 01 - N 600 W



Proposed Street Standard for N 600 W

Classification: Major Arterial

Minimum R.O.W. Width: 140'

Minimum Road Width: 4 Lanes - 68'

Proposed Street Condition for N 600 W

Description:

The conditions along N 600 W can be a combination of a 10' shared use trail on the west side of the road and a 12' shared & branded path on the east side of the road.

The 10' trail on the west can be asphalt pavement and have minimal markings and signage.

The 12' shared & branded path on the east can have decorative pavement treatment to include center line markings. Branding & identity elements, such as signage, specialty pavements, center line markings, and cross walks, can all be developed to correspond with the trail's name and specific brand. Where appropriate, amenities, such as enhanced plantings, trail head nodes, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art, could add an additional level of unique identity to the trail.

The corridor is designated a high priority to provide connectivity and add the missing segments along the corridor. An asphalt path with some upgraded site elements could be a cost effective first phase of development.

Branded Trail Precedent Imagery





XXX

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Legend

Corridor Roadway

Bike Route

Intersection

Improvements

Existing Bike / Pedestrian Facility

Neighborhood

Bridge

Waterway Train Tracks

Section (refer to page 74)

Proposed Sidewalk

Proposed Protected Path

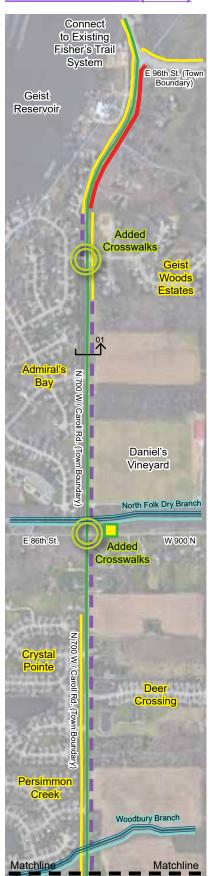
Proposed Separated Path

Proposed Sharrow

Proposed Greenway

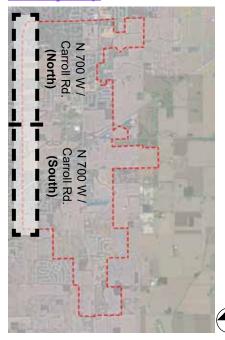
Trail Head

N 700 W / Carroll Rd. (North)

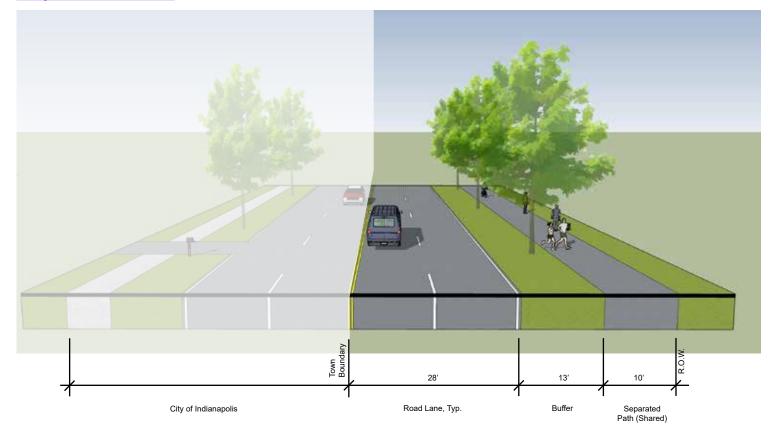


N 700 W / Carroll Rd. (South)





Proposed Section 01- N 700 W / Carroll Rd.



Proposed Street Standard for N 700 W / Carroll Rd.

Classification: Minor Arterial

Minimum R.O.W. Width: 97'

Minimum Road Width: 4 Lanes - 56'

Proposed Street Condition for N 700 W / Carroll Rd.

Description:

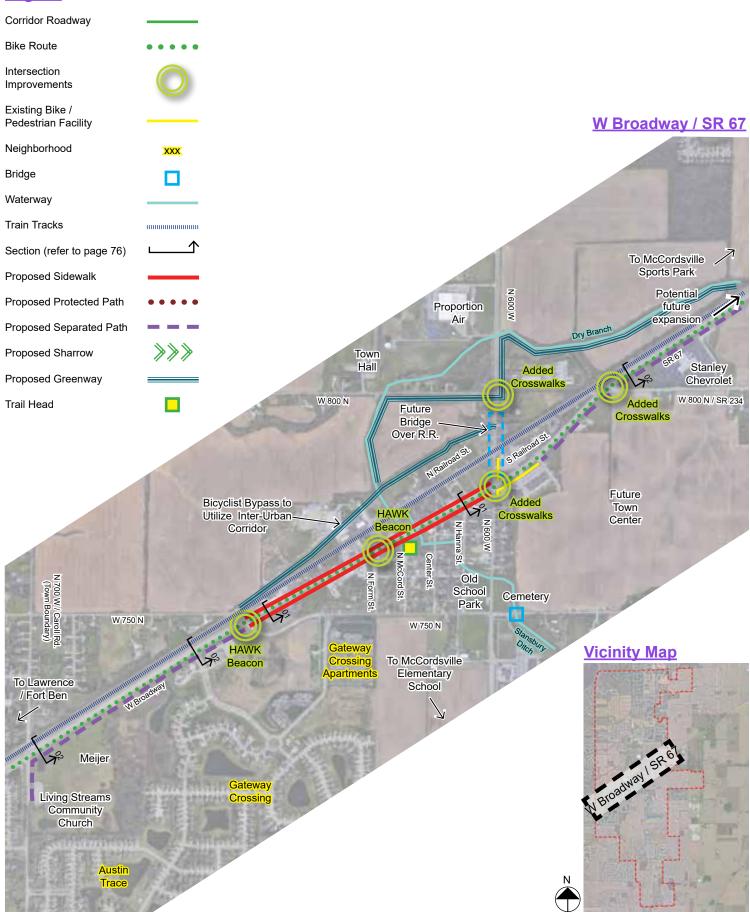
The conditions along N 700 W / Carroll Road can be a combination of a 6' sidewalk on the west side of the road and a 10' shared path on the east side of the road.

The 6' sidewalk on the west side of the road should be provided by the City of Indianapolis and is recommended to be concrete pavement. Crosswalk connectivity should be added at prominent intersections.

The 10' shared path on the east side of the road can be asphalt pavement and can include basic signage, way-finding package, and cross walk treatments.

Additional considerations for intersections treatments to provide some unique pavement treatments and identity elements or gateways to distinguish the McCordsville Town boundary would be appropriate.

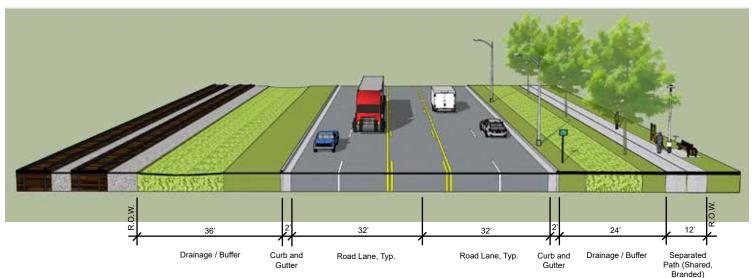
Legend



Proposed Section 01 - W Broadway / SR 67



Proposed Section 02 - W Broadway / SR 67



Proposed Street Standard for W Broadway / SR 67

Classification: Major Arterial

Minimum R.O.W. Width: 140'

Minimum Road Width: 4 Lanes - 68'

Proposed Street Condition for W Broadway / SR 67

Description:

The conditions along W Broadway can be two different scenarios. On the northern and southern sections of the corridor, a 12' shared & branded path can be located on the east side of the road. In the middle section of the corridor, an 8' sidewalk can be located on both sides of the road. Due to ROW constraints within Old Town, bicycle traffic should follow the former Inter-Urban Corridor to bypass Proposed Section 01 conditions. Refer to page 77 for Old Town enlargements.

The 8' sidewalk on both sides of the road can be concrete with tree lawn or an amenities area buffering the sidewalk and from the road. Unique pavement at intersections, crosswalk treatments, decorative lighting, site furnishings, signage, way-finding signs, and enhanced plantings should be considered within this zone to create a pedestrian friendly streetscape.

The 12' shared & branded path on the east side of the road can have decorative pavement treatment to include center line markings. Branding & identity elements, such as signage, specialty pavements, center line markings, and cross walks, can all be developed to correspond with the trail's name and specific brand. Where appropriate, amenities, such as enhanced plantings, trail head nodes, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art, could add an additional level of unique identity to the trail.

W Broadway (Old-Town Zoom-In)



Legend

Corridor Roadway

Bike Route

Intersection
Improvements

Existing Bike /
Pedestrian Facility

Neighborhood

Bridge

Waterway

Train Tracks

Section (refer to page 78)

Proposed Path / Trail

Proposed Sidewalk

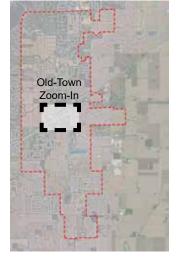
Proposed Separated Path

Proposed Sharrow

Proposed Greenway

Trail Head

Vicinity Map





Proposed Protected Path

Proposed Section 01- Old Town



Proposed Street Standard for Old Town

Classification: Local Street

Minimum R.O.W. Width: 54'

Minimum Road Width: 2 Lanes - 30'

Proposed Street Condition for Old Town

Description:

The conditions along the Old Town corridor can be a combination of a 6' concrete sidewalk on the west side of the road and a 12' shared & branded path on the east side of the road.

The 12' shared & branded path on the east side can have decorative pavement treatment to include center line markings. Branding & identity elements, such as signage, specialty pavements, center line markings, and cross walks, can all be developed to correspond with the trail's name and specific brand. Where appropriate, amenities, such as enhanced plantings, trail head nodes, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art, could add an additional level of unique identity to the trail.

Major road corridors would also receive bike route signage/share the road for more advanced bicyclist and biking groups traveling faster that recreational users on the shared use paths. Sharrows could be used as an inter-phase to make connections within the missing corridor segments.

Branded Trail Precedent Imagery





XXX

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Legend

Corridor Roadway

Bike Route

Intersection Improvements

Existing Bike / Pedestrian Facility

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Neighborhood

Bridge

Waterway
Train Tracks

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Section (refer to page 80)

Proposed Sidewalk

Proposed Protected Path

Proposed Separated Path

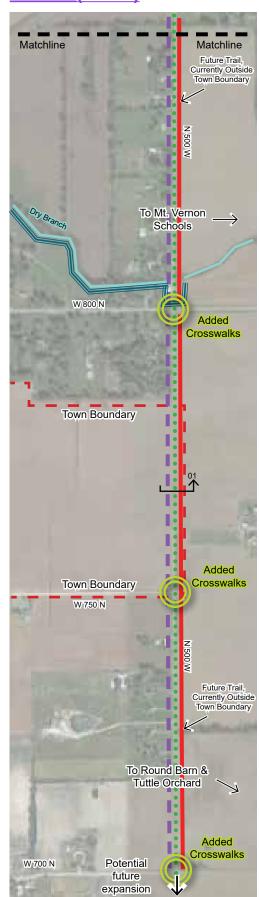
Proposed Sharrow
Proposed Greenway

Trail Head

N 500 W (North)

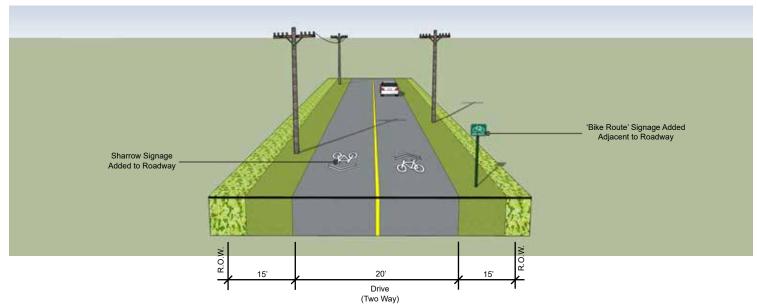


N 500 W (South)

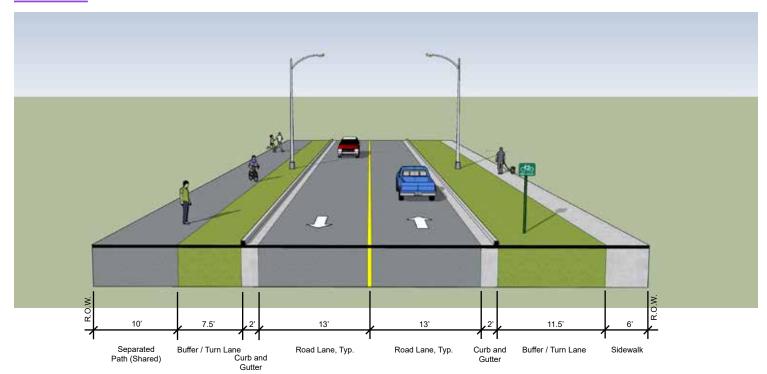




Phase 01 - Interim Phase Conditions - N 500 W



Phase 02 - N 500 W



Proposed Street Standard for N 500 W

Classification: Minor Collector

Minimum R.O.W. Width: 65'

Minimum Road Width: 2 Lanes - 30'

Proposed Street Condition for N 500 W

Description:

The conditions along N 500 W can be a combination of a 10' separated path on the west side of the road and a 6' concrete sidewalk on the east side of the road.

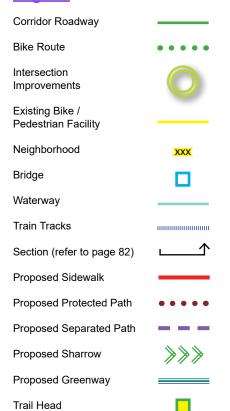
The 10' shared path on the east side can be asphalt pavement and will have basic signage and way-finding.

The current corridor is largely within agricultural areas but is still well traveled with bicycles. An interim phase would be to include sharrows and bike route signage until the corridor is developed.

E 96th St. / W 1000 N

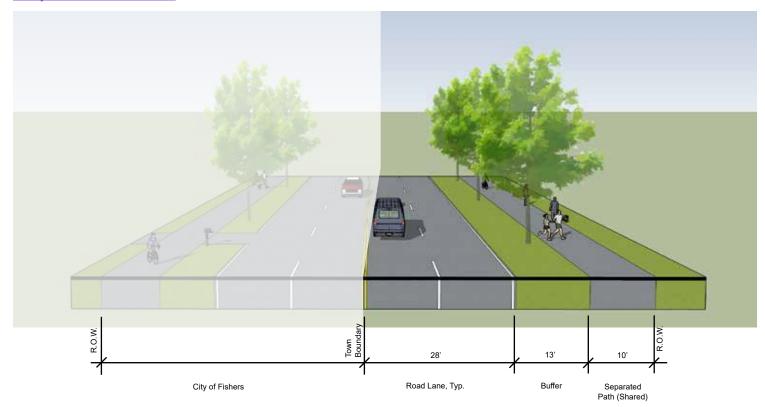


Legend





Proposed Section 01 - E 96th St. / W 1000 N



Proposed Street Standard for E 96th St. / W 1000 N

Classification: Minor Arterial

Minimum R.O.W. Width: 97'

Proposed Street Condition for E 96th St. / W 1000 N

Description:

The conditions along E 96th St. can be a combination of a 6' sidewalk on the north side of the road and a 10' shared path on the south side of the road

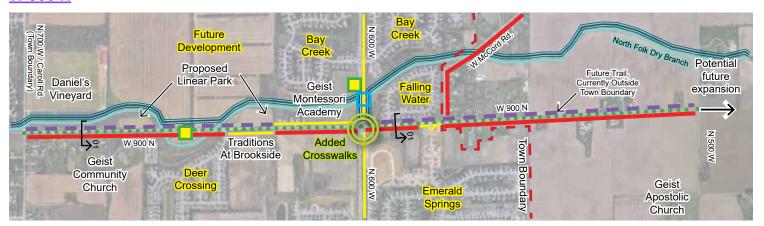
The sidewalk or trail on the north side should be by the City of Fishers and is recommended to provide for crosswalk connectivity at prominent intersections.

The 10' shared path on the south side of the road, east of N 600 W can be asphalt pavement, including basic signage and way-finding package and cross walk treatments.

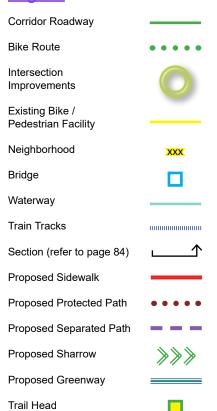
Due to grade and ROW constraints, development on the south side of the road west of N 600 W is not feasible. Provide for crosswalk connections to the north side of the street in prominent intersections.

Additional considerations for intersections treatments to provide some unique pavement treatments and identity elements or gateways to distinguish the McCordsville town boundary would be appropriate.

W 900 N

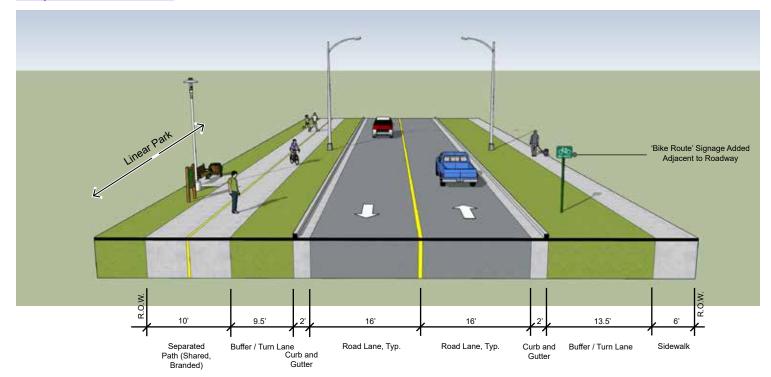


Legend





Proposed Section 01-W 900 N



Proposed Street Standard for W 900 N

Classification: Major Collector

Minimum R.O.W. Width: 75'

Minimum Road Width: 2 Lanes - 36'

Proposed Street Condition for W 900 N

Description:

The conditions along W 900 N can be a combination of a 10'-12' separated branded trail on the north side of the road in between N 600 W and N 700 W, a 10' separated trail west of N 600 W., and a 6' concrete sidewalk on the south side of the road.

The 12' shared & branded path on the north side of the road can have decorative pavement treatment to include center line markings. Branding & identity elements, such as signage, specialty pavements, center line markings, and cross walks, can all be developed to correspond with the trail's name and specific brand. Where appropriate, amenities, such as enhanced plantings, trail head nodes, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art, could add an additional level of unique identity to the trail.

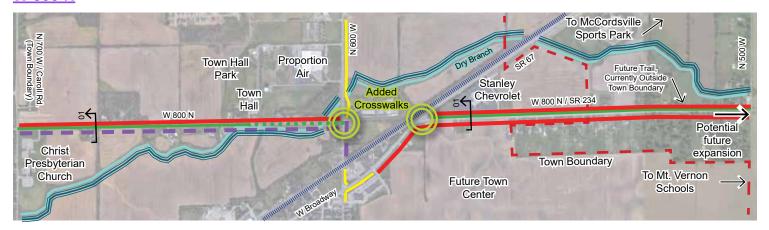
The area between N 600 W and N 700 W has the potential to create a unique linear park that includes the combination of greenway connectivity and recreational opportunities along the corridor.

Linear Park Precedent Imagery

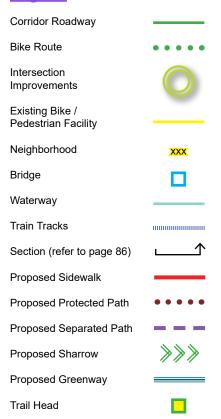


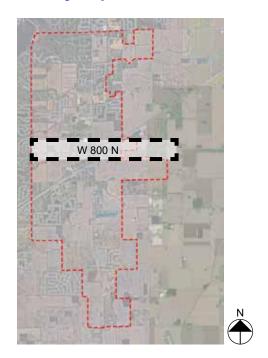


W 800 N

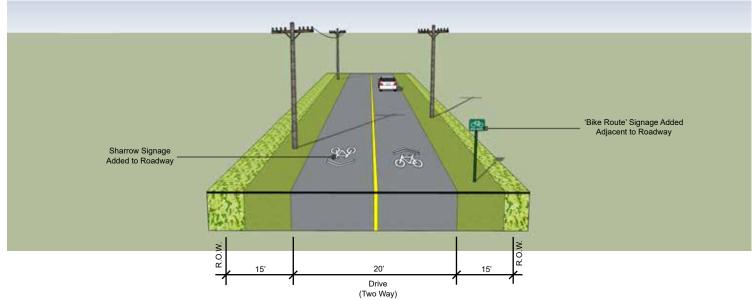


Legend

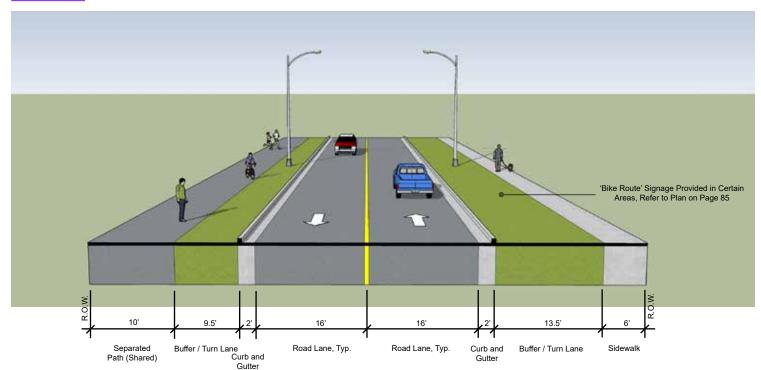




Phase 01 - Interim Phase - W 800 N



Phase 02 - W 800 N



Proposed Street Standard for W 800 N

Classification: Major Collector

Minimum R.O.W. Width: 75'

Minimum Road Width: 2 Lanes - 36'

Proposed Street Condition for W 800 N

Description:

The conditions along W 800 N can be a combination of a 10' separated path on the south side of the road and a 6' concrete sidewalk on the north side of the road.

The 10' shared path on the east side of the road can be asphalt pavement including: basic signage and way-finding package and cross walk treatments.

The current corridor is largely within agricultural areas but still well traveled with bicycles. An interim phase would be to include sharrows and bike route signage until the corridor is developed.

W 750 N



Legend

Corridor Roadway

Bike Route

Intersection
Improvements

Existing Bike / Pedestrian Facility

Neighborhood

Bridge

XXX

.....

Waterway

Train Tracks

Section (refer to page 88)

Proposed Sidewalk

Proposed Protected Path

Proposed Separated Path

— — •

Proposed Sharrow

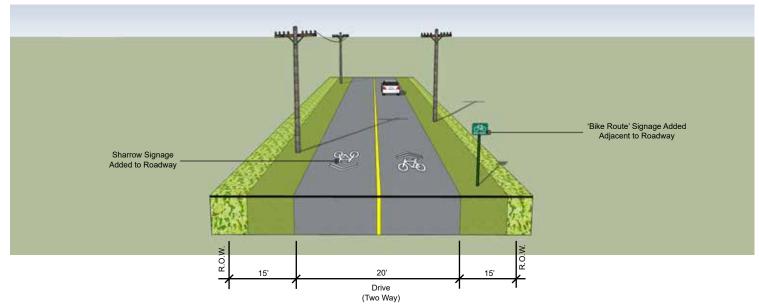
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Proposed Greenway

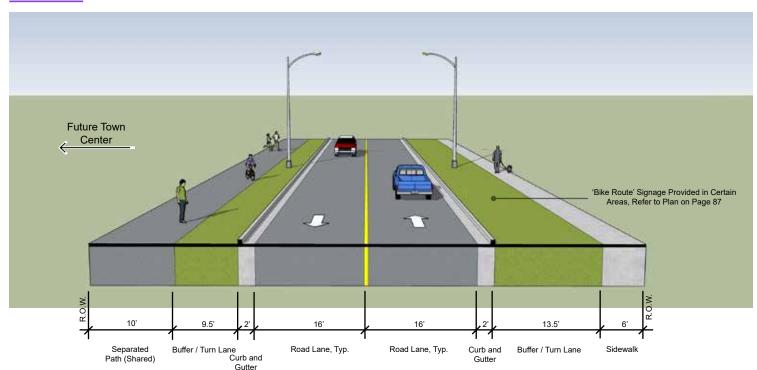




Phase 01 - Interim Phase - W 750 N



Phase 02 - W 750 N



Proposed Street Standard for W 750 N

Classification: Major Collector

Minimum R.O.W. Width: 75'

Minimum Road Width: 2 Lanes - 36'

Proposed Street Condition for W 750 N

Description:

The conditions along W 750 N can be a combination of a 10' separated path on the north side of the road and a 6' sidewalk on the south side of the road.

The 10' shared path on the east side can be asphalt pavement, including basic signage and way-finding package and cross walk treatments.

The current corridor is largely within agricultural areas but still well traveled with bicycles. An interim phase would add sharrows and bike route signage until the corridor is developed.

W 700 N



Legend

Corridor Roadway

Bike Route

Intersection Improvements

Existing Bike /

XXX

Pedestrian Facility

Neighborhood

Bridge

Waterway

Train Tracks

Section (refer to page 90)

Proposed Sidewalk

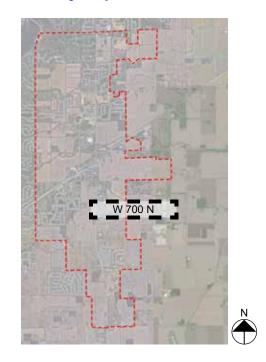
Proposed Protected Path

Proposed Separated Path

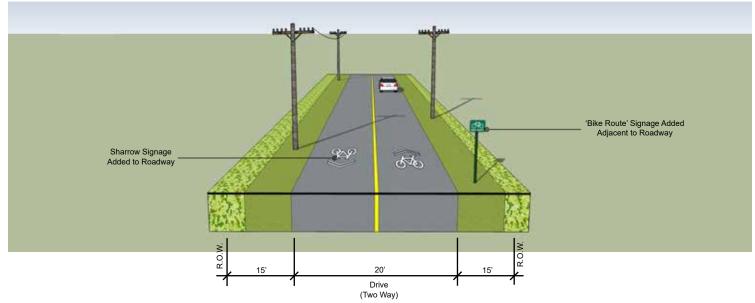
Proposed Sharrow

Proposed Greenway

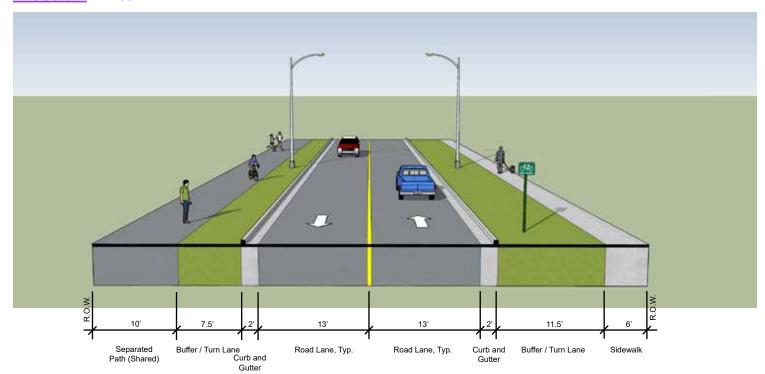
Trail Head



Phase 01- Interim Phase - W 700 N



Phase 02 - W 700 N



Proposed Street Standard for W 700 N

Classification: Minor Collector Minimum R.O.W. Width: 65'

Minimum Road Width: 2 Lanes - 30'

Proposed Street Condition for W 700 N

Description:

The conditions along W 700 N can be a combination of a 10' separated path on the north side of the road and a 6' sidewalk on the south side of the road.

The 10' shared path on the east side can be asphalt pavement, including basic signage and way-finding package and cross walk treatments.

The current corridor is largely within agricultural areas but is still well traveled with bicycles. An interim phase would add sharrows and bike route signage until the corridor is developed.

W 650 N



Legend

Corridor Roadway

Bike Route

Intersection Improvements

Existing Bike / Pedestrian Facility

Neighborhood

XXX

Bridge

Waterway
Train Tracks

Section (refer to page 92)



Proposed Sidewalk

Toposed Oldewalk

Proposed Protected Path • • • •

Proposed Separated Path

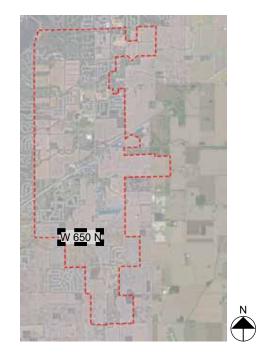


Proposed Sharrow

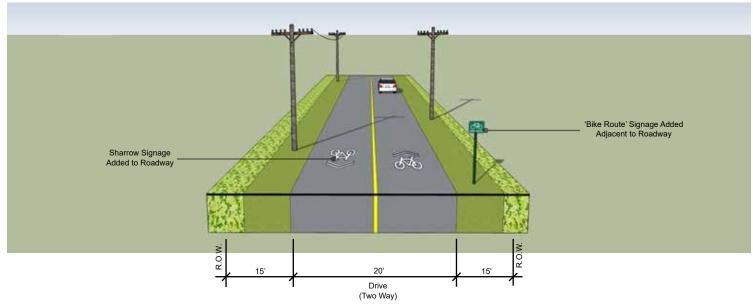
nnn

Proposed Greenway

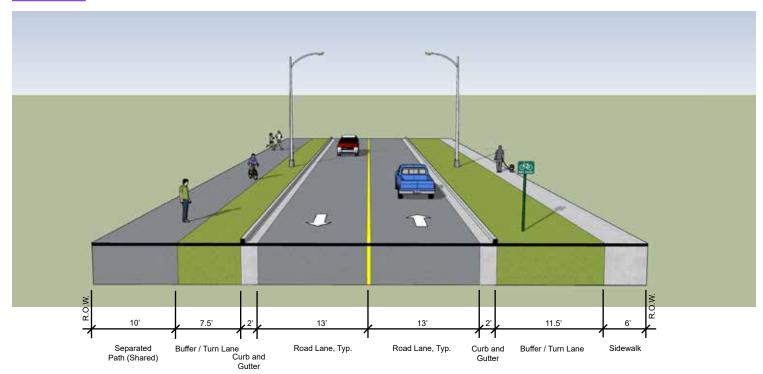
Trail Head



Phase 01- Interim Phase - W 650 N



Phase 02 - W 650 N



Proposed Street Standard for W 650 N

Classification: Minor Collector

Minimum R.O.W. Width: 65'

Minimum Road Width: 2 Lanes - 30'

Proposed Street Condition for W 650 N

Description:

The conditions along W 650 N can be a combination of a 10' separated path on the north side of the road and a 6' sidewalk on the south side of the road.

The 10' shared path on the north side can be asphalt pavement and will have no signage, branding, or amenities.

The 6' sidewalk on the south side shall be concrete pavement and have no markings, signage, branding, or amenities.

W 600 N



Legend

Corridor Roadway Bike Route

Intersection Improvements

Existing Bike / Pedestrian Facility

Neighborhood

XXX

Bridge

Train Tracks

Waterway

Section (refer to page 94)

Proposed Sidewalk

Proposed Protected Path

Proposed Separated Path

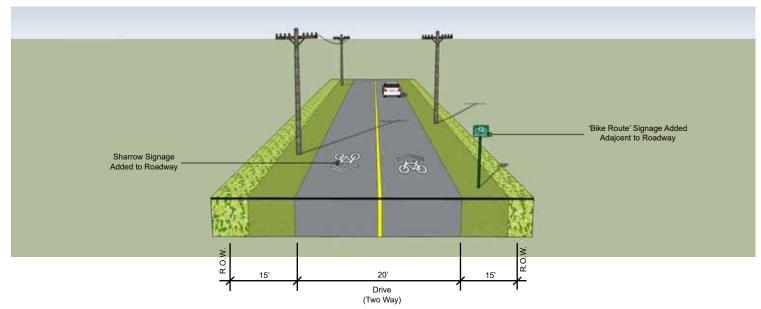
Proposed Sharrow

Proposed Greenway

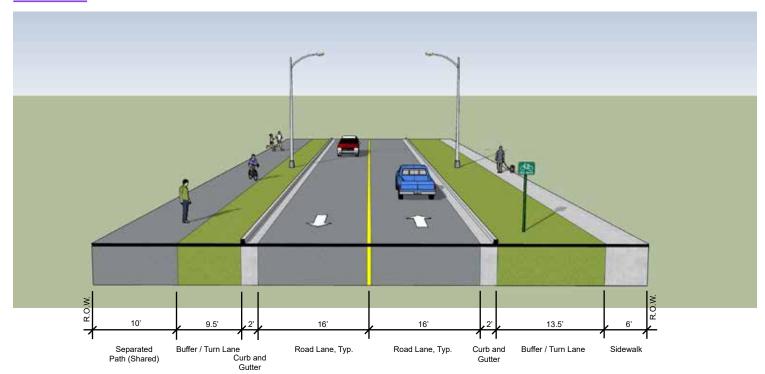
Trail Head



Phase 01- Interim Phase - W 600 N



Phase 02 - W 600 N



Proposed Street Standard for W 600 N

Classification: Major Collector Minimum R.O.W. Width: 75'

Minimum Road Width: 2 Lanes - 36'

Proposed Street Condition for W 600 N

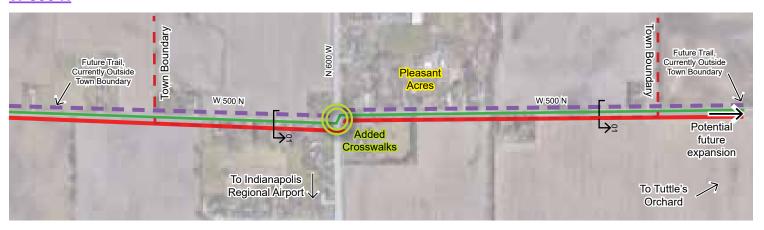
Description:

The conditions along W 600 N can be a combination of a 10' separated path on the north side of the road and a 6' sidewalk on the south side of the road.

The 10' shared path on the east side can be asphalt pavement, including basic signage and way finding package and cross walk treatments.

The current corridor is largely within agricultural areas but is still well traveled with bicycles. An interim phase would add sharrows and bike route signage until the corridor is developed.

W 500 N



Legend

Corridor Roadway

Bike Route

Intersection Improvements

Existing Bike / Pedestrian Facility

Neighborhood

Bridge

XXX

Waterway
Train Tracks

Section (refer to page 96)

, , , ,

Proposed Sidewalk

Proposed Protected Path • • • • •

Proposed Separated Path

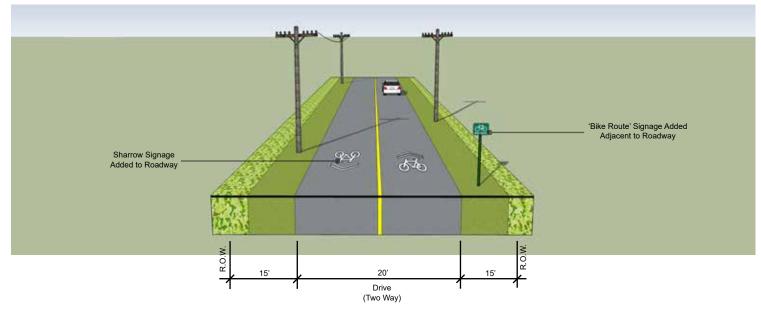
Proposed Sharrow

Proposed Greenway

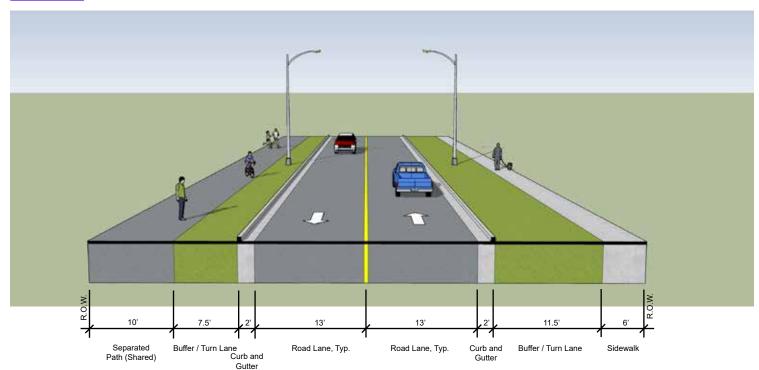
Trail Head



Phase 01 - Interim Phase - W 500 N



Phase 02 - W 500 N



Proposed Street Standard for W 500 N

Classification: Minor Collector Minimum R.O.W. Width: 65'

Minimum Road Width: 2 Lanes - 30'

Proposed Street Condition for W 500 N

Description:

The conditions along W 500 N can be a combination of a 10' separated path on the north side of the road and a 6' sidewalk on the south side of the road.

The 10' shared path on the east side can be asphalt pavement, including basic signage and way-finding package and cross walk treatments.

The current corridor is largely within agricultural areas but is still well traveled with bicycles. An interim phase would add sharrows and bike route signage until the corridor is developed.

Legend

Corridor Roadway

Waterway

Public park

Town Boundary

Area of Interest

Neighborhood

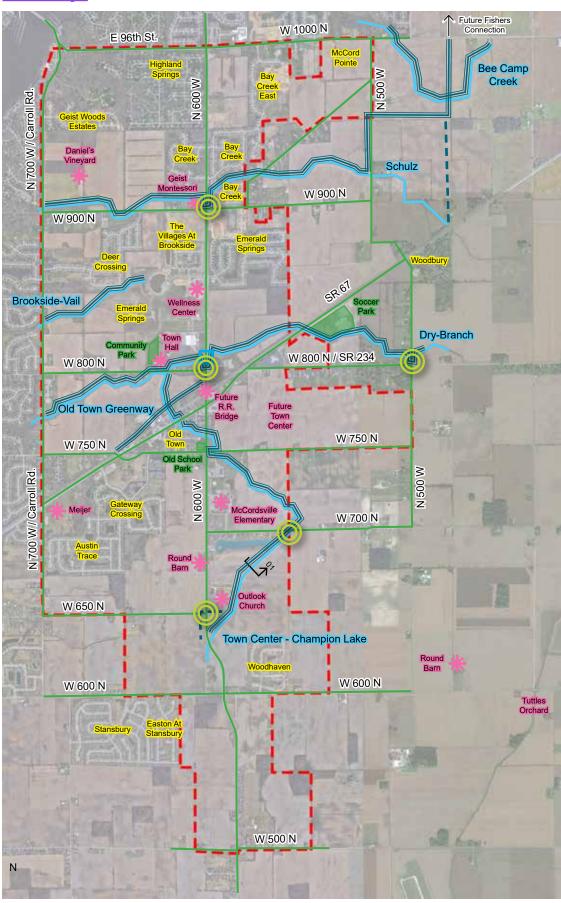
Proposed Greenway

Optional Greenway

Bridges

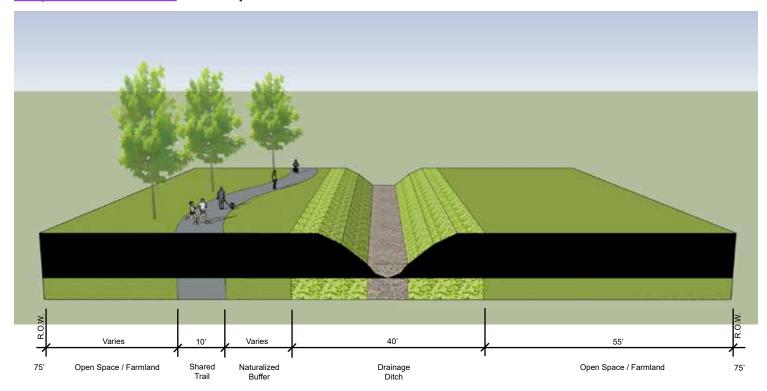
Crossing

Greenways





Proposed Section 01 - Greenways



Proposed Condition for Greenways

Description:

Greenways can be a 10' shared path made of asphalt, that meanders along the drainage corridor and can include the following: trail heads, interpretation nodes, signage, way finding, site furnishings, and naturalized plantings.

Branded Trails Examples















Description:

Branded Trails are considered any trail or separated path that is accompanied by a family of branding and identity elements to create a unique experience that celebrates the community. These family of elements can include gateway elements, unique signage, specialty pavements, enhanced pavement markings, cross walk markings, enhanced plantings, trail head nodes, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art. These elements add an additional level of unique identity to the trail.

These elements should be developed during scoping and design development efforts of each corridor. While the trail's identity elements can be stand-alone and unique, they should compliment to the town's overall branding, identity, signage, and graphical standards.

Trail Signage Families Examples



Description:

A family of signage and way-finding signage standards shall be developed to create a consistent identity and application within the system. The family of the signs can include kiosks, overall way finding maps, directional signs, landmark signs, areas of interest, interpretive signs, and distance markers. The entire family of signs should reflect and mimic the Town's overall graphical and identity standards.

Crossing Signals - HAWK







Description:

A HAWK (High-Intensity Activated crossWalK) beacon is a traffic control device used to slow road traffic and allow pedestrians to cross safely. It is officially known as a Pedestrian Hybrid Beacon (PHB). The purpose of a HAWK beacon is to allow pedestrian to cross safely, slowing road traffic only when pedestrians are present. They are used in combination with signage, flashing lights, and cross-walk striping.

Rail Road Crossings







Description:

The images above and to the left show examples of rail road crossings for bikers & pedestrians in Normal, IL. These images contain the following best practices:

- 1. A crossing arm designed specifically for pedestrians/bicyclists along the 8 foot wide sidewalk.
- 2. Truncated domes prior to the pedestrian crossing arm.
- 3. 36 inch fencing that prevents bikes/peds from accessing the railroad tracks other than as designated along the 8-foot sidewalk.
- 4. Approach signage warning bicyclist/peds about the rail crossing.
- 5. Rail tracks that are flush to ground to ease crossing path for bikes, strollers, etc.

Trail Heads











Description:

Trail heads are considered the point at which a trail begins / ends at prominent intersections with corridors or areas of interest.

Trail heads can have a hierarchy of applications from providing a simple visual marking of the start of the trail to a larger facility that includes vehicular parking and restrooms.

To create a unique identity or punctuation, trail head elements can include gateway elements, unique signage, specialty pavements, enhanced pavement markings, enhanced plantings, interpretive areas, site furnishings, decorative lighting, shade elements, bike repair stations, and public art.

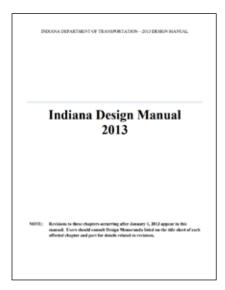


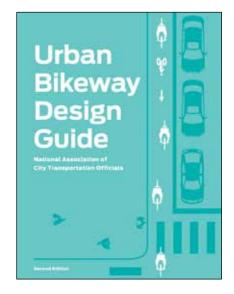
IMPLEMENTATION

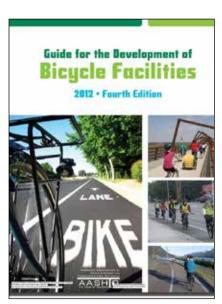
Summary

This section provides a framework for effectively executing the McCordsville Bike and Pedestrian Master Plan. It includes the following:

- Design guidelines to be used by future designers and engineers.
- Reference resources to be followed while implementing the design
- Subdivision and zoning ordinance review for future developers.
- Cost methodologies and breakdowns for each corridor or greenway.
- Hierarchies of design / construction priorities per corridor.
- Funding opportunities to help support the development costs.
- Trail maintenance and operations costs for future maintenance staff.
- An Action Matrix to break down the implementation into measurable tasks.







Design Guidelines -Reference

Above left: INDOT 2013 Design Manual

Above: Urban Bikeway Design Guide / NACTO

Left: Guide for Development of Bicycle Facilities / AASHTO

Design Guidelines - Shared Use Paths

Path Width and Profiles

Bike Path Width and Lateral Clearance

Guide for Development of Bicycle Facilities / AASHTO - 10 feet minimum; 8 feet in specified circumstances, 11 to 14 feet when high level of pedestrians served

INDOT 2013 Design Manual - 10 feet width recommended (Up to 14 feet if heavy pedestrian use expected); 8 feet minimum. 3 foot clear width from poles, trees, fences recommended

Minimum Clear Graded Shoulder

INDOT 2013 Design Manual - 2 feet on both sides with max 6:1 slope

Vertical Clearance

INDOT 2013 Design Manual - 8 feet min for cyclists; 10 feet if emergency vehicles will use the tunnel

Profile Grade

Guide for Development of Bicycle Facilities / AASHTO - 5% max but generally match roadway

INDOT 2013 Design Manual - As minimal as possible to a max of 5%

Stopping Sight Distances

INDOT 2013 Design Manual - Variable; See Figure 51-7L

Cross Slope

Guide for Development of Bicycle Facilities / AASHTO - 1% recommended

INDOT 2013 Design Manual - 2% for drainage and pedal clearance on curves

Separation from Roadway with No Curb

INDOT 2013 Design Manual - 10 feet for bike lane; between bike lane and road buffer based on roadway design speed (45 mph or under 10 ft min, 20 ft recommended from BOC; 50 mph and above, 24 to 35 feet from BOC); clearance to posts, curbs/gutters, or fences is 3 to 6 feet. (Figure 51-7C)

Separation from Roadway with Curb

INDOT 2013 Design Manual - 10 feet for bike lane; between bike lane and road buffer based on roadway design speed (under 30 mph, 5 feet min or 3 feet if parking permitted; 35-40 mph, 5 ft min; 45 mph and above, 10 ft min); clearance to posts, curbs/gutters, or fences is 2 feet min. (Figure 51-7D

Physical Features

Roadway Intersection Treatments

INDOT 2013 Design Manual - See Figure 51-7-O; Standards based on Roadway type, # of Lanes, and ADT's. Treatments increase as lanes and ADT's increase.

Drainage Grates

INDOT 2013 Design Manual - Sufficiently narrow and short to prevent bicycle or wheelchair tires from dropping into it regardless of the direction of travel

Culverts

INDOT 2013 Design Manual - 15 inches min

Bike Path Surfaces

Guide for Development of Bicycle Facilities / AASHTO - Hard, all-weather pavement surfaces are preferred over crushed aggregate, sand, clay, or stabilized earth; Unpaved surfaces may be appropriate on rural paths.

Intersection Treatments

Guide for Development of Bicycle Facilities / AASHTO - The opening of a shared use path at the roadway should be at least the same width as the shared use path itself. Curb ramps, if provided, should be the full width of the path, not including any flared sides. Detectable warnings should be placed across the full width of the ramp.

Design Guidelines - Buffered Bike Lanes

Bike Lanes

Bike Lane Width (Travel Area)

Guide for Development of Bicycle Facilities / AASHTO - 5 feet minimum

Combined Width of Bike Lane and Buffers

Urban Bikeway Design Guide / NATCO - 5 to 7 feet

At Intersection Approaches With Right Turn Only Lanes

Urban Bikeway Design Guide / NATCO - Bike lane to transition to through bike lane to left of right turn only lane or a combined bike lane/turn lane

Guide for Development of Bicycle Facilities / AASHTO - Standard width of 5-6 feet (4 in constrained locations)

At Intersection Approaches With No Right Turn Lane

Urban Bikeway Design Guide / NATCO - Markings should transition to conventional dashed line

At Intersection Approaches Where Through Lane Becomes Right Turn Lane (drop lane)

Guide for Development of Bicycle Facilities / AASHTO - No dotted line; Bike Lane dropped before merging area. Shared lane markings may be used.

Markings and Physical Features

Buffer Area between Bike Travel Lane and Vehicle Lane

Urban Bikeway Design Guide / NATCO - Two solid white lines; Minimum buffer width: 18 inches; Cross hatching of buffer area if 3 feet wide or greater

Guide for Development of Bicycle Facilities / AASHTO - Two feet wide minimum, Cross hatching if buffer is 3 feet in wide or greater

"Bicycle lane" Word or Symbol With Arrow To Designate Bike Lane

Urban Bikeway Design Guide / NATCO - MUTCD standard (Figure 9C-3)

Traffic Merging Areas

Urban Bikeway Design Guide / NATCO - Dotted Line at signalized intersection

Solid White Line Separating Bike Lane From Vehicle Lane

Urban Bikeway Design Guide / NATCO - 6 to 8 inches

Reduce Vehicle Door Zone Conflicts

Urban Bikeway Design Guide / NATCO - Separation between bike lane striping and parking boundary marking

Minimize Parked Cars Encroaching Into Bike Lane

Urban Bikeway Design Guide / NATCO - Mark boundary between parking lane and bike lane with 4 inch solid white line

Guide for Development of Bicycle Facilities / AASHTO - 4-6 inch white line

Drain Grates

Guide for Development of Bicycle Facilities / AASHTO -Should be Bike-Compatible

Gutter Seams, Drain Inlets, and Utility Covers

Urban Bikeway Design Guide / NATCO - Flush with ground to prevent conflicts with bike tires

Guide for Development of Bicycle Facilities / AASHTO - Flush with ground to prevent conflicts with bike tires; bike compatible grate (Section 4.12.8); adjust width if bike travel lane falls below 4 feet

Additional Recommendations

Use of Color for Bike Lane

Urban Bikeway Design Guide / NATCO - To discourage motorists from entering Bike Lane

Guide for Development of Bicycle Facilities / AASHTO - In conflict areas to promote visibility of cyclists

Alternate Paving Materials for the Bike Lane

Urban Bikeway Design Guide / NATCO - Avoid textured materials

Design Guidelines - Conventional Bike Lanes

Bike Lanes

Bike Lane Width (Curbed Street)

Urban Bikeway Design Guide / NATCO - 6 feet

Guide for Development of Bicycle Facilities / AASHTO - 5 feet; 6 feet if gutter is +2 feet wide

Bike Lane Width (Non-Curbed Street)

Urban Bikeway Design Guide / NATCO - 4 feet desireable; 3 feet

Guide for Development of Bicycle Facilities / AASHTO - 4 feet min

Bike Lane Width (When Bike Lane Adj to Parking Lane)

Urban Bikeway Design Guide / NATCO - 5 feet minimum

Guide for Development of Bicycle Facilities / AASHTO - 5-7 feet; Maximum of 7 feet to discourage vehicles from using bike lane

Total Lane Width (When Bike Lane Adj to Parking Lane)

Urban Bikeway Design Guide / NATCO - 14.5 feet preferred, 12 feet minimum as measured from BOC to Bike Lane Edge Adj to Road

Guide for Development of Bicycle Facilities / AASHTO - 14.5 feet preferred, 12 feet minimum as measured from BOC to Bike Lane Edge Adj to Road

Bike Lane Width (When Adj to Guardrail / Physical

Urban Bikeway Design Guide / NATCO - Bike Lane Width Plus 2 Feet

Guide for Development of Bicycle Facilities / AASHTO - 42 inch high min railing or barrier; 48 inches high at curves; 5 ft Bike Lane min

Through Bike Lane at Right Turn Only Vehicle Lane

Urban Bikeway Design Guide / NATCO - Not allowed unless a split-phase signal timing is used; See "bike turn lanes" in UBDG

Guide for Development of Bicycle Facilities / AASHTO - Shift to dashed line through right turn lane merge area (Page 4-24)

Through Bike Lane at Left Turn Only Vehicle Lane

Urban Bikeway Design Guide / NATCO - Not allowed unless a split-phase signal timing is used; See "bike turn lanes" in UBDG

Guide for Development of Bicycle Facilities / AASHTO - Shift to dashed line through right turn lane merge area (Page 4-27)

Vehicle Lanes

Vehicle Travel Lane Width Less Than 13 Feet Wide

Guide for Development of Bicycle Facilities / AASHTO - Vehicles will encroach into adj lane to pass cyclist

Vehicle Travel Lane Width Greater Than 14 Feet Wide

Guide for Development of Bicycle Facilities / AASHTO - Vehicles will NOT encroach into adj vehcile lane to pass cyclist

Markings and Physical Features

"Bicycle Lane" Word or Symbol With Arrow To **Designate Bike Lane**

Urban Bikeway Design Guide / NATCO - MUTCD standard (Figure 9C-3)

"Bicvcle Lane" Word or Symbol With Arrow Outside **Vehicle Tread Path**

Urban Bikeway Design Guide / NATCO - At intersections, driveways, merging areas to minimize wear on markings

Solid White Line Separating Bike Lane From Vehicle Lane

Urban Bikeway Design Guide / NATCO - 6 to 8 inches

Guide for Development of Bicycle Facilities / AASHTO - Required

Dotted Line At Signalized Intersection

Guide for Development of Bicycle Facilities / AASHTO - 50-200 feet prior to intersection

Minimize Parked Cars Encroaching Into Bike Lane

Urban Bikeway Design Guide / NATCO - Mark boundary between parking lane and bike lane with 4 inch solid white line

Guide for Development of Bicycle Facilities / AASHTO - 4-6 inch white line

High Traffic Merging Areas

Urban Bikeway Design Guide / NATCO - Dashed lane striping

Drain Grates

Guide for Development of Bicycle Facilities / AASHTO - Should be Bike-Compatible

Gutter Seams, Drain Inlets, and Utility Covers

Urban Bikeway Design Guide / NATCO - Flush with ground to prevent conflicts with bike tires

Guide for Development of Bicycle Facilities / AASHTO - Flush with ground to prevent conflicts with bike tires; bike compatible grate (Section 4.12.8); adjust width if bike travel lane falls below 4 feet

Design Guidelines - Conventional Bike Lanes,

Additional Recommendations

Bike Lanes Allowing For Side-by-side Biking

Urban Bikeway Design Guide / NATCO - Exceed minimum bike lane widths of 5 feet as much as possible

Guide for Development of Bicycle Facilities / AASHTO - 6-8 feet if no on street parking

Reduce Vehicle Door Zone Conflicts

Urban Bikeway Design Guide / NATCO - Make separation between bike lane striping and parking boundary marking as wide as feasible

Guide for Development of Bicycle Facilities / AASHTO - Optional; Also, 45 degree diagonal markings for no parking areas can be used

Increase Separation Between Vehicle Travel Lane

Urban Bikeway Design Guide / NATCO - Increase travel side buffer/space between bike lane and travel lane

Unpaved Drives Meeting Roadway or Pathway

Guide for Development of Bicycle Facilities / AASHTO - Pave driveway 10 feet from drive connection to road

Rumble Strips

Guide for Development of Bicycle Facilities / AASHTO - 4 foot clear path from rumble strip

Bike Lane Signs (MUTCD R3-17)

Urban Bikeway Design Guide / NATCO - Follow Indiana State Law

Guide for Development of Bicycle Facilities / AASHTO - "Share the Road" (W16-1P)

Reference Resources

Design Guidelines

The design team utilized several sources for best practices and design standards to put together the charts located in this section. These charts provide best practices and guidelines for conventional bike lanes, buffered bike lanes and shared use paths (SUP). Sources of this information include the NACTO (National Association of City Transportation Officials) Urban Bikeway Design Guide, the AASHTO (American Association of State Highway and Transportation Officials) Guide for the Development of Bicycle Facilities and the INDOT (Indiana Department of Transportation) 2013 Design Manual, Chapter 51.

Urban Bikeway Design Guide

https://nacto.org/publication/urban-bikeway-design-guide/

Guide for the Development of Bicycle Facilities

https://safety.fhwa.dot.gov/ped_bike/docs/b_aashtobik.pdf

Indiana Department of Transportation Design Manual

https://www.in.gov/indot/design manual/

These best practices and design guidelines latest editions could be utilized as the Town of McCordsville prepares to add facilities to the streets or corridors within the community. Additionally, engineering judgment should be utilized regarding specific situations in the Town of McCordsville. It should be noted that NACTO guidelines do change based on best practices throughout the country. The INDOT design manual receives updates as well.

Intersection Crossing Treatments

The NACTO best practices for bicycle crossings at intersections are included in their guide "Don't Give Up at the Intersection: Designing all ages and abilities bicycle crossings." The USDOT publishes the "Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations" that can be utilized to determine which crossing types are best used in specific situations. In addition, FHWA's Safety Program includes recommendations for Pedestrian Hybrid Beacons in their Guidance Manual. Note that this guidance refers to the MUTCD (Manual on Uniform Traffic Control Devices), but Indiana has their own version called the IN-MUTCD. FHWA also provides guidance on the usage of Rectangular Rapid Flashing Beacons (RRFB).

Don't Give Up at the Intersection

https://nacto.org/publication/urban-bikeway-design-guide/dont-give-up-at-the-intersection/

Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations

https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/STEP-field-guide.pdf

Pedestrian Hybrid Beacon Guide – Recommendations and Case Study

https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa14014/

Indiana Manual On Uniform Traffic Control Devices

https://www.in.gov/dot/div/contracts/design/mutcd/mutcd.html

Rectangular Rapid Flash Beacon (RRFB)

https://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/

These best practices and guidance can be utilized as the Town of McCordsville prepares to add crossing facilities to the streets within the community. Additionally, other guidance or engineering judgment should be utilized regarding specific situations in the Town of McCordsville.

ADA & PROWAG

The Americans with Disabilities Act, Title II applies to State and local government entities and protects individuals with disabilities from discrimination. As such, the United States Access Board has produced Public Rights-of-Way Guidelines (PROWAG). In addition, INDOT has specific guidelines for the design of pedestrian facilities.

About the Rule-making on Public Rights-of-Way

https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way

ADA requirements shall be met for all new facilities. ADA compliance for retro-fit areas shall be discussed with the Town of McCordsville or the funding agency prior to beginning design.

Subdivision and Zoning Ordinance Review

The following is a summary of recommended changes to McCordsville's Subdivision Regulations (Chapter 153) and Zoning Code (Chapter 154) in order to more effectively implement the Bike and Pedestrian Plan.

Chapter 154 - Zoning Ordinance

General Provisions

Section 154.004 Adoption and Amendments Subsection A (2) Decision Criteria

This section states that Plan Commission and Town Council consider five criteria in relation to zoning text or map amendments, including whether the proposed change is consistent with the most recently adopted McCordsville Comprehensive Plan. Consideration should be given to adding the Adopted Bike and Ped Master Plan to this decision criteria.

Zoning Districts

154.01 (D) Overlay Districts (2) HCO, Highway Corridor Overlay

This section reads as follows:

The HCO district is intended to address the unique characteristics of the properties adjacent to the two primary transportation corridors that run through the town. Citing unique traffic management needs, development pressures, and aesthetic quality, the purpose of the HCO district is to require additional development standards and regulations without modifying the development objectives of the underlying base zoning districts.

The Bike/Ped Master Plan will be instrumental in adding additional detail to the Highway Corridor Overlay. These details are found in Section 153.053 GEOMETRIC STREET STANDARDS. It is recommended that Section 154.01 (D)(2) be amended to include a link this Section 153.053 to aid the reader in finding these required cross-sections.

154.01 (E) Other Districts (2) Old Town and (3) Town Center

These two sections make specific reference to elements discussed in the Bike / Ped Master Plan:

Old Town: "In this district, commercial establishments are intended to serve the residents of and visitors to the Town of McCordsville rather than the motoring public."

Town Center: "It is further intended that all TC districts ensure a pedestrian-friendly environment with multiple destinations for working, shopping, and entertainment. In most instances, residential dwellings are encouraged, provided they are not single-family detached homes."

Town Center: "Small parcels may need to be consolidated to provide development sites large enough for today's building and parking needs, but should be designed with an emphasis on pedestrian traffic rather than vehicular traffic..."

It is recommended that a reference the Bike / Ped Master Plan in these two classification descriptions be provided as they are likely to be key destinations for cyclists and pedestrians; Safe and convenient access to Old Town and Town Center should be a priority.

Specific Use Standards

Section 154.072 Multi-Family Residential Subdivisions Subsection (D) Community Amenity

This section states that "Multi-family developments greater than 120

acres and less than 239 acres shall include provisions for public recreation such as baseball fields, soccer fields, basketball court, tennis courts, fitness trails and the like. The land set aside for such uses is to be a minimum of five acres and should increase five acres for each additional 120 acres that the gross number of acres exceeds 239 acres."

In addition, this section provides that "The park land shall be transferred to the McCordsville Park Board upon recording the plat for the area upon the consent of the Board. If at the time of recordation of the plan, the Park Board decides not accept the transfer of the park, the land is instead deeded to the homeowners association for maintenance and control. After five years from the date of recordation, if the Park Board does not formally request title to the land, the homeowners association shall use the land for the benefit of the development... The use may include park amenities, sports fields, trails, community buildings and other uses which meet the intent of this section of the ordinance and shall be consistent with all applicable zoning commitments, codes and regulations."

Per the above section, the following is recommended:

- 1.) Require any "fitness trails" link with any adjacent existing or proposed bike/ped trails shown on the Bike/Ped Master Plan.
- 2.) Include provisions to credit the developer of Multi-Family Residential Subdivisions when trails internal to the subdivision are linked to the overall Bike/Ped Master Plan trails. For example, trails that connect may be considered "linear parks." The acreage for these linear parks can be credited toward the overall provision of recreational space. To obtain this credit, trails would be required to be built to a specific standard (which should be described in detail elsewhere in the Zoning and/or Subdivision regulations).
- 3) Provide specific design guidelines as to how linkages between internal and external trails are to be made such as connection cross sections, minimum trail width criteria, and identification signage.
- 4.) Provide provisions for additional credits if off-site improvements are made to connect non-adjacent Multi-Family Residential Subdivisions to the Bike Ped Master Plan Trails. For example, if the developer provides funds and materials for additional improvements to a city-owned multi-use path (e.g. bollards, additional paving, trees and landscaping, trail lighting, signage, etc.)

Section 154.076 Land Use Requirements Subsection (B) Residential Uses (1) Determining Density and Open Space and Subsection (B) (2) Evaluation Criteria

Subsection (B)(1) requires that 25% of the land for "open space uses" and that a minimum of 6% of this land be for active or passive recreation purposes. Subsection (B) (2) Evaluation Criteria provides details as to how this is to be accomplished. For the purposes of the Bike and Pedestrian Plan, Criteria h, i, and j are most relevant.

Similar to recommendations above for Section 154.072, the following is recommended for Section 154.076:

- 1.) Require the "fitness trails" link with any adjacent existing or proposed bike/ped trails contained within the Master Plan.
- 2.) Include provisions to credit the developer of Single-Family Residential Subdivisions when trails internal to the subdivision are linked to the overall Bike/Ped Master Plan trails. For example, trails that connect may be considered "linear parks" and credited toward the overall provision of recreational space. Note that, to obtain this credit, trails would be required to be built to a specific standard (which should be described in detail elsewhere in the Zoning and/or Subdivision regulations)..
- 3) Provide specific design guidelines as to how linkages between internal and external trails are to be made such as connection cross sections, minimum trail width criteria, and identification signage.

IMPLEMENTATION

Subdivision and Zoning Ordinance Review

4.) Provide provisions for additional credits if off-site improvements are made to connect non-adjacent Single-Family Residential Subdivisions to the Bike Ped Master Plan Trails. For example, if the developer provides funds and materials for additional improvements to a city-owned multi-use path (e.g. bollards, additional paving, trees and landscaping, trail lighting, signage, etc.)

In addition, consideration should be given for how Single-Family developments connect to immediately adjacent schools, parks, and commercial nodes (pedestrian access easements across common lots), and how on-street bike lanes internal to the subdivision should connect to the city-wide on-street bike lane system, if applicable.

Overlay Districts

Section 154.091 Highway Corridor Overlay, Subsection 6 Pedestrian Circulation

The sections on (a) "pedestrian facilities" and (b) "public spaces" may be amended to better conform with the Bike/Ped Master Plan recommendations. Specifically, the "public spaces" section might include a new provision for "bike trail connection" as a listed amenity in this section.

Development Standards

Section 154.116 Entrance/Drive Standards

It is recommended that this section include Entrance Drives Standards criteria and illustrations for uses which have a multi-use path running parallel to the arterial or collector street.

Procedures and Permits

Section 154.208 Development Plan Review Subsection (C) (3) (e) Required Materials – Site Plan

Among the elements to be shown on a site plan should be information and details as to how connections to adjoining trails and bike lanes will be made.

Chapter 153 - Subdivision Regulations

Generally, one of the most effective ways for municipalities to ensure connections to sidewalks, paths and trails is to incorporate their required dedication through the platting process. This can be accomplished through the use of common lots or dedicated easements for the specific purpose of connecting subdivisions to trails and/or multi-use paths. Similarly, provisions to allow greenway trails within floodplain easements can also be effective. While McCordsville has already adopted many of these best practices, several changes below are recommended.

Design Principals and Standards

153.051 Open Space Standards Subsection C (3) (g) Open Space Types - Greenway Corridors

This subsection offers an opportunity to incorporate design recommendations from the Bike/Ped plan for Greenway Corridors into the Subdivision Regulations in the form of the construction standards for multi-use paths. For example, this subsection should call out minimum width standards, pavement or surface type, slope, and thickness.

It is also recommended that this subsection (or alternatively Section 153.057 Easements) include a description of and provisions for the dedication of pedestrian easements. Pedestrian easements can be effective in scenarios where a sidewalk, path, or trail is unable to remain within right-of-way and must meander onto available private property as a result of unfavorable

topography/slopes, obstructions (e.g. trees, bridges, overhead power lines, etc.), or the need to cross private property to reach a trail or path access point (e.g. from the terminus of a cul-de-sac bulb to a trail using lot side yards).

153.053 Geometric Street Standards (D) Pedestrian Route Standards

It is recommended that this subsection include a new Figure (Figure 15) showing a cross section illustration for multi-use paths within Greenway Trail corridors.

Utility Coordination

Utilities were contacted in October 2019 regarding their existing facilities and plans for future upgrades and new facilities. The following utility companies have facilities within the Town limits and should be contacted before any project design is initiated. Contact information and additional utility information can be found in the Appendix.

Coordination has begun with utilities having facilities in the project limits. There are a variety of utility facilities surrounding the study limits. The purpose of the utility coordination efforts for this study is to discover any potential significant impacts to utility facilities which would result in unusual or extraordinary costs to the utility company or to the project. These types of impacts also need to be factored when determining construction schedules. A summary of the initial coordination follows:

- <u>AT&T-Distribution</u> has not yet responded to the request for information.
- <u>AT&T-Transmission</u> has facilities within the study area; however, these facilities are not anticipated to conflict with the proposed trail. These facilities are located within the CSX property limits.
- <u>Brighthouse (Spectrum)</u> has not yet responded to the request for information
- <u>Citizens Energy (Gas)</u> has identified that they have facilities within the area of the study. GIS mapping information has been provided for reference purposes.
- Citizens Energy (Sewer) has no facilities within the area of the study.
- <u>Citizens Energy (Water)</u> has identified that they have facilities within the area of the study. GIS mapping information has been provided for reference purposes.
- <u>Comcast</u> has facilities within the area of the study. Comcast has provided electronic drawings of these facilities for information.
- <u>Indianapolis Department of Public Works</u> This project is in Hancock County. The areas where it intersects with Marion County is in the City of Lawrence which has their own storm and sanitary utility. There will be no conflicts with and City of Indianapolis facilities.
- Town of Fishers has not yet responded to the request for information.
- <u>Hamilton Southeastern Utilities</u> has not yet responded to the request for information
- Indianapolis Power & Light (Electrical) has not yet responded to the request for information.
- City of Lawrence has not yet responded to the request for information.
- <u>McCordsville Public Works</u> has not yet responded to the request for information.
- <u>MCI-Verizon Business</u> has no facilities at any of the proposed trail locations
- Nine Star Connect has not yet responded to the request for information.
- <u>Vectren</u> has facilities operated by Aqua Indiana within the limits of the study area. A GIS map for facility locations has been provided for reference purposes.
- <u>Western Hancock Utilities</u> has facilities operated by Aqua Indiana within the limits of the study area. A GIS map for facility locations has been provided for reference purposes.

Cost Methodology

Below is a general break down of 2019 costs for acreage, bike / pedestrian facilities, and maintenance for planning purposes.

roperty costs in McCordsville		ı ·	1		A./		A / C		
	acres	list price	location	type	\$/acre		\$/sft		
	15	\$ 936.000	corner of 900N at 700W	wooded	\$	62,400	Ś	1.43	
	95.73		corner 600w at 750N	farmland	\$		\$	1.11	
	68.34		650N east of 700W	farmland	\$	43,781		1.01	
	142		62nd St east of 800W	farmland	\$	35,140		0.81	
	80		700N between 600W & 500W	farm+house	\$	38,000		0.87	
	80	\$ 2,640,000	corner of 500W at 700N	farm	\$	33,000	\$	0.76	
				averages:	\$	43,422	\$	1.00	
cility Components									
RFB									
g cost =		\$ 22,500	in 2018 (depends on location)						
-		,	(,						
wĸ									
g cost =		\$ 112,500	in 2013 (depends on location)						
ino Key Crosswalk									
wide		\$ 14	per lft						
ratherm Crosswalk		ė 22	nor on ft						
		\$ 32	per sq ft						
ck Paver Crosswalk									
		\$ 38	per sq ft						
arrows									
arrows		ć 420	nor oach						
g cost =		\$ 420	per each						
ce lane striping									
g cost =		\$ 1	per Ift						
acrata Davament									
ncrete Pavement		\$ 8	per sq ft						
		٥ -	per sq rt						
il Asphalt Pavement									
		\$ 5	per sq ft						
il Concrete Paver on Concrete Subb	ase								
concrete i avei oii concrete subbi		\$ 24	per sq ft						
			F = - 34 14						
OA Curb Ramp			syd - ramp						
		\$ 40	Ift - remove and replace						
ail Wood Boardwalk									
		\$ 20	per sq ft						
il Head Amenities			urnishings, Pavements, Planting	s, Amenities					
owance		\$ 45,000	each						
ail Head Amenities		Sign, Kiosk. Site I	Furnishings, Amenities						
		-	per sq ft						
				4			_		
idge - trail type, steel		\$ 150	per sqft	\$50-\$150 - sł	nort is m	ore \$ per	sqft		
moral Costs Commonsate									
eneral Costs Components									
ail - General Corridor		\$ 981,750	per mile						
w, separate alignment SUP			per Ift						
cludes signage									
ail - Branded Trail - Premium Upgrad	٥,	\$ 150,000	per mile						
ver nodes, duratherm crosswalk treat									
ver modes, duramenti crosswaik tredi	.ment, þ	anungs, anu en	חומווככע מוווכווונוכל.						
ail - Branded Trail - Base Upgrades		\$ 90,000	per mile						
ncrete nodes, enhanced, crosswalk tr	eatmen	t and amenities	•						
rveying & engineering		\$ 195,000	per mile	use 20% of o	construct	ion cost i	f fed	erally fu	nder
cludes ROW aquisition			per mile	use 12% of o					
1								,	-
aintenance									
		\$ 4,400	per mile						
laintenance years - restorative seal years - surface treatments			per mile per mile						

IMPLEMENTATION

Cost Methodology

Planned Separated Paths/Trails and Sidewalks - Distance Summary

	Length of Separated	Length of 5'	Length of 6'	Length of 8'
Road/Path	Path/Trail (in ft)	Sidewalk (in ft.)	Sidewalk (in ft.)	Sidewalk (in ft.)
N600W - North	12,100	2,000		
N600W - South	23,600			
N700W - North	6,500		1,900	
N700W - South	12,300			
W Broadway	6,400		4,100	6,600
N500W - North	1,600	2,300		
N500W - South	1,800	1,800		
E 96th Street	4,400			
W900N	6,800	5,900		
W800N	8,300	8,300		
W800N - Alternate*	6,700	9,700		
W750N	12,200	11,900		
W750N - Alternate**	10,200	13,900		
W700N	2,700	2,700		
W650N	2,600	2,600		
W600N - West	3,200	3,200		
W600N - East	3,500	3,500		
W500N	3,800	3,800		
McCord Road		12,100		
North Fork Dry Branch	18,900			
Dry Branch	14,100			
Old Town	10,500			
Brookside-Vail	3,900			

^{*}Alternate shows a sidewalk in front of homes to the east.

^{**} Alternate shows a sidewalk on the north side where the homes are located.

Improvement by Type - Developer's Responsibility

Road	Separated Path (ft)	% Developer's Responsibility	Sidewalk (5 foot) (ft)	% Developer's Responsibility	Total Potential Cost to Developers
N600W - North	2,575	21%	325	16%	\$ 497,520
N600W - South	13,625	21%	-	-	\$ 2,546,547
N700W - North	3,900	60%	-	-	\$ 725,400
N700W - South	4,100	33%	-	-	\$ 762,600
W Broadway	2,550	40%	-	-	\$ 474,300
N500W - North	1,600	100%	2,300	100%	\$ 412,600
N500W - South	1,800	100%	1,800	100%	\$ 424,800
E 96th Street	1,050	24%	-	-	\$ 195,300
W900N	4,000	59%	3,350	57%	\$ 915,147
W800N	4,500	54%	4,100	49%	\$ 1,042,000
W750N	7,900	65%	6,625	56%	\$ 1,800,650
W700N	1,850	69%	1,850	69%	\$ 436,600
W650N	2,350	90%	1,750	67%	\$ 524,600
W600N - West	2,800	88%	950	30%	\$ 568,300
W600N - East	900	26%	2,850	81%	\$ 309,900
W500N	1,775	47%	1,800	47%	\$ 420,150
McCord Road	-	-	4,700	39%	\$ 235,000
Totals	57,275	-	32,400	-	\$ 12,291,414

Notes:

McCordsville's Subdivision Regulations provide that developers are responsible for the construction of separated paths and sidewalks. Based on this, the table classifies land in the study area by "developed" or "undeveloped" status. Improvements to undeveloped land will be the developer's responsibility while improvements to developed land will be the Town of McCordsville's responsibility.

The "Separated Path" and "Sidewalk" colums show the lot/parcel frontage length of undeveloped property within McCordsville corporate limits by type.

"Percent developer's responsibility" is determined by dividing the length of the roadway frontage of undeveloped property by total roadway corridor length.

Only undeveloped property within McCordsville town limits is included.

As the majority of land adjacent to McCordsville in unincorporated Hancock County is undeveloped, the developer would be responsible for nearly all improvements shown in the McCordsville Bicycle and Pedestrian Plan, once annexed into town limits.

Bridges, ADA improvements, curbs, detectable warnings, crosswalks, and other support infrastructure are not included in the distance or cost estimates.

There is an estimated 111,800 linear feet of new separated path improvements in the McCordsville Pedestrian and Bicycle plan. Developer's will potentially be responsible for 57,275 linear feet (51.2%) of these separated path improvements on property that is currently classified as "undeveloped."

There is an estimated 72,700 linear feet of new sidewalk improvements in the McCordsville Pedestrian and Bicycle plan. Developer's will potentially be responsible for 32,400 linear feet (44.6%) of these sidewalks on property that is currently classified as "undeveloped."

IMPLEMENTATION

Legend

Town Boundary

Corridor Roadway

Roadway Bike Route

Neighborhood

Destination XXX

Waterway / Greenway

Proposed Sidewalk

Proposed Protected Path

Proposed Separated Path

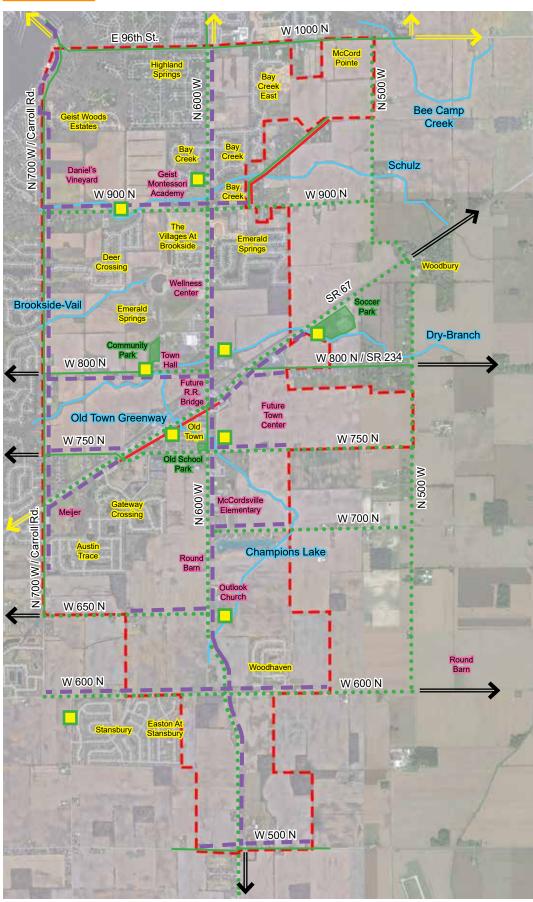
Proposed Sharrow

Trail Head

Proposed Regional Connection

Regional Connection

Overall Plan



Legend

High Priority Medium Priority Low Priority

Description

High Priority

N 600 W - Between 96th St./1000 N and W 500 N

N 700 W (North) - Between 96th St. and W 900 N

W Broadway - Between N 700 W and Dry Branch (East Crossing)

W 900 N - Between N 700 W and N 500 W

W 750 N - Between W Broadway and N 600 W

W 650 N - Between N 700 W and N 600 W

Medium Priority

N 700 W (South) - Between W 900 N and W 650 N

E 96th St. / W 1000 N - Between N 600 W and Georgia Rd.

Low Priority

N 500 W - Between 96th St. and W 700 N

W 800 N - Between N 700 W and N 500 W

W 750 N - Between N 700 W and W Broadway

W 750 N - Between N 600 W and N 500 W

W 700 N - Between N 600 W and N 500 W

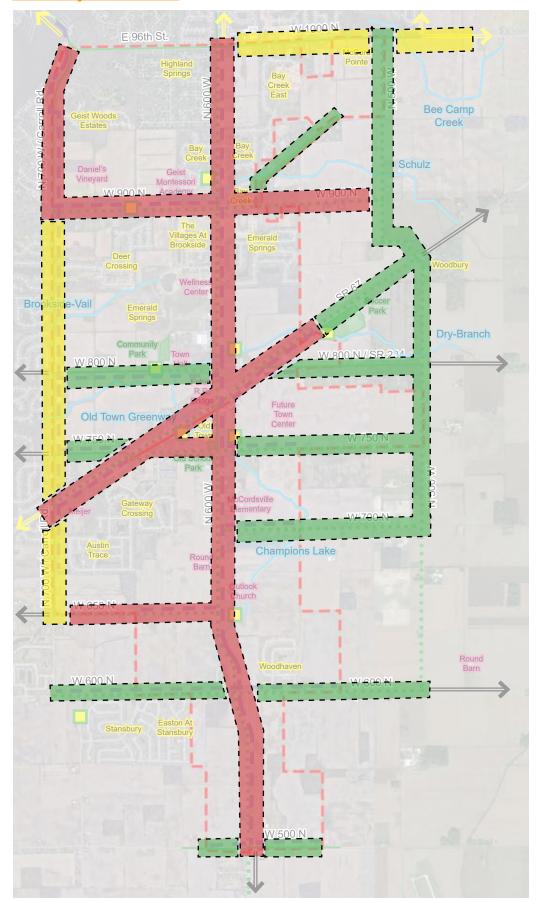
W 600 N - Between N 700 W/Carroll Rd. and N 500 W

W 500 N - From 2695 ft left of N 600 W to 3174 ft right of N 600 W

W McCord Road

W Broadway - Between Dry Branch (East Crossing) and Woodbury

Hierarchy of Priorities



Costs Per Corridor

The numbers below include approximate surveying & engineering fees.

Numbers in red include surveying & engineering being 20% of construction costs if federally funded.

Numbers in blue include surveying & engineering being 12% of construction costs if locally funded.

Detailed breakdowns are within the appendix.

N 600 W

(North) - \$4,471,100 / \$4,173,100 (South) - \$6,175,700 / \$5,764,000 Branding Trail Upgrades \$90,000 -\$150,00 per mile

N 700 W

(North) - \$1,703,100 / \$1,589,600 (South) - \$3,545,900 / \$3,309,500

W Broadway

\$3,280,200 / \$3,061,600 Branding Trail Upgrades \$90,000 -\$150,00 per mile

N 500 W

(North) - \$995,200 / \$928,900 (South) - \$861,900 / \$804,400

E 96th St.

\$998,000 / \$931,400

W 900 N

\$2,460,300 / \$2,296,300 Branding Trail Upgrades \$90,000 -\$150,00 per mile

W 800 N

\$4,673,900 / \$4,362,300

W 750 N

\$8,255,800 / \$7,705,500

W 700 N

\$927,500 / \$865,700

W 650 N

\$976,800 / \$911,700

W 600 N

(West) - \$1,101,200 / \$1,027,800 (East) - \$1,261,700 / \$1,177,600

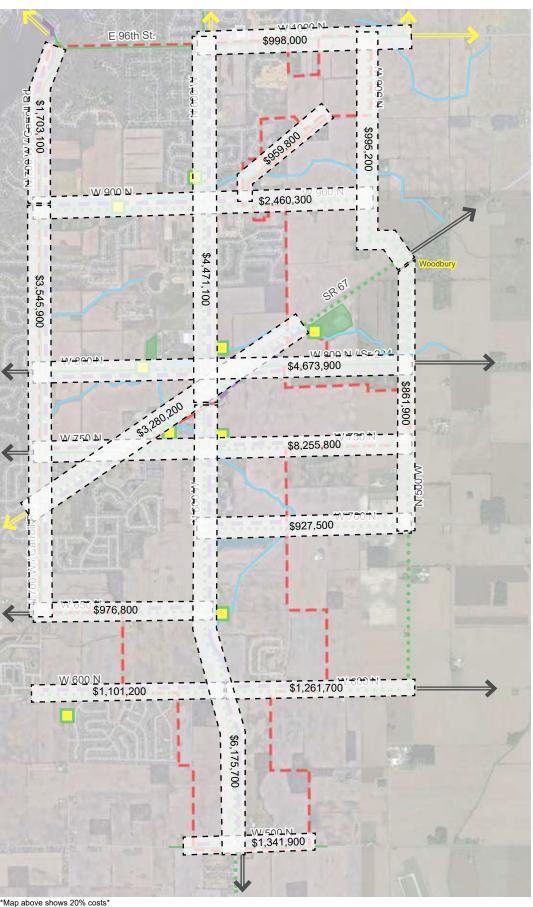
W 500 N

\$1,341,900 / \$1,252,400

McCord Road

\$959,800 / \$895,800

Overall Map



Costs Per Greenway

The numbers below include approximate surveying & engineering fees.

Numbers in red include surveying & engineering being 20% of construction costs if federally funded.

Numbers in blue include surveying & engineering being 12% of construction costs if locally funded.

Detailed breakdowns are within the appendix.

North Folk Dry Branch / Schulz \$5,499,800 / \$5,133,100

Dry Branch

\$4,258,400 / \$3,974,500

Town Center - Champion Lake \$6,147,500 / \$5,737,700

Brookside Vail

\$1,995,200 / \$1,862,200

Bee Camp Creek

\$3,050,800 / \$2,847,400

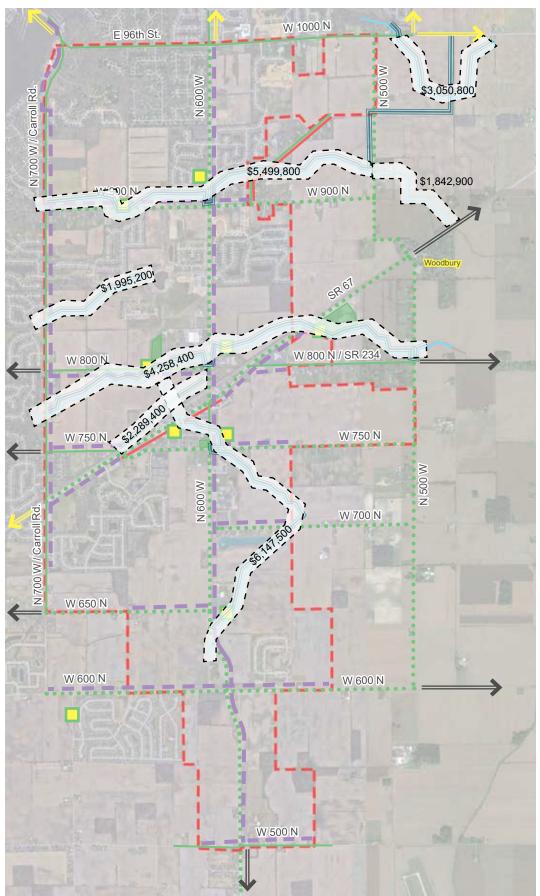
Geist South Extension

\$1,842,900 / \$1,720,000

Inter-Urban

\$2,289,400 / \$2,136,800

Overall Map



Map above shows 20% costs

Funding Opportunities

At federal, state and local level of government, funding for bicycle and pedestrian projects is not only competitive but increasingly only covers specifically identified improvements or program elements. As a result, many governments have found it necessary to identify specific funding sources for each bike/ped plan element or project. For example, the Transportation Infrastructure Finance and Innovation Act (TIFIA) listed in Table 1 offers assistance only in the form of secured loans, loan guarantees, or standby lines of credit but can be combined with other grant sources, subject to total Federal assistance limitations. Meanwhile, programs such as the Recreational Trails Program (RTP) offers federal dollars administrated by the state that are targeted specifically for recreational trails, and, therefore, will not cover improvements such as traffic signals, streetscaping, or on-road bicycle lanes. In short, planning ahead to identify multiple funding sources may be necessary in order ensure that all costs of a planned improvement have been covered.

Table 1 provides a list of Activity or Project Types available from Federal funding sources. For brevity, Table 1 focuses on sources for capital improvement projects; it does not include sources for non-capital programs, such as salaries, safety training programs, or operations and maintenance costs. Federal funds are typically available on a competitive basis through state agencies for distribution at the local or regional level. Matching funds by the local government are often required. See the U.S. Department of Transportation, Federal Highway Administration or Indiana Department of Transportation (INDOT) websites for additional details on eligibility requirements for the funding sources noted in Table 1.

Table 1

	Pedestrian and Bicycle Funding Opportunities U.S. Department of Transportation Transit, Highway, and Safety Funds					
Activity or Project Type	TIFIA	CMAQ	STBG	<u>TA</u>	RTP	PLAN
Access enhancements to public transportation (includes benches, bus pads)	\$	\$	\$	\$		
ADA/504 Self Evaluation / Transition Plan			\$	\$	\$	\$
Bicycle lanes on road	\$	\$	\$	\$		
Bicycle parking	\$	\$	\$	\$	\$	
Bike racks on transit	\$	\$	\$	\$		
Bicycle Repair Station (air pump, simple tools)	\$	\$	\$	\$		
Bicycle share (capital and equipment; not operations)	\$	\$	\$	\$		
Bicycle storage or service centers (example: at transit hubs)	\$	\$	\$	\$		
Bridges / overcrossings for pedestrians and/or bicyclists	\$	\$	\$	\$	\$	
Bus shelters and benches	\$	\$	\$	\$		
Crosswalks (new or retrofit)	\$	\$	\$	\$	\$	
Curb cuts and ramps	\$	\$	\$	\$	\$	
Counting equipment			\$	\$	\$	\$
Data collection and monitoring for pedestrians and/or bicyclists			\$	\$	\$	\$
Historic preservation (pedestrian and bicycle and transit facilities)	\$		\$	\$		

Landscaping, streetscaping (pedestrian and/or	\$		\$	\$		
bicycle route; transit						
access); related amenities (benches,						
water fountains); generally as part of a						
larger project						
Lighting (pedestrian	\$		\$	\$	\$	
and bicyclist scale associated with						
pedestrian/bicyclist						
project) Maps (for pedestrians		\$	\$	\$		\$
and/or bicyclists)		,	,	,		,
Paved shoulders for pedestrian and/or	\$	\$	\$	\$		
bicyclist use						
Recreational trails	\$		\$	\$	\$	
Road Diets (pedestrian	\$		\$	\$		
and bicycle portions)						
Road Safety			\$	\$		\$
Assessment for pedestrians and						
bicyclists						
Separated bicycle lanes	\$	\$	\$	\$		
Shared use paths / transportation trails	\$	\$	\$	\$	\$	
Sidewalks (new or retrofit)	\$	\$	\$	\$	\$	
Signs / signals / signal improvements	\$	\$	\$	\$		
Signed pedestrian or	\$	\$	\$	\$		
bicycle routes Spot improvement	\$		\$	\$	\$	
programs			Ť	-	-	
Stormwater impacts	\$		\$	\$	\$	
related to pedestrian and bicycle projects						
Traffic calming	\$		\$	\$		
Trail bridges	\$	\$	\$	\$	\$	
Trail construction and			\$	\$	\$	
maintenance equipment						
Trail/highway	\$	\$	\$	\$	\$	
intersections Trailside and trailhead	\$		\$	\$	\$	
facilities (includes	,		ب	ب	ب	
restrooms and water,						
but not general park amenities; see program						
guidance)						
Tunnels /	\$	\$	\$	\$	\$	
undercrossings for pedestrians and/or						
bicyclists						

Source: U.S. Department of Transportation, Federal Highway Administration, Pedestrian and Bicycle Funding Opportunities

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm

TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)

CMAQ: Congestion Mitigation and Air Quality Improvement Program

STBG: Surface Transportation Block Grant Program

TA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)

RTP: Recreational Trails Program

PLAN: Statewide Planning and Research (SPR) or Metropolitan Planning

funds

Table 2 provides a list of potential State funding sources for bicycle and pedestrian improvements. As with Table 1, Table 2 focuses on sources of funds for capital improvement projects. While some may include federal dollars, the intent of Table 2 is to identify resources not listed in Table 1. As funds are limited, they are usually competitively allocated and can be applied for only during designated application periods. Matching funds (usually 20-25%) by the local government are often required. See the Indiana Department of Transportation (INDOT), Indiana Department of Natural Resources (INDNR), and the Indiana Department of Community and Rural Affairs (OCRA) websites for additional details on the funding sources listed in Table 2.

Table 2

Funding Source	Project Type	Agency
President Benjamin Harrison Conservation Trust Fund		INDNR
Place Based Investment Fund	conservation areas Parks, public venues and other quality of place projects	OCRA
Next Level Trails Grant Program	All non-motorized trail types, especially multi-use trails, including upgrading surface type, land acquisition, design and engineering, and basic trail amenities.	DNR Division of Outdoor Recreation

Local governments may also adopt taxes or impact fees that can directly support bicycle and pedestrian improvements. These revenues can serve as matching dollar requirements for Federal and/or State funding program requirements. These taxes can be assessed within cities or at the county-wide level. Examples include the Local Option Income Tax (LOIT), the County Option Income Tax (COIT), the County Adjusted Gross Income Tax (CAGIT), and the County Economic Development Income Tax (CEDIT/EDIT).

In addition, approximately half the counties in Indiana, including Hancock County, have a "County Vehicle Excise Tax and Wheel Tax." Also known as the Local Option Highway User Taxes (LOHUT), these funds provide revenue for road maintenance and construction. As the roadways within the McCordsville Bike and Pedestrian Plan area are gradually constructed or improved, LOHUT revenues can assist in ensuring the corridor is constructed in a manner consistent with the McCordsville Bike and Ped Plan.

Other potential sources of revenue include Local/County Recreation Impact Fees (RIF), where a local government adopts a fee to offset additional costs for park system expansion and improvements to serve additional residents. Fees are usually assessed either at the time of final subdivision platting or upon issuance of the building permit for new residential dwelling(s). Impact fees may cover the cost of new bicycle and pedestrian improvements to serve new residents, as well as a means of safe and convenient access to these public improvements. For example, a pedestrian connection from an adjoining neighborhood or commercial use to the multi-use trail along N 600 W would be a valid use of RIF dollars.

Tax Increment Financing (TIF) districts are another method that can be used to implement the Bike and Pedestrian Plan. TIFs are most effectively used in commercially zoned areas, especially those which are undeveloped, under-developed, or in need of re-development. In touting the economic benefit of a well-planned bike and ped plan to bring customers to commercial sites, a TIF district ordinance should include provisions to ensure that TIF dollars are directly tied to the improvements in the Bike and Ped Plan. This can be either as a percentage of total funds or via specifically identified list (and associated costs) of improvements as part of the development plan for a commercial site. Approaching TIFs in this manner can raise community confidence that TIF dollars are being effectively used and will result in higher property values for the community when the TIF district expires.

In addition to federal, state and local funds, a wide variety of Non-Government funds are listed and updated regularly at visitindianatourism.com. Among the non-profit entities, private foundations, and utility companies listed are the following:

Non-Profit Trail Grants:

- Rail-to-Trails Doppelt Family Trail Development Grant: https://www.railstotrails.org/our-work/doppelt-family-trail-development-fund/
- People for Bikes Community Grants https://peopleforbikes.org/our-work/community-grants/
- Greenways Foundation http://www.greenwaysfoundation.org/grants.html
- Indiana Trails Fund http://www.indianatrails.com/?q=content/indiana-trails-fund

Private Foundations/Endowments:

- Lilly Endowment
- Ball Brothers Foundations

Utility Companies Funding Sources or Partnerships:

-Vectren Energy

Trail Maintenance and Operation Costs

During the construction and design phase for trails, multi-use paths, and sidewalks, planning for annual and long-term operations and maintenance (O&M) costs should be done to enable elected and appointed officials to budget for these costs once the facility is open to the public.

While O&M costs for bike and pedestrian facilities will represent a new expenditure in the McCordsville annual budget, a well-maintained system will significantly extend the life of these facilities at a fraction of their original cost.

O&M costs can be variable due to factors such as construction methods, geography, weather, regional economy, and labor costs. However, studies documenting typical expenditures in other Midwestern states are useful in anticipating what is most likely to occur in McCordsville. This report utilizes a 2014 study conducted by Purdue University/Indiana ITAP in conjunction with the Ohio River Greenway Development Commission titled "Best Practices in Trail Maintenance." *1* Costs cited in this study have been adjusted to 2019 dollars using a 3% annual inflation rate.

Table 1 - Trail Maintenance

Task	Task Type	Recommended Frequency	Cost
Mowing	Routine	On-Going	
Edging	Routine	On-Going	
Landscaping and Tree/Brush			52,400 per mile (amount covers all
Clearing	Routine	On-Going	items listed to left)
Trash/Debris Removal	Routine	On-Going	
Graffiti Removal	Minor Repairs	As needed	

Table 2 - Trail Amenity Maintenance/Repair

Task	Task Type	Recommended Frequency	Cost
Wayfinding Signage	Minor Repairs	Ongoing As Needed	
Gates and Fencing	Minor Repairs	Ongoing As Needed	
Lighting	Minor Repairs	Ongoing As Needed	
Drainage and Rip-Rap	Minor Repairs	Ongoing As Needed	CAND a se suite fa se suite au suite
Benches	Minor Repairs	Ongoing As Needed	S480 per mile (amount covers all
Picnic Areas	Minor Repairs	Ongoing As Needed	items listed to left)
Garbage Cans	Minor Repairs	Ongoing As Needed	
Seasonal Care (Snow Removal,			
Flooding etc)	Minor Repairs	Ongoing As Needed	
Amenity Replacement	Minor Repairs	As needed	On par with original costs

The \$480 per mile amount assumes that trail maintenance personnel will allocate 80% of their time on tasks listed in Table 1, and 20% of their time on tasks listed in Table 2.

1 - LTAP, Indiana and Development Commission, Ohio River Greenway, "Best Practices in Trail Maintenance" (2014). Indiana Local Technical Assistance Program (LTAP) Publications. Paper 8. http://docs.lib.purdue.edu/inltappubs/8

Table 3 - Trails (Asphalt)

Task	Task Type	Recommended Frequency	Cost
Wayfinding Signage	Minor Repairs	Ongoing As Needed	
Gates and Fencing	Minor Repairs	Ongoing As Needed	
Lighting	Minor Repairs	Ongoing As Needed	
Drainage and Rip-Rap	Minor Repairs	Ongoing As Needed	\$480 per mile (amount covers all
Benches	Minor Repairs	Ongoing As Needed	items listed to left)
Picnic Areas	Minor Repairs	Ongoing As Needed	raems raced to rent)
Garbage Cans	Minor Repairs	Ongoing As Needed	
easonal Care (Snow Removal,			
Flooding, etc)	Minor Repairs	Ongoing As Needed	
Amenity Replacement	Minor Repairs	As needed	On par with original costs

Table 4 - Bridges

Task	Task Type	Recommended Frequency	Cost
Bridge Deck Sealing	Minor Repairs	6 years	\$1 per square foot of bridge surface
Joint Repair to Integral			
Abutments	Minor Repair	6 years	S1 linear foot
Bridge Painting (incl. cleaning)	Minor Repairs	12 years	\$19 per square foot
Deck Overlay	Minor Reconstruction	12 years	5234 per square yard
Substructure repair	Major Reconstruction	20 years	On par with original costs

Table 4 addresses bridges that may be along greenbelt trails or multi-use paths separated from a bridge which serves automobile traffic.

The Best Practices in Trail Maintenance study (See Page 10 in Appendix) also provides a cost per mile amount for a variety of trail types. While the study does not clarify how bridge costs in Table 4 are addressed, it does state that an annual average cost between \$1,200 ("absolute minimum") and \$2,525 per mile (2007 dollars) is typical. Adjusted for inflation in 2019 dollars at a 3% annual increase, this range would be between \$1,700 and \$3,600 dollars per mile.

Action Item Matrix

2020

I-3 YEARS

Approve and adopt the McCordsville Bike and Pedestrian Plan. Work with Town Council to communicate the plan and priorities. Explore creation of a trails advisory board by identifying members and engaging with local foundations, interest groups, officials, community groups and citizens. Work with in process community developments to include facilities that align with the plan. Identify funding strategies for plan development. Work with the Town Council to develop future budget allocations. Issue RFQ/RFP to begin Project Scoping and Conceptual Design of high priority corridors to refine costs and phasing plans.

Issue RFQ/RFP to create signage

priority corridors.

standards that would closely relate to design development of high

- Continue to mentor and develop the trails advisory group to become the dominant lead and point of contact for private fundraising initiatives and design guidance. Pursue public and private grants for
- implementation. Issue RFQ/RFP to begin construction drawings of a Phase One project

identified within the Scoping Project.

- Continue to work with private developers to implement new segments of facilities in proposed developments.
- Release Phase One for bidding and start construction, if funded.
- Issue RFQ/RFP to begin construction drawings of a Phase Two project identified within the Scoping Project.

3-8 YEARS

Complete construction and hold a grand opening of Phase One. Evaluate previous implementation progress, identify needs, and adjust priority of action items accordingly. Continue to mentor and develop the trails advisory group to become the dominant lead and point of contact for private fundraising initiatives and design guidance. Continue to pursue public and private grants for implementation. Continue to work with private developers to implement new segments of faculties in proposed developments. Release Phase Two for bidding and start construction. ☐ Issue RFQ/RFP to begin construction drawing of a Phase Three project identified within the Scoping Report.

8+YEARS

0	Complete construction and hold a grand opening of Phase Two.
0	Release Phase Three for bidding and start construction.
0	Complete construction and hold a grand opening of Phase Three.
	Reevaluate the Bike and Pedestrian Master Plan's priorities and the Scoping Report to remain current with market changes and community needs.
	Continue to mentor and develop the trails advisory group to become the dominant lead and point of contact for private fundraising initiatives and design guidance.
	Continue to work with private developers to implement new segments of facilities in proposed developments.



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Meeting Sign-In Sheets





SIGN-IN SHEET | STAKEHOLDER MEETING #1

DATE:	July 23, 2019		
PROJECT NAME:	McCordsville Bike & Pedes	trian Master Plan	
		+0 * * * * * * * * * * * * * * * * * * *	
Name:	Phone:	Email:	
Anna Bergm Jon Hioginbo Christin Maria B Adam Zaklik Joe Mite Sysan Body Josef Sur ALETHA DU. BANDY SOLRES	than Duvens ond swiki hell win Ubracil	Redacted	
	alia:		

PEOPLE+LAND Context Design | 12 S Main St. Ste 200 | Fortville IN 46040 | 317-485-6900 | www.context-design.com





SIGN-IN SHEET | STEERING COMMITTE MEETING #2

DATE:	August 15th, 2019		
PROJECT NAME:	McCordsville Bike & Pedestria	n Master Plan	
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Name:	Phone:	Email:	
Ann KIC Brianne Schne Amanda EVE MARK WITS Ron Crida Byan Chin Aky La	CKeviberger ERIDGE MAN =V	<u>Redacted</u>	
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Meeting Sign-In Sheets





SIGN-IN SHEET | STEERING COMMITTE MEETING #3

DATE:	October 25th, 2019		
PROJECT NAME:	McCordsville Bike & Pedestria	an Master Plan	
	(±)	15	
Name:	Phone:	Email:	
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Brianne Schne	ckenberger		
Amanda Everid	lae		
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Ryan Cr	8 № 4 монучностроння порта	Redacted	
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Survey Write-Ins

Question 02: What do you like MOST about walking and biking in McCordsville?

I can get to destinations but not directly. It would be great to have a path on Carroll Rd.

There are NO trails for walking and NO bike lanes . So biking and walking in McCordsville is dangerous!

They are not on the roads so it is safer.

I would love to bike in McCordsville if safe paths are created. I especially like when trails allow you to stop for a beer, food, ice cream, shops. Pendleton Pike offers a lot of potential if trails led to Trax BBQ, Scarlet Lane, etc

Not very bikeable

As a McCordsville Southsider I really can't walk or bike. There is essentially nothing south of the tracks resembling a trail or sidewalk

Where we live now there is now real place to walk or ride that is why this would be great

I live south of the railroad tracks and it is dangerous to cross Broadway St and the tracks to get to the path.

Why do walking trails almost always go beside noisy roads? Take a look at Bee Creek Trail....that is a LOT more desirable than a noisy path alongside Olio Rd. Require new neighborhoods to incorporated trails like that!!!!

There is nothing to ride to. No town:(

Too many distracted drivers; it is not worth the risk

Don't do what Greenfield did on Hwy 40!

Bike paths that do NOT remove a lane from the road

Surrounding areas have some paths but nothing connects to access the businesses in the "town".

Poor walking and biking path exist currently and most are in neighbourhoods and do not connect to destinations. Shops and neighborhoods are not connected.

Would love to see more options besides the trail along County Rd 600

I don't usually walk or bike in town

I currently do not bike/walk in McCordsville due to the lack of paths stemming from my neighborhood.

I only bike for exercise.

McCordsville only has 1 trail that runs partially down Mt. Comfort. The town does not currently have good bike/pedi trails, so I don't do these things. I checked what I would like to have.

I currently do not walk or bike in McCordsville. There is no sidewalk on my street and the shoulder is too narrow. We need more sidewalks!!

There really aren't many options for trails/walking in McCordsville at this time

Unfortunately, I feel there isn't any real safe place to bike or walk.

Currently since most neighborhoods north of railroad are not able to safely connect to or travel on Broadway to dining, grocery, etc. there is not much to like.

From where I live, there is no safe way to get south of the tracks or Pendleton Pike. There are not enough good destinations in McCordsville.

Since I live on 600W, which is like a highway, I have no safe place to walk unless I get in my car and drive somewhere. Would be nice to have a path I could use along there.

We "Southside" McCordsville residents have not had the opportunity to enjoy a bike/ pedestrian path. I live in Woodhaven subdivision off of 600N and unlike the folks who live on Olio we do not have anything to connect us to McCordsville "downtown" or other communities. We do not want to wait years to be able to get out in the community on a bike or walking.

would like more paths to bike on

I just moved to McCordsville so can't comment. My concern is having ways to bike safely with all the traffic in the area. I moved here from New Pal where I often headed south to Shelby County to minimize traffic concerns.

There is nowhere safe to bike in mccordsville out of the woodhaven home addition. This is not an option for us currently.

waste of money

Not great sidewalk access near vp and none that connects to the sidewalk system near Hancock wellness center. I love that route but few it's dangerous walking along traffic

I'm still not comfortable walking/biking outside my neighborhood due to lack of complete sidewalks and traffic.

I don't have much because there's no path network in Woodhaven outside of the sidewalks inside the subdivisions. Need to connect path to get to "downtown" McCordsville and connect to the path on north side of Pendleton pike

Convenient to just step out my door and go for a run.

I'm in woodhaven and don't have access to any yet but would love too! We bike the county roads which are getting more unsafe every day

There currently are not any biking or walking paths connecting to my neighborhood (Woodhaven) so I do not walk or bike in McCordsville.

There's not much to like. It's just a hot, boring strip along 600W

I don't currently

Question 03: How often do you walk or bike from HOME to another destination?

I would bike if bike paths existed.

I do not currently walk or bike from home to a destination b/c of the lack of safe pathways. I currently have to drive to a location to exercise.

I can't right now

One a month. I bike to a destination.

A few times over the nice weather seasons. My family would do it a lot more if these trails are built out more. Currently there no trails to safely get to the south side of

Just moved here from Seattle. Not much to ride to. Still settling in, but would like to bike all over when able. I would also like to wals, but there is nothing here to walk to. No real community.

I would bike more if more accessible and scenery was better (trees, bushes, flowers)

Walk around my neighborhood

Occasionally have biked to parks in Fishers along trail on Olio. Only a couple times a year.

I would like to start

I run, but not to a destination just a loop to return to my starting point.

Would if a path connected to our neighborhood. But drive to trails now to use.

I do walk to the Wellness Center, but that is all

I bike within my neighborhood for exercise but do not go to a destination.

I bike for exercise so I don't go to a certain point, but I bike2-3x week

There is nowhere safe to bike from where we live (woodhaven). However we would bike 3 times a week if there was the option.

Never because it's too dangerous on mt comfort or 600 with absolutely no paths

3-4 x a year but would do much more if had trails!!

If there was a path from Woodhaven I would bike into town with the children often

I would...but there is no walking/bike trails on the south side of mccordsville

Just within the neighborhood. There is really nowhere to safely cross 600 to get to the sidewalk. We could use one on the Wellness Center side, especially with building the new Geist Montessori Academy. :)

Question 04: How often do you walk or bike from WORK or SCHOOL to another destination?

Too far 25 miles

n/a - retired

Mt. Vernon Schools require the neighborhood kids to take the bus to school, even those who live 200 feet away have to get on the bus. With policies like these, why even bother?

Retired

I am retired

I would if I could. Too far.

Work from home so it does not apply

same answer as before. Unable to ride safely to work. Nothing to ride to here but places that will negate the exercise.

Seldom

I would more if you could get through the town a lit easier. Trying g to cross the railroad tracks and south of Broadway is a nightmare walking or biking work is in another county or I would if it were closer

Same answer as #3

Not safe to ride to cross Pendleton Pike. The little park by town hall is not much of a destination.

I don't do this currently but want to now that my workplace location has changed!

There is nowhere safe to bike from where we live (woodhaven). However we would bike 3 times a week if there was the option.

If there was a path from Woodhaven I would bike into town with the children often

I would bike to the kids school if there was a bike trail to MES

Question 05: Please tell us about the types of WALK-ING trips you take and how often:

I ride east of McCordsville since there are fare too many high density home divisions North, south and west. The traffice generated by this lack of control makes it difficult to enjoy riding. When you fear for your life it makes McCordsville and unattractive place for physical fitness out doors!

Would walk more if my neighborhood was connected to more

Can't even walk to Vernon Township Park. Unsafe to cross Mt. Comfort Road most of the day and impossible to cross on foot between 7 and 9 AM weekdays. There is not even a crosswalk painted on the road at 750 and 600 to access the park on foot from the east side.

Currently I have to drive to a location to do these activities

Again, we would utilize these trails a lot more if they are built up.

I have to cross into Hamilton County for scenic quiet walks.

My last residence I walked 4-7 miles a day. There is nothing convenient to walk to. Just kind of unhealthy places to eat.

We would if it was available

There's no sidewalks or trails connecting my neighborhood (Deer Crossing)

We don't currently walk or bike due to a lack of pathways

It is unsafe to Walt to town, restaurants and shopping from my location. If trails were built I would bike to grocery, restaurants and dental appointments.

I mainly walk in a loop inside my Neighborhood Emerald Springs for exercise. I want a park with a walking trail.

to the mailbox

I walk at the gym or the state parks or shopping.

Running

I park and walk most places downtown, but there isn't much within walking distance of my Mccordsville home and no shade along the walking paths

Are you serious about there being a network of trails? Please post a map to the town website along with desirable destinations.

Kind of misleading because I walk to Hamilton county

I am on 234, not many opportunities.

We "Southside" McCordsville residents have not had the opportunity to enjoy a bike/ pedestrian path. I live in Woodhaven subdivision off of 600N and unlike the folks who live on Olio we do not have anything to connect us to McCordsville "downtown" or other communities. We do not want to wait years to be able to get out in the community on a bike or walking.

Would love to bike or walk to restaurants if Mc Cordsville had more accessibility and restaurants provide bike racks etc. Have thought of moving to Fishers for just this reason.

There are no sidewalks or trails connected to our neighborhood so we only walk for leisure within the neighborhood

Taking baby to the sitter

Leave McCordsville to walk at parks

I actually use the trails to run nearly every day.

If there was a path from Woodhaven I would walk o restaurants and events

Question 06: Please tell us about the types of BIKING trips you take and how often:

See above! bike lanes and trail might help but controlling the sea of crap housing would go farther!

Are you kidding? Some of the pickup truck drivers actually try to hit bikers with their mirrors

I Bike to meetings, appointments, and to the YMCA at Fort Harrison.

I walk I do not bike

There is no entertainment in McCordsville

I would bike/walk more if we had more parks/splash pad. Things for kids of all ages

I would take more biking trips if there were safe biking paths that led to locations in mccordsville

Need a bike

I would love to start

No connections to my neighborhood, Deer Crossing to public parks, entertainment or restaurants.

Biking to amenities and activities does not happen due to a lack of safe pathways.

APPENDIX

Survey Write-Ins

Again, if there were trails, I would do all the above

I bike within my neighborhood in Emerald Springs and rarely on the path on 600 W to Bay Creek

I don't like biking

Also to Hamilton County. Additionally, in a fit of "safety theater" MVCSC prohibits walking and biking to school.

I don't bike, but my son and husband do. They go to the Pennsy to do itsey

We "Southside" McCordsville residents have not had the opportunity to enjoy a bike/ pedestrian path. I live in Woodhaven subdivision off of 600N and unlike the folks who live on Olio we do not have anything to connect us to McCordsville "downtown" or other communities. We do not want to wait years to be able to get out in the community on a bike or walking.

I don't currently bike because there are no safe trails out of our neighborhood.

Bike for leisure within the neighborhood due to no sidewalks or trails.

Would like a path down Carroll road from Broadway to CR 650

Question 07: What factors DISCOURAGE WALKING in McCordsville?

No direct route. (Carroll Road 86th to 96th street

Need 600W widened to 4 lanes plus bike lanes prior to worrying about this

NO Trails in McCordsville!

None of the above. Paths are great and in a great location

Make walking trails more interesting....not road sidewalks

Path floods between 900 and 1000N

There aren't many shops or restaurants in town that I would be willing to walk to.

The lack of pathways connecting our area.

I don't see a huge need for anyone who doesn't live in the pop up neighborhoods.

pedestrian bike crossings should have a flashing light that can be pushed or a sign at minimum that tells traffic to yield to pedestrians - all lanes must stop.

There aren't good destinations to walk to. I'm in Emerald Springs. I'm no walking to Village Pantry, and there is nothing else good on my side of the road. I'm not crossing 600 West or Pendleton Pike. Wish we had a nice town park to walk to WITH RESTROOMS.

night time lighting on hanna st, not enough street lights

We need more parks for the # of people here, public spaces

More shade

Need more attractive landscaping

Poor drainage leads to standing water on path days after rain/snowmelt

By vp across the tracks and connecting to the sidewalk. Also no sidewalks along Broadway

No sidewalks to get out of Sagebrook subdivision. Road ROW too narrow to ride in grass areas

Question 08: What factors DISCOURAGE BIKING in McCordsville?

No direct route. (Carroll Road 86th to 96th street

Bikers need to actually use the paths or have bike lanes with widened 600W to 4 lanes

NO bike trails in McCordsville!

I don't bike, but majority of the roads are too dangerous for bikers to be on the road. As a driver I don't want any bikers on the road, they cause too many potential hazards. I would recommend splitting the walking path to create a bike lane instead of them riding on a narrow two lane road with cars trying to travel at the speed limit.

My preferred destinations are not in McCordsville

Don't know, not a biker.

Need wider and bike friendly roads

I don't bike.

Even the bike lanes on the street are not ideal for my elementary kids to ride on. I love the wide path along Olio and 96th Street. It's set back off the street and we can go for family bikerides. It's hard to cross Olio from Highland Springs, Bay Creek and Emerald Springs.

The path along 600 West is nice, but there aren't good destinations to bike to.

need more public spaces, parks, etc.

Drivers don't watch for bikes

Question 09: What factors ENCOURAGE an increase of WALKING in McCordsville?

Public bathrooms

More crosswalks. The one or two that exist are ok

It goes along with the crosswalks and calming traffic. Olio is busy, cars go faster than the speed limit, and no one would ever consider yielding to a pedestrian waiting at a crosswalk. Even if a good samaritan stopped, cars would simple speed around you in the turn lane, leaving the crosswalk potentially more dangerous. In places like Carmel, drivers have been conditioned to stop for pedestrians. We need that awareness and conditioning in McCordsville to make walking safer. We might need some of those pedestrian traffic lights like they have in Fishers, like in front of HSE or at Brooks School Rd. and Fall Creek. As it is now, cars have absolutely no respect for pedestrians in McCordsville.

None too dangerous with all the extra people coming through here. Roads are mot made/ designed for all this traffic. 600 is a highway.

This was hard to choose 3! I would select the 2nd and 3rd ones too.

What am I supposed to do if I'm walking and biking with a child along 600 West and then she needs to use a bathroom? No good destinations to walk or bike to.

Somewhere to go

Safe railroad crossing is my top concern

dog friendly, low water for dogs, poop bags and deposit bins

1) Landscaping, attractive scenery

Unfortunately non of these for Woodhaven residents

I read this as what would encourage because in my section of McCordsville I have none of these

Question 10: What factors ENCOURAGE an increase of BIKING in McCordsville?

not needed until 600 w is widened

None too dangerous with all the extra people coming through here. Roads are mot made/ designed for all this traffic. 600 is a highway.

I would also select 1, 2, and 4.:)

If there was a destination to bike to, such as a family friendly park with restrooms.

1) landscaping, scenery improvements

Unfortunately non for Woodhaven residents

Answered as what would encourage

Question 11: What locations need the most pedestrian and biking improvements?

Pointless until 600w is widened as we will just have to redo when it is done

I live on a county road (900N) with no direct access to trails and road is very busy.

there are no parks which we should have!!!!

There is no safe way for residents of Old Town to connect to all of the wonderful trails created north of the railroad tracks. it is unsafe to cross SR67 and/or Olio Rd becuase of traffic and the lack of sidewalks or bike lanes. We pay taxes too. :)

If there was a higher category for crosswalks and intersections I would choose that one

The person formulating this question left out scenic winding paths, like the Bee Creek Trail as an example.

There is nothing attracting people to stay here

Infront of Austin Trace was never connected!

This town is not at sll set up for walking or biking due to being on the busiest rood in Hancock.

Kids aren't going to walk to school 9 times out of 10. They'd be hit by a car on 600.

Being able to bike into McCordsville along Olio, Carrol Rd, along 67 and the side streets. Being able to bike into Fortville from 96th St. All on paths away from the road.

I would like to see a pedestrian bridge over Olio

Weeds and grass get too high along existing bike routes and is not safe.

Currently we do not have access to any bike paths outside out neighborhood. Biking/walking is not an option but we wish it was.

Connect outer parts of McCordsville

North McCordsville has nice, wide bike and walking paths. Unfortunately, South McCordsville can not utilize these paths because there are no paths available there.

Question 18: If you work in McCordsville, what is your location or company's name?

MVCSC

I work from home.

Retired

Home office

Work from home, DINO LLC

Greenfield, IN

30th Shadeland

Work from home

Retired

Mt. Vernon Community School Corporation

McCordsville Elementary

MVCSC

116th

Finish line

In home nanny

Hancock Wellness Center

Stay at home mom

Home

McCordsville Veterinary Hospital

WineShop at Home

I worl from home in the Woodhaven Subdivision

Work from home

Wellness Center

Mobile worker/territory coverage

From home

Home, self employed

I work from home

At home for Ascension Technologies

Detailed Cost Breakdown - Corridors

N 600 W (North)

Between 96th St/1000 N and W 750 N

HIGH PRIORITY							
	UNIT	QUANTITY	10	NIT COST		TOTAL	
Separated path	FT	12,100	\$	186	\$	2,250,600	
Separated path centerline marking	FT	12,100	\$	0.90	\$	10,900	
Sidewalk (5')	FT	2,000	\$	50	\$	100,000	
Bridge, trail type, steel	SQFT	1,800	\$	150	\$	270,000	
ADA ramps:							
ramp	SYD	126	\$	212	\$	26,800	
detectable warning	SYD	28	\$	145	\$	4,100	
remove & replace curb	LFT	280	\$	40	\$	11,200	
piano key crosswalk	LFT	301	\$	14	\$	4,300	
ROW costs	SQFT	823,000	\$	1	\$	823,000	
HAWK Beacon	EACH	2	\$	112,500	\$	225,000	
		Cons	struc	ction Cost:	\$	3,725,900	
Surveying & engineering (20%)					\$	745,200	\$ 4,471,100
Surveying & engineering (12%)			\$	447,200	\$ 4,173,100		
						•	
Restorative Seal - 5 years	SYD	15,700	\$	0.75	\$	11,800	
Surface Treatments - 10 years	SYD	15,700	\$	2	\$	31,400	
Mill and Resurface - 15 years	SYD	15,700	\$	8	\$	125,600	

Assum	ntions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 4 trail stream crossing included in cost estimate
- 18. Excludes cost of trail crossing rail road tracks
- 19. "Linear Feet" is the total length of undeveloped property along this corridor.
- 20. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 21. "Percent" is the percent of this corridor classified as "undeveloped."

Potential developer responsibility	Linear Feet	Cost	Percent		
Separated Path	2,575	\$ 481,270	21%		
Sidewalk	325	\$ 16,250	16%		

Total 497.520

N 600 W (South)

Between W 750 N and W 500 N

	п	IGH PRIORITY				
	UNIT	QUANTITY	UN	IIT COST	TOTAL	
Separated path	FT	23,600	\$	186	\$ 4,389,600	
Separated path centerline marking	FT	23,600	\$	0.90	\$ 21,300	
Bridge, trail type, steel	SQFT	700	\$	150	\$ 105,000	
ADA ramps:						
ramp	SYD	81	\$	212	\$ 17,200	
detectable warning	SYD	18	\$	145	\$ 2,700	
remove & replace curb	LFT	180	\$	40	\$ 7,200	
piano key crosswalk	LFT	242	\$	14	\$ 3,400	
ROW costs	SQFT	600,000	\$	1	\$ 600,000	
		Const	ruct	ion Cost:	\$ 5,146,400	
	Sur	veying & engir	neeri	ng (20%)	\$ 1,029,300	\$ 6,175,700
	Surveying & engineering (12%)				\$ 617,600	\$ 5,764,000
Restorative Seal - 5 years	SYD	26,000	\$	0.75	\$ 19,500	
Surface Treatments - 10 years	SYD	26,000	\$	2	\$ 52,000	
Mill and Resurface - 15 years	SYD	26,000	\$	8	\$ 208,000	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	13,625	\$ 2,546,547	58%

\$ 2.546.547 Total

- 1. 9 SYD ramp per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 2 trail stream crossing included in cost estimate
- 18. "Linear Feet" is the total length of undeveloped property along this corridor. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property
- 19. along this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

N 700 W (North)

Between 96th St and W 900 N

HIGH PRIORITY								
	UNIT	QUANTITY	UN	IIT COST		TOTAL		
Separated path	FT	6,500	\$	186	\$	1,209,000		
Sidewalk (6' wide)	FT	1,900	\$	60.00	\$	114,000		
Bridge, trail type, steel	SQFT	260	\$	150.00	\$	39,000		
ADA ramps:								
ramp	SYD	27	\$	212	\$	5,800		
detectable warning	SYD	10	\$	145	\$	1,500		
remove & replace curb	LFT	60	\$	40	\$	2,400		
piano key crosswalk	LFT	54	\$	14	\$	800		
ROW costs	SQFT	46,700	\$	1	\$	46,700		
		Constr	ucti	ion Cost:	\$	1,419,200		
Surveying & engineering (20%)					\$	283,900	\$	1,703,100
Surveying & engineering (12%)					\$	170,400	\$	1,589,600
Restorative Seal - 5 years	SYD	4,700	\$	0.75	\$	3,600		•
Surface Treatments - 10 years	SYD	4,700	\$	2	\$	9,400		•
Mill and Resurface - 15 years	SYD	4,700	\$	8	\$	37,600		•

Potential Developer responsibility	Feet	Cost	Percent
Separated Path	3,900	\$ 725,400	60%

Total \$ 725,400

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. West side of roadway completed by others
- 9. Excludes roadway improvement costs
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. 1 trail stream crossing included in cost estimate
- 19. "Linear Feet" is the total length of undeveloped property along this corridor.
- 20. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 21. "Percent" is the percent of this corridor classified as "undeveloped."

N 700 W (South)

W 900 N and W 650 N

MEDIUM PRIORITY								
	UNIT	QUANTITY	U	INIT COST		TOTAL		
Separated path	FT	12,300	\$	186	\$	2,287,800		
Bridge, trail type, steel	SQFT	900	\$	150	\$	135,000		
ADA ramps:								
ramp	SYD	54	\$	212	\$	11,500		
detectable warning	SYD	12	\$	145	\$	1,800		
remove & replace curb	LFT	120	\$	40	\$	4,800		
piano key crosswalk	LFT	65	\$	14	\$	1,000		
ROW costs	SQFT	513,000	\$	1	\$	513,000		
		Cons	tru	ction Cost:	\$	2,954,900		
Surveying & engineering (20%)					\$	591,000	\$	3,545,900
Surveying & engineering (12%)				\$	354,600	\$	3,309,500	
Restorative Seal - 5 years	SYD	13,000	\$	0.75	\$	9,800		•
Surface Treatments - 10 years	SYD	13,000	\$	2	\$	26,000		
Mill and Resurface - 15 years	SYD	13,000	\$	8	\$	104,000		

Potential developer responsibility	Feet	Cost	Percent
Separated Path	4,100	\$ 762,600	33%

Total \$ 762,600

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. West side of roadway completed by others
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. 2 trail stream crossings included in cost estimate
- 19. Excludes cost of trail crossing rail road tracks
- 20. "Linear Feet" is the total length of undeveloped property along this corridor.
- 21. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 22. "Percent" is the percent of this corridor classified as "undeveloped."

Detailed Cost Breakdown - Corridors

W Broadway

Between N 700 W and Dry Branch (East Crossing)

	HIGH PRIORITY									
	UNIT	QUANTITY	UN	NIT COST		TOTAL				
Separated path	FT	6,400	\$	186	\$	1,190,400				
Sidewalk (8' wide)	FT	6,600	\$	80.00	\$	528,000				
Sidewalk (6' wide)	FT	4,100	\$	60.00	\$	246,000				
Bridge, trail type, steel	SQFT	600	\$	150.00	\$	90,000				
ADA ramps:										
ramp	SYD	72	\$	212	\$	15,300				
detectable warning	SYD	16	\$	145	\$	2,400				
remove & replace curb	LFT	160	\$	40	\$	6,400				
piano key crosswalk	LFT	281	\$	14	\$	4,000				
ROW costs	SQFT	426,000	\$	1	\$	426,000				
HAWK Beacon	EACH	2	\$	112,500	\$	225,000				
		Const	ruct	ion Cost:	\$	2,733,500				
	Surve	ying & engin	eeri	ng (20%)	\$	546,700	\$	3,280,200		
	Surve	ying & engin	eeri	ng (12%)	\$	328,100	\$	3,061,600		
Restorative Seal - 5 years	SYD	15,700	\$	0.75	\$	11,800				
Surface Treatments - 10 years	SYD	15,700	\$	2	\$	31,400				
Mill and Resurface - 15 years	SYD	15,700	\$	8	\$	125,600				

_				
Ass	um	nnti	ion	ıs.

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 2 sidewalk stream crossings included in cost estimate
- 18. "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

Potential developer responsibility
Separated Path

Feet	Cost	Percent
2,550	\$ 474,300	40%

Total

\$ 474,300

McCord Road

From W 900 N to N 500 W

	l	OW PRIORITY	′				
	UNIT	QUANTITY	UN	IT COST		TOTAL	
Sidewalk (5' wide)	FT	12,100	\$	50	\$	605,000	
ADA ramps:							
ramp	SYD	36	\$	212	\$	7,700	
detectable warning	SYD	8	\$	145	\$	1,200	
remove & replace curb	LFT	80	\$	40	\$	3,200	
piano key crosswalk	LFT	85	\$	14	\$	1,200	
ROW costs	SQFT	181,500	\$	1	\$	181,500	
		Cons	truct	ion Cost:	\$	799,800	
	Sur	eying & engir	neeri	ng (20%)	\$	160,000	\$ 959,800
	Sur	eying & engir	neeri	ng (12%)	\$	96,000	\$ 895,800
Restorative Seal - 5 years	SYD	6,700	\$	0.75	\$	5,100	
Surface Treatments - 10 years	SYD	6,700	\$	2	\$	13,400	
Mill and Resurface - 15 years	SYD	6.700	Ś	8	Ś	53,600	

Potential developer responsibility	Feet	Cost	Percent
Sidewalk	4,700	\$ 235,000	39%

Total \$ 235,000

- 1. 9 SYD per ADA ramp
- 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- ${\bf 12. \ Excludes \ easements \ and \ drive \ aprons \ for \ trail/sidewalk \ crossings}$
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 19. "Percent" is the percent of this corridor classified as "undeveloped."

N 500 W (North)

Between 96th St and South of Main St

	ASSU	JMED LOW PR	IORI	ΓΥ		
	UNIT	QUANTITY	UN	IIT COST	TOTAL	
Separated path	FT	1,600	\$	186	\$ 297,600	
Sidewalk (5' wide)	FT	2,300	\$	50	\$ 115,000	
Bridge, trail type, steel	SQFT	600	\$	150	\$ 90,000	
ADA ramps:						
ramp	SYD	54	\$	212	\$ 11,500	
detectable warning	SYD	12	\$	145	\$ 1,800	
remove & replace curb	LFT	120	\$	40	\$ 4,800	
piano key crosswalk	LFT	113	\$	14	\$ 1,600	
ROW costs	SQFT	307,000	\$	1	\$ 307,000	
		Cons	truct	tion Cost:	\$ 829,300	
	Sui	rveying & engi	neer	ing (20%)	\$ 165,900	\$ 995,200
	Sui	rveying & engi	neer	ing (12%)	\$ 99,600	\$ 928,900
Restorative Seal - 5 years	SYD	3,100	\$	0.75	\$ 2,400	
Surface Treatments - 10 years	SYD	3,100	\$	2	\$ 6,200	
Mill and Resurface - 15 years	SYD	3,100	\$	8	\$ 24,800	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	1,600	\$ 297,600	100%
Sidewalk	2,300	\$ 115,000	100%

Total \$ 412,600

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Portions of the East side of roadway completed by others
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. 2 trail stream crossings included in cost estimate
- 19. Excludes cost of trail crossing rail road tracks
- 20. "Linear Feet" is the total length of undeveloped property along this corridor.
- 21. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 22. "Percent" is the percent of this corridor classified as "undeveloped."

N 500 W (South)

Between South of Main St and W 700 N

ASSUMED LOW PRIORITY									
	UNIT	QUANTITY	1U	NIT COST	TOTAL				
Separated path	FT	1,800	\$	186	\$	334,800			
Sidewalk (5' wide)	FT	1,800	\$	50	\$	90,000			
ADA ramps:									
ramp	SYD	45	\$	212	\$	9,600			
detectable warning	SYD	10	\$	145	\$	1,500			
remove & replace curb	LFT	100	\$	40	\$	4,000			
piano key crosswalk	LFT	88	\$	14	\$	1,300			
ROW costs	SQFT	277,000	\$	1	\$	277,000			
		Cons	truc	tion Cost:	\$	718,200			
	Sui	rveying & engi	neer	ring (20%)	\$	143,700	\$	861,900	
	Sui	veying & engi	neer	ring (12%)	\$	86,200	\$	804,400	
Restorative Seal - 5 years	SYD	3,000	\$	0.75	\$	2,300			
Surface Treatments - 10 years	SYD	3,000	\$	2	\$	6,000			
Mill and Resurface - 15 years	SYD	3,000	\$	8	\$	24,000			

Potential developer responsibility	Feet	Cost	Percent		
Separated Path	1,800	\$ 334,800	100%		
Sidewalk	1,800	\$ 90,000	100%		

\$ 424,800

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Portions of the East side of roadway completed by others
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. "Linear Feet" is the total length of undeveloped property along this corridor.
- 19. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

Detailed Cost Breakdown - Corridors

E 96th St

Between N 600 W and Georgia Rd

	MEDIUM PRIORITY									
	UNIT	QUANTITY	U١	NIT COST	TOTAL					
Separated path	FT	4,400	\$	186	\$	818,400				
ADA ramps:										
ramp	SYD	36	\$	212	\$	7,700				
detectable warning	SYD	8	\$	145	\$	1,200				
remove & replace curb	LFT	80	\$	40	\$	3,200				
piano key crosswalk	LFT	154	\$	7	\$	1,100				
ROW costs	SQFT	*	\$	1	\$	-				
		Cons	truc	tion Cost:	\$	831,600				
	Surv	eying & engi	neer	ing (20%)	\$	166,400	\$	998,000		
	Surv	eying & engi	neer	ing (12%)	\$	99,800	\$	931,400		
Restorative Seal - 5 years	SYD	4,900	\$	0.75	\$	3,700				
Surface Treatments - 10 years	SYD	4,900	\$	2	\$	9,800				
Mill and Resurface - 15 years	SYD	4,900	\$	8	\$	39,200				

Potential developer responsibility	Feet	Cost	Percent
Separated Path	1,050	\$ 195,300	24%

Total \$ 195,300

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- Trails and separate paths pricing includes signage and assumes asphalt
- Trails and separate paths assumed 10' wide
- Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- North side of roadway completed by others
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17.* Sufficent ROW observed, no additional ROW needed for improvements
- 18. "Linear Feet" is the total length of undeveloped property along this corridor. "Cost" is the estimated total to install paths/sidewalks on "undeveloped"
- property along this corridor (based on the percent figure in the next column). "Percent" is the percent of this corridor classified as "undeveloped."

W 900 N

Between N 700 W and N 500 W

HIGH PRIORITY								
	UNIT	QUANTITY	U١	NIT COST		TOTAL		
Separated path	FT	6,800	\$	186	\$	1,264,800		
Separated path centerline marking	FT	6,800	\$	0.90	\$	6,200		
Sidewalk (5' wide)	FT	5,900	\$	50	\$	295,000		
Bridge, trail type, steel	SQFT	1,100	\$	150	\$	165,000		
ADA ramps:								
ramp	SYD	36	\$	212	\$	7,700		
detectable warning	SYD	8	\$	145	\$	1,200		
remove & replace curb	LFT	80	\$	40	\$	3,200		
piano key crosswalk	LFT	154	\$	7	\$	1,100		
ROW costs	SQFT	306,000	\$	1	\$	306,000		
		Cons	truc	tion Cost:	\$	2,050,200		
	Surv	eying & engi	neer	ing (20%)	\$	410,100	\$	2,460,300
	Surv	eying & engi	neer	ing (12%)	\$	246,100	\$	2,296,300
Restorative Seal - 5 years	SYD	10,900	\$	0.75	\$	8,200		
Surface Treatments - 10 years	SYD	10,900	\$	2	\$	21,800		
Mill and Resurface - 15 years	SYD	10,900	\$	8	\$	87,200		

Feet	Cost	Percent
4,000	\$ 747,647	59%
3,350	\$ 167,500	57%
1	1,000	Feet Cost 4,000 \$ 747,647 8,350 \$ 167,500

Total \$ 915,147

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 2 trail stream crossings included in cost estimate
- 18. 2 sidewalk stream crossings included in cost estimate
- $19. \ \ "Linear Feet" is the total length of undeveloped property along this corridor.$
- 20. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 21. "Percent" is the percent of this corridor classified as "undeveloped."

W 800 N

Between N 700 W and N 500 W

ASSUMED LOW PRIORITY									
	UNIT	QUANTITY	UNIT COST		TOTAL				
Separated path	FT	8,300	\$	186	\$	1,543,800			
Sidewalk (5' wide)	FT	8,300	\$	50	\$	415,000			
Bridge, trail type, steel	SQFT	550	\$	150	\$	82,500			
ADA ramps:									
ramp	SYD	54	\$	212	\$	11,500			
detectable warning	SYD	12	\$	145	\$	1,800			
remove & replace curb	LFT	120	\$	40	\$	4,800			
piano key crosswalk	LFT	254	\$	7	\$	1,800			
ROW costs	SQFT	*	\$	1	\$	-			
		Cons	struc	ction Cost:	\$	2,061,200			
	Sı	ırveying & engi	inee	ring (20%)	\$	412,300	\$	2,473,500	
	Sı	ırveying & engi	inee	ring (12%)	\$	247,400	\$	2,308,600	
Restorative Seal - 5 years	SYD	13,900	\$	0.75	\$	10,500			
Surface Treatments - 10 years	SYD	13,900	\$	2	\$	27,800			
Mill and Resurface - 15 years	SYD	13,900	\$	8	\$	111,200			

Potential developer responsibility	Feet	Cost	Percent
Separated Path	4,500	\$ 837,000	54%
Sidewalk	4,100	\$ 205,000	49%

Total \$ 1,042,000

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- Sidewalks are assumed concrete
- Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- Piano kev crosswalks are assumed 10' wide
- Excludes roadway improvement costs
- **Excludes lighting** 9.
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- Surveying & engineering is 12% of construction cost if locally funded
- 16.* Sufficent ROW observed, no additional ROW needed for improvements
- 17. 1 trail stream crossing included in cost estimate
- 18. 1 sidewalk stream crossing included in cost estimate
- "Linear Feet" is the total length of undeveloped property along this corridor.
- 20. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 21. "Percent" is the percent of this corridor classified as "undeveloped."

W 800 N

Between N 700 W and N 500 W

With sidewalk in front of houses to east

ASSUMED LOW PRIORITY								
	UNIT	QUANTITY	UN	IT COST		TOTAL		
Separated path	FT	6,700	\$	186	\$	1,246,200		
Sidewalk (5' wide)	FT	9,700	\$	50	\$	485,000		
Bridge, trail type, steel	SQFT	550	\$	150	\$	82,500		
ADA ramps:								
ramp	SYD	54	\$	212	\$	11,500		
detectable warning	SYD	12	\$	145	\$	1,800		
remove & replace curb	LFT	120	\$	40	\$	4,800		
piano key crosswalk	LFT	254	\$	7	\$	1,800		
ROW costs	SQFT	*	\$	1	\$	-		
		Cons	tructi	ion Cost:	\$	1,833,600		
	S	urveying & engi	neeri	ng (20%)	\$	366,800	\$	2,200,400
	S	urveying & engi	neeri	ng (12%)	\$	220,100	\$	2,053,700
Restorative Seal - 5 years	SYD	12,900	\$	0.75	\$	9,700		
Surface Treatments - 10 years	SYD	12,900	\$	2	\$	25,800		
Mill and Resurface - 15 years	SYD	12,900	\$	8	\$	103,200		

Potential developer responsibility	Feet Cost			Percent
Separated Path	4,500	\$	837,000	67%
Sidewalk	4,100	\$	205,000	42%

\$ 1.042.000 Total

- 1. 9 SYD per ADA ramp
- 2 SYD detectable warning per ADA ramp
- 20 LFT curb remove and replace per ADA ramp
- Sidewalks are assumed concrete
- Trails and separate paths pricing includes signage and assumes asphalt
- Trails and separate paths assumed 10' wide 6.
- Piano key crosswalks are assumed 10' wide
- Excludes roadway improvement costs
- **Excludes lighting**
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- Surveying & engineering is 12% of construction cost if locally funded
- 16.* Sufficent ROW observed, no additional ROW needed for improvements
- 17. 1 trail stream crossing included in cost estimate
- 18. 1 sidewalk stream crossing included in cost estimate
- 19. "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- "Percent" is the percent of this corridor classified as "undeveloped."

Detailed Cost Breakdown - Corridors

W 750 N

Between N 700 W and N 500 W

LOW PRIORITY (MIDDLE SECTION HIGH PRIORITY)												
	UNIT	QUANTITY	U	UNIT COST		UNIT COST		UNIT COST		TOTAL		
Separated path	FT	12,200	\$	186	\$	2,269,200						
Sidewalk (5' wide)	FT	11,900	\$	50	\$	595,000						
Bridge, trail type, steel	SQFT	300	\$	150	\$	45,000						
ADA ramps:												
ramp	SYD	18	\$	212	\$	3,900						
detectable warning	SYD	4	\$	145	\$	600						
remove & replace curb	LFT	40	\$	40	\$	1,600						
piano key crosswalk	LFT	154	\$	7	\$	1,100						
HAWK Beacon	EACH	1	\$	112,500	\$	112,500						
ROW costs	SQFT	547,000	\$	1	\$	547,000						
	-	Cons	tru	ction Cost:	\$	3,575,900						
	Surveying & engineering (20%)				\$	715,200	\$	4,291,100				
	Surveying & engineering (12%)			\$	429,200	\$	4,005,100					
Restorative Seal - 5 years	SYD	20,200	\$	0.75	\$	15,200						
Surface Treatments - 10 years	SYD	20,200	\$	2	\$	40,400						
Mill and Resurface - 15 years	SYD	20,200	\$	8	\$	161,600		•				

Potential developer responsibility	Feet	Cost	Percent
· · · · · ·		 COSE	rercent
Separated Path	7,900	\$ 1,469,400	65%
Sidewalk	6,625	\$ 331,250	56%

Total \$ 1,800,650

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 1 trail stream crossing included in cost estimate
- 18. 1 sidewalk stream crossing included in cost estimate
- 19. Excludes cost of trail crossing rail road tracks
- 20. "Linear Feet" is the total length of undeveloped property along this corridor.

"Cost" is the estimated total to install paths/sidewalks on "undeveloped"

- 21. property along this corridor (based on the percent figure in the next column).
- 22. "Percent" is the percent of this corridor classified as "undeveloped."

W 750 N

Between N 700 W and N 500 W

With sidewalk on the north side where the homes are instead of trail I OW PRIORITY (MIDDLE SECTION HIGH PRIORITY)

LOW PRIC	KITY (IVII	DDLE SECTION H	IIGH	PRIORITY)		
	UNIT	QUANTITY	U	NIT COST	TOTAL	
Separated path	FT	10,200	\$	186	\$ 1,897,200	
Sidewalk (5' wide)	FT	13,900	\$	50	\$ 695,000	
Bridge, trail type, steel	SQFT	300	\$	150	\$ 45,000	
ADA ramps:						
ramp	SYD	18	\$	212	\$ 3,900	
detectable warning	SYD	4	\$	145	\$ 600	
remove & replace curb	LFT	40	\$	40	\$ 1,600	
piano key crosswalk	LFT	154	\$	7	\$ 1,100	
HAWK Beacon	EACH	1	\$	112,500	\$ 112,500	
ROW costs	SQFT	547,000	\$	1	\$ 547,000	
		Cons	tru	ction Cost:	\$ 3,303,900	
	S	urveying & engi	nee	ring (20%)	\$ 660,800	\$ 3,964,700
	S	urveying & engi	nee	ring (12%)	\$ 396,500	\$ 3,700,400
Restorative Seal - 5 years	SYD	19,100	\$	0.75	\$ 14,400	
Surface Treatments - 10 years	SYD	19,100	\$	2	\$ 38,200	
Mill and Resurface - 15 years	SYD	19,100	\$	8	\$ 152,800	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	7,900	\$ 1,469,400	77%
Sidewalk	6,625	\$ 331,250	48%

\$ 1,800,650 Total

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. 1 trail stream crossing included in cost estimate
- 18. 1 sidewalk stream crossing included in cost estimate
- 19. Excludes cost of trail crossing rail road tracks
- 20. "Linear Feet" is the total length of undeveloped property along this corridor.
- 21. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 22. "Percent" is the percent of this corridor classified as "undeveloped."

W 700 N

Between N 600 W and N 500 W

	LO	W PRIORITY				
	UNIT	QUANTITY	UI	NIT COST	TOTAL	
Separated path	FT	2,700	\$	186	\$ 502,200	
Sidewalk (5' wide)	FT	2,700	\$	50.00	\$ 135,000	
Bridge, trail type, steel	SQFT	375	\$	150	\$ 56,300	
ADA ramps:						
ramp	SYD	72	\$	212	\$ 15,300	
detectable warning	SYD	16	\$	145	\$ 2,400	
remove & replace curb	LFT	160	\$	40	\$ 6,400	
piano key crosswalk	LFT	174	\$	7	\$ 1,300	
ROW costs	SQFT	54,000	\$	1	\$ 54,000	
		Cons	struc	ction Cost:	\$ 772,900	
	Sur	veying & engi	nee	ring (20%)	\$ 154,600	\$ 927,500
	Sur	veying & engi	nee	ring (12%)	\$ 92,800	\$ 865,700
Restorative Seal - 5 years	SYD	4,500	\$	0.75	\$ 3,400	
Surface Treatments - 10 years	SYD	4,500	\$	2	\$ 9,000	
Mill and Resurface - 15 years	SYD	4,500	\$	8	\$ 36,000	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	1,850	\$ 344,100	69%
Sidewalk	1,850	\$ 92,500	69%

Total \$ 436,600

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. North side of roadway to the East of Stansbury ditch completed by others
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. From town boundary to N 500 W, separated path built by others
- 18. 1 trail stream crossing included in cost estimate
- 19. 1 sidewalk stream crossing included in cost estimate
- 20. "Linear Feet" is the total length of undeveloped property along this corridor.
- 21. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 22. "Percent" is the percent of this corridor classified as "undeveloped."

W 650 N

Between N 700 W and N 600 W

	LC	W PRIORITY				
	UNIT	QUANTITY	S	NIT COST	TOTAL	
Separated path	FT	2,600	\$	186	\$ 483,600	
Sidewalk (5' wide)	FT	2,600	\$	50	\$ 130,000	
ADA ramps:						
ramp	SYD	36	\$	212	\$ 7,700	
detectable warning	SYD	8	\$	145	\$ 1,200	
remove & replace curb	LFT	80	\$	40	\$ 3,200	
piano key crosswalk	LFT	174	\$	7	\$ 1,300	
ROW costs	SQFT	187,000	\$	1	\$ 187,000	
		Cons	truc	tion Cost:	\$ 814,000	
	Surv	eying & engi	neer	ring (20%)	\$ 162,800	\$ 976,800
	Surv	eying & engi	neer	ring (12%)	\$ 97,700	\$ 911,700
Restorative Seal - 5 years	SYD	4,300	\$	0.75	\$ 3,300	
Surface Treatments - 10 years	SYD	4,300	\$	2	\$ 8,600	
Mill and Resurface - 15 years	SYD	4,300	\$	8	\$ 34,400	·

Potential developer responsibility	Feet	Cost	Percent
Separated Path	2,350	\$ 437,100	90%
Sidewalk	1,750	\$ 87,500	67%

\$ 524,600 Total

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. Excludes roadway improvement costs
- 9. Excludes lighting
- 10. Sidewalk pricing excludes signage
- 11. Excludes trash cans/benches/street trees
- 12. Excludes easements and drive aprons for trail/sidewalk crossings
- 13. All new trail, sidewalk, and separate path
- 14. Surveying & engineering is 20% of construction cost if federally funded
- 15. Surveying & engineering is 12% of construction cost if locally funded
- 16. See "ROW widths" spreadsheet for ROW cost calculations
- 17. From town boundary to N 700 W, separated path built by others
- 18. "Linear Feet" is the total length of undeveloped property along this corridor.
- 19. "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

Detailed Cost Breakdown - Corridors

W 600 N (East)

Between N 600 W and N 500 W

	Į	OW PRIORITY	′			
	UNIT	QUANTITY	UI	NIT COST	TOTAL	
Separated path	FT	3,500	\$	186	\$ 651,000	
Sidewalk (5' wide)	FT	3,500	\$	50	\$ 175,000	
ADA ramps:						
ramp	SYD	36	\$	212	\$ 7,700	
detectable warning	SYD	8	\$	145	\$ 1,200	
remove & replace curb	LFT	80	\$	40	\$ 3,200	
piano key crosswalk	LFT	162	\$	14	\$ 2,300	
ROW costs	SQFT	211,000	\$	1	\$ 211,000	
		Cons	truc	tion Cost:	\$ 1,051,400	
	Sur	veying & engir	neei	ring (20%)	\$ 210,300	\$ 1,261,700
	Surv	veying & engir	nee	ring (12%)	\$ 126,200	\$ 1,177,600
Restorative Seal - 5 years	SYD	5,900	\$	0.75	\$ 4,500	
Surface Treatments - 10 years	SYD	5,900	\$	2	\$ 11,800	·
Mill and Resurface - 15 years	SYD	5,900	\$	8	\$ 47,200	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	900	\$ 167,400	26%
Sidewalk	2,850	\$ 142,500	81%
•			-

Total \$ 309,900

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. North side of roadway to the East and West of town boundary completed by others
- 9. Excludes roadway improvement costs
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18 "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along 19. this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

W 600 N (West)

Between N 700 W/Carroll Rd and N 600 W

	Н	IGH PRIORITY				
	UNIT	QUANTITY	UI	NIT COST	TOTAL	
Separated path	FT	3,200	\$	186	\$ 595,200	
Sidewalk (5' wide)	FT	3,200	\$	50	\$ 160,000	
ADA ramps:						
ramp	SYD	36	\$	212	\$ 7,700	
detectable warning	SYD	8	\$	145	\$ 1,200	
remove & replace curb	LFT	80	\$	40	\$ 3,200	
piano key crosswalk	LFT	162	\$	14	\$ 2,300	
ROW costs	SQFT	148,000	\$	1	\$ 148,000	
		Cons	truc	tion Cost:	\$ 917,600	
	Surv	veying & engi	neei	ring (20%)	\$ 183,600	\$ 1,101,200
	Surv	veying & engi	neei	ring (12%)	\$ 110,200	\$ 1,027,800
Restorative Seal - 5 years	SYD	5,400	\$	0.75	\$ 4,100	•
Surface Treatments - 10 years	SYD	5,400	\$	2	\$ 10,800	
Mill and Resurface - 15 years	SYD	5,400	\$	8	\$ 43,200	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	2,800	\$ 520,800	88%
Sidewalk	950	\$ 47,500	30%

\$ 568,300

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. North side of roadway to the East and West of town boundary completed by others
- 9. Excludes roadway improvement costs
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along 19. this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

W 500 N

From 2695 ft left of N 600 W to 3174 ft right of N 600 W

	L	OW PRIORITY				
	UNIT	QUANTITY	UN	IIT COST	TOTAL	
Separated path	FT	3,800	\$	186	\$ 706,800	
Sidewalk (5' wide)	FT	3,800	\$	50	\$ 190,000	
ADA ramps:						
ramp	SYD	36	\$	212	\$ 7,700	
detectable warning	SYD	8	\$	145	\$ 1,200	
remove & replace curb	LFT	80	\$	40	\$ 3,200	
piano key crosswalk	LFT	158	\$	14	\$ 2,300	
ROW costs	SQFT	207,000	\$	1	\$ 207,000	
		Cons	truct	ion Cost:	\$ 1,118,200	
	Sur	veying & engi	neer	ing (20%)	\$ 223,700	\$ 1,341,900
	Sur	veying & engi	neer	ing (12%)	\$ 134,200	\$ 1,252,400
Restorative Seal - 5 years	SYD	6,400	\$	0.75	\$ 4,800	
Surface Treatments - 10 years	SYD	6,400	\$	2	\$ 12,800	
Mill and Resurface - 15 years	SYD	6,400	\$	8	\$ 51,200	

Potential developer responsibility	Feet	Cost	Percent
Separated Path	1,775	\$ 330,150	47%
Sidewalk	1,800	\$ 90,000	47%

\$ 420,150 Total

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Sidewalks are assumed concrete
- 5. Trails and separate paths pricing includes signage and assumes asphalt
- 6. Trails and separate paths assumed 10' wide
- 7. Piano key crosswalks are assumed 10' wide
- 8. North side of roadway to the East and West of town boundary completed by others
- 9. Excludes roadway improvement costs
- 10. Excludes lighting
- 11. Sidewalk pricing excludes signage
- 12. Excludes trash cans/benches/street trees
- 13. Excludes easements and drive aprons for trail/sidewalk crossings
- 14. All new trail, sidewalk, and separate path
- 15. Surveying & engineering is 20% of construction cost if federally funded
- 16. Surveying & engineering is 12% of construction cost if locally funded
- 17. See "ROW widths" spreadsheet for ROW cost calculations
- 18. "Linear Feet" is the total length of undeveloped property along this corridor.
- "Cost" is the estimated total to install paths/sidewalks on "undeveloped" property along 19. this corridor (based on the percent figure in the next column).
- 20. "Percent" is the percent of this corridor classified as "undeveloped."

Detailed Cost Breakdown - Greenways

North Fork Dry Branch/Schulz

Between N 700 W/Carroll Rd and E 96th St/1000 N

NO	NORTH FORK DRY BRANCH GREENWAY*									
	UNIT	QUANTITY	IU	NIT COST		TOTAL				
Trail	FT	18,900	\$	186	\$	3,515,400				
Trail centerline marking	FT	18,900			\$	-				
Linear grading	LFT	18,900	\$	50	\$	945,000				
Bridge, trail type, steel	SQFT	600	\$	150	\$	90,000				
ADA ramps:					\$	-				
ramp	SYD	90	\$	212	\$	19,100				
detectable warning	SYD	20	\$	145	\$	2,900				
remove & replace curb	LFT	200	\$	40	\$	8,000				
piano key crosswalk	LFT	186	\$	14	\$	2,700				
		Cons	truc	tion Cost:	\$	4,583,100				
	Sui	rveying & engi	neer	ring (20%)	\$	916,700	\$	5,499,800		
	Sui	rveying & engi	neer	ring (12%)	\$	550,000	\$	5,133,100		
Restorative Seal - 5 years	SYD	21,000	\$	0.75	\$	15,800				
Surface Treatments - 10 years	SYD	21,000	\$	2	\$	42,000				
Mill and Resurface - 15 years	SYD	21,000	\$	8	\$	168,000				

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Trails pricing includes signage and assumes asphalt
- 5. Trails assumed 10' wide
- 6. Piano key crosswalks proposed at every roadway crossing and are assumed 10' wide
- 7. Excludes roadway improvement costs
- 8. Excludes lighting
- 9. Excludes trash cans/benches/street trees
- 10. Excludes easements and drive aprons for trail crossings
- 11 All new trail
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- 15. 1 stream crossing included in cost estimate

Town Center - Champion Lake (Old Town)

Between W Broadway and N 600 W

OLD TOW	'N GREEI	NWAY (south	of r	railroad tra	cks)	*	
	UNIT	QUANTITY	U	NIT COST		TOTAL	
Trail	FT	10,500	\$	186	\$	1,953,000	
Trail centerline marking	FT	10,500	\$	186	\$	1,953,000	
Linear grading	LFT	10,500	\$	50	\$	525,000	
ADA ramps:							
ramp	SYD	90	\$	212	\$	19,100	
detectable warning	SYD	20	\$	145	\$	2,900	
remove & replace curb	LFT	200	\$	40	\$	8,000	
piano key crosswalk	LFT	115	\$	14	\$	1,700	
		Cons	stru	ction Cost:	\$	4,462,700	
	Sur	veying & engi	nee	ering (20%)	\$	892,600	\$ 5,355,300
	Sur	veying & engi	nee	ering (12%)	\$	535,600	\$ 4,998,300
Restorative Seal - 5 years	SYD	11,700	\$	0.75	\$	8,800	
Surface Treatments - 10 years	SYD	11,700	\$	2	\$	23,400	
Mill and Resurface - 15 years	SYD	11,700	\$	8	\$	93,600	

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp 4. Trails pricing includes signage and assumes asphalt
- 5 Trails assumed 10' wide
- 6. Piano key crosswalks proposed at every roadway crossing and are assumed 10' wide
- Excludes roadway improvement costs
- 8. Excludes lighting
- 9. Excludes trash cans/benches/street trees
- 10. Excludes easements and drive aprons for trail crossings
- 11. All new trail
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- 15. Assume greenway starts south of railroad.

^{*} Old Town Greenway calculations above begin south of the railroad tracks. North of the railraod tracks is an additional 1,500 liner feet to reach W 800 N.

OLD TOWN GREENWAY (north of railroad tracks)								
	UNIT	QUANTITY	UNIT COST		TOTAL			
Trail	FT	1,500	\$	186	\$	279,000		
Trail centerline marking	FT	1,500	\$	186	\$	279,000		
Linear grading	LFT	1,500	\$	50	\$	75,000		
ADA ramps:								
ramp	SYD	90	\$	212	\$	19,100		
detectable warning	SYD	-	\$	145	\$	-		
remove & replace curb	LFT	200	\$	40	\$	8,000		
piano key crosswalk	LFT	-	\$	14	\$	-		
		Cons	truc	ction Cost:	\$	660,100		
	Sur	veying & engi	nee	ring (20%)	\$	132,100	\$	792,200
	ring (12%)	\$	79,300	\$	739,400			
Restorative Seal - 5 years	SYD	11,667	\$	0.75	\$	8,800		
Surface Treatments - 10 years	SYD	11,667	\$	2	\$	23,400		
Mill and Resurface - 15 years	SYD	11,667	\$	8	\$	93,400		

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Trails pricing includes signage and assumes asphalt
- 5. Trails assumed 10' wide
- 6. Piano key crosswalk not needed for this section as W 800 N improvements will be used.
- 7. Excludes improvement costs at W 800 N to access separated path along this corridor.
- 8. Excludes lighting
- 9. Excludes trash cans/benches/street trees
- 10. Excludes easements and drive aprons for trail crossings
- 11. All new trail.
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- 15. This calculation is only for the section north of the railroad tracks to W 800 N.
- 16. Excludes cost to cross railroad to access south portion of Old Town greenway

^{*}Note that the North Fork of Dry Branch is within the Schulz Creek stream path until reaching N 500 W, where it takes a route to reach E 96th Street.

Dry Branch

Between N 700 W/Carroll Rd and N 500 W

	DRY BRANCH GREENWAY							
	UNIT	QUANTITY	UN	IIT COST	TOTAL			
Trail	FT	14,100	\$	186	\$	2,622,600		
Trail centerline marking	FT	14,100			\$	-		
Linear grading	LFT	14,100	\$	50	\$	705,000		
Bridge, trail type, steel	SQFT	1,300	\$	150	\$	195,000		
ADA ramps:								
ramp	SYD	72	\$	212	\$	15,300		
detectable warning	SYD	16	\$	145	\$	2,400		
remove & replace curb	LFT	160	\$	40	\$	6,400		
piano key crosswalk	LFT	131	\$	14	\$	1,900		
		1						
		Cons	truct	tion Cost:	\$	3,548,600		
	Sur	rveying & engi	neer	ing (20%)	\$	709,800	\$ 4,258,400	
	ing (12%)	\$	425,900	\$ 3,974,500				
Restorative Seal - 5 years	SYD	15,700	\$	0.75	\$	11,800		
Surface Treatments - 10 years	SYD	15,700	\$	2	\$	31,400		
Mill and Resurface - 15 years	SYD	15,700	\$	8	\$	125,600		

Assumptions:

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Trails pricing includes signage and assumes asphalt
- 5. Trails assumed 10' wide
- 6. Piano key crosswalks proposed at every roadway crossing and are assumed 10' wide
- 7. Excludes roadway improvement costs
- 8. Excludes lighting
- 9. Excludes trash cans/benches/street trees
- 10. Excludes easements and drive aprons for trail crossings
- 11. All new trail
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- 15. 1 stream crossing included in cost estimate
- 16. Excludes cost of trail crossing rail road tracks

Brookside-Vail

Between Carroll Road and Tanglewood Circle

BROOKSIDE - VALE GREENWAY								
	UNIT	QUANTITY	UNIT COST			TOTAL		
Trail	FT	3,900	\$	186	\$	725,400		
Trail centerline marking	FT	3,900	\$	187	\$	729,300		
Linear grading	LFT	3,900	\$	50	\$	195,000		
ADA ramps:								
ramp	SYD	36	\$	212	\$	7,700		
detectable warning	SYD	8	\$	145	\$	1,200		
remove & replace curb	LFT	80	\$	40	\$	3,200		
piano key crosswalk	LFT	57	\$	14	\$	800		
		Cons	tru	ction Cost:	\$	1,662,600		
	Sur	veying & engi	nee	ring (20%)	\$	332,600	\$	1,995,200
	Sur	veying & engi	nee	\$	199,600	\$	1,862,200	
Restorative Seal - 5 years	SYD	4,300	\$	0.75	\$	3,300		
Surface Treatments - 10 years	SYD	4,300	\$	2	\$	8,600		
Mill and Resurface - 15 years	SYD	4,300	\$	8	\$	34,400		

- 1. 9 SYD per ADA ramp
- 2. 2 SYD detectable warning per ADA ramp
- 3. 20 LFT curb remove and replace per ADA ramp
- 4. Trails pricing includes signage and assumes asphalt
- 5. Trails assumed 10' wide
- 6. Piano key crosswalks proposed at every roadway crossing and are assumed 10' wide
- 7. Excludes roadway improvement costs
- 8. Excludes lighting
- 9. Excludes trash cans/benches/street trees
- 10. Excludes easements and drive aprons for trail crossings
- 11. All new trail
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs

Detailed Cost Breakdown - Greenways

BEE CAMP CREEK GREENWAY							
			L	UNIT			
	UNIT	QUANTITY	C	OST		TOTAL	
Trail	FT	6,000	\$	186	\$1	,116,000	
Trail centerline marking	FT	6,000	\$	187	\$1	,122,000	
Linear grading	LFT	6,000	\$	50	\$	300,000	
ADA ramps:							
ramp	SYD	18	\$	212	\$	3,900	
detectable warning	SYD	2	\$	145	\$	300	
remove & replace curb	LFT	2	\$	40	\$	100	
piano key crosswalk	LFT	-	\$	14	\$	-	
		Constru	ctior	Cost:	\$2	,542,300	
	Surveyin	g & enginee	ering	(20%)	\$	508,500	\$3,050,800
	Surveyin	g & enginee	\$	305,100	\$2,847,400		
Restorative Seal - 5 years	SYD	6,700	\$	0.75	\$	5,100	
Surface Treatments - 10 years	SYD	6,700	\$	2	\$	13,400	
Mill and Resurface - 15 years	SYD	6,700	\$	8	\$	53,600	

GEIST GREENWAY - SOUTH EXTENSION to US 36*								
			ι	JNIT				
	UNIT	QUANTITY	(COST		TOTAL		
Trail	FT	3,600	\$	186	\$	669,600		
Trail cente	FT	3,600	\$	187	\$	673,200		
Linear grad	LFT	3,600	\$	50	\$	180,000		
ADA ramps	5:							
ramp	SYD	36	\$	212	\$	7,700		
detecta	SYD	8	\$	145	\$	1,200		
remove	LFT	80	\$	40	\$	3,200		
piano ke	LFT	57	\$	14	\$	800		
		Constru	ctio	n Cost:	\$1	1,535,700		
Surveying & engineering (20%) \$ 307,				307,200	\$1,842,900			
Surveying & engineering (12%)				g (12%)	\$	184,300	\$ 1,720,000	
Restorativ	SYD	4,000	\$	0.75	\$	3,000		
Surface Tr	SYD	4,000	\$	2	\$	8,000		
Mill and R	SYD	4,000	\$	8	\$	32,000		

Assumptions:

- 9 SYD per ADA ramp
- 2 SYD detectable warning per ADA ramp
- 20 LFT curb remove and replace per ADA ramp
- Trail pricing includes signage and assumes asphalt
- Trails assumed 10' wide
- Piano key crosswalks not needed for this greenway as bikes/peds can use crossing at N 500 W/96th Street intersection
- Excludes roadway improvement costs
- Excludes lighting
- Excludes trash cans/benches/street trees
- Excludes easements and drive aprons for trail crossings
- 11. All new trail.
- Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- Greenway trail could utilize a storm culvert to cross under E. 96th Street; these costs are not included. 15.
- Costs do not include an ADA-accessible way for bike/ped users to get from greenway trail to E 96th Street path.

Assumptions:

- 9 SYD per ADA ramp
- 2 SYD detectable warning per ADA ramp 2
- 20 LFT curb remove and replace per ADA ramp
- Trails pricing includes signage and assumes asphalt 4.
- Trails assumed 10' wide
- Piano key crosswalks proposed at every roadway crossing and are assumed 10' wide
- Excludes roadway improvement costs
- 8. **Excludes lighting**
- 9 Excludes trash cans/benches/street trees
- Excludes easements and drive aprons for trail crossings
- 11. All new trail
- Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- 14. Greenways are within a pedestrian and/or floodplain easement; therefore, no acquisition costs
- 15 Trail path adjusted at south trailhead to avoid farmhouse at US 36.
- * The north section of the Geist greenway trail is part of the North Fork of Dry Branch greenway trail. The south section is shown as an "optional greenway" (page 96) and is calculated separately here.

INTER-URBAN GREENWAY								
			ι	UNIT		<u> </u>		
	UNIT	QUANTITY	(OST		TOTAL		
Trail	FT	4,500	\$	186	\$	837,000		
Trail cente	FT	4,500	\$	187	\$	841,500		
Linear grad	LFT	4,500	\$	50	\$	225,000		
ADA ramps	5:							
ramp	SYD	18	\$	212	\$	3,900		
detecta	SYD	2	\$	145	\$	300		
remove	LFT	2	\$	40	\$	100		
piano ke	LFT	-	\$	14	\$	-		
		Constru	ctio	n Cost:	\$1	L,907,800		
	ig & engine	ering	g (20%)	\$	381,600	\$2,289,400		
Surveying & eng			ering	g (12%)	\$	229,000	\$ 2,136,800	
						•		
Restorativ	SYD	5,000	\$	0.75	\$	3,800		
Surface Tr	SYD	5,000	\$	2	\$	10,000		
Mill and R	SYD	5,000	\$	8	\$	40,000		

- 1. 9 SYD per ADA ramp
- 2 SYD detectable warning per ADA ramp
- 20 LFT curb remove and replace per ADA ramp
- Trail pricing includes signage and assumes asphalt
- Trails assumed 10' wide
- Piano key crosswalks not needed for this greenway as bikes/peds connect to other planned trails
- Excludes roadway improvement costs
- **Excludes lighting** 8.
- 9. Excludes trash cans/benches/street trees
- Excludes easements and drive aprons for trail crossings 10.
- 11.
- 12. Surveying & engineering is 20% of construction cost if federally funded
- 13. Surveying & engineering is 12% of construction cost if locally funded
- Greenways are not within a pedestrian and/or floodplain easement.
- 15. Easement acquisition costs from property owners not included
- 16. Planned route follows property lines to minimize crossing private property, resulting in a longer trail path.
- Planned route intersects with Old Town Greenway, north of railroad tracks.

UTILITY COORDINATION LOG

CONTACT INFORMATION

PHONE:

UTILITY COMPANY: ATT-D

DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: Spindler

ADDRESS: 240 N. Meridian Street

Indianapolis

317-265-3050 PHONE:

CELL: CELL: EMAIL: ms4822@att.com **EMAIL:**

UTILITY SCHEDULE INFORMATION

RESPONSE DATE: DATE SENT: BY: **DELIVERY METHOD:**

DESIGNATED CONTACT:

ADDRESS:

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: Conflict Analysis Request:

Executed Reimbursement Agreement: Recommend Work Plan Approval: INDOT Approval of Work Plan: NTP/Permit Letter sent to utility: Relocation Start Date:

Relocation Complete Date: UTILITY CONTACT LOG

Request for Work Plans:

FROM: TO: DATE: NATURE OF DISCUSSION

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-96th Street from Carroll Road to Georgia Street -ØR W 900 N from Carroll Road to CR N 500 W

Richy Condre Matt Spindler 10/14/2019 -ØR W 800 N from Carroll Road to CR N 500 W

> -ØR W 750 N from Carroll Road to CR N 500 W -ØR W 700 N from CR N 600 W to CR N 500 W -ØR W 650 N from Carroll Road to CR N 600 W -ØR W 600 N from Carroll Road to CR N 500 W

-ØR W 500 N from McCordsville to Boundary to McCordsville Town Boundary

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Automated email message the request GIS Information email has been delivered. Matt Spindler Richy Condre 10/14/2019

ADDRESS:

CONTACT INFORMATION

UTILITY COMPANY: ATT-LD

DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: Kenneth Colwell DESIGNATED CONTACT:

ADDRESS: 1010 N. Saint Mary Stre

San Antonio TX

 PHONE:
 630-383-9249
 PHONE:

 CELL:
 CELL:

 EMAIL:
 kc1298@att.com
 EMAIL:

UTILITY SCHEDULE INFORMATION

DATE SENT: BY: DELIVERY METHOD: RESPONSE DATE:

Initial Notice of Project:
Verification Notice Request:
Verification of Property Interest:
Conflict Analysis Request:
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SD M 000 N frame Carrell Dank to CD N 500 M

Richy Condre 10/14/2019 -®R W 900 N from Carroll Road to CR N 500 W

-©R W 800 N from Carroll Road to CR N 500 W -©R W 750 N from Carroll Road to CR N 500 W -©R W 700 N from CR N 600 W to CR N 500 W -©R W 650 N from Carroll Road to CR N 600 W

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Kenneth Colwell Richy Condre 10/14/2019

Kenneth Colwell Richy Condre 10/14/2019 I am out of the office returning Tuesday, October 15th

Automated email message the request GIS Information email has been delivered.

I am out of the office returning Tuesday, October 15th. Responses will be delayed.

Hello I was contracted to investigate any involvement with the bike path project you are working on, and AT&T-T fiber optic cables. I looked through the roads and areas in question from the drawing you

Luke Dillow Richy Condre 10/29/2019

and AT&T-I fiber optic cables. I looked through the roads and areas in question from the drawing you sent and will say AT&T-T has a fiber on the CSX railroad property that parallels Hwy67 on the north side of the highway. After looking at what you guys plan to do I believe we will be NIV. I will have a letter stating so sent from our office asap so you have something in writing from us. Thanks Richard,

feel free to contact me if you need anything else from me.

Alissa Overmeyer Richy Condre 10/29/2019 Attached is ATT-L NIV letter for the project listed above.

PHONE:

Utilities Coordination

UTILITY COORDINATION LOG

CONTACT INFORMATION

UTILITY COMPANY: Brighthouse-Spectrum DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: Hinrichs **DESIGNATED CONTACT:** Ronald

ADDRESS: 3030 Roosevelt Avenue

Indianapolis

PHONE:

CELL: CELL: ronald.hinrichs@charter.com EMAIL: EMAIL:

UTILITY SCHEDULE INFORMATION

BY: **DELIVERY METHOD:** RESPONSE DATE: **DATE SENT:**

ADDRESS:

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: **Conflict Analysis Request:**

Request for Work Plans:

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Richy Condre

Ronald Hinrichs

FROM: TO: DATE: NATURE OF DISCUSSION

10/14/2019

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-ER W 800 N from Carroll Road to CR N 500 W

-PR W 750 N from Carroll Road to CR N 500 W

-ØR W 700 N from CR N 600 W to CR N 500 W -ØR W 650 N from Carroll Road to CR N 600 W

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Ronald Hinrichs 10/14/2019 Automated email message the request GIS Information email has been delivered. Richy Condre

Ronald Hinrichs 10/14/2019 Automated email message the request GIS Information email has been read. Richy Condre



October 29, 2019

Richy Condre
Engineer
Crawford, Murphy & Tilly
8790 Purdue Road
Indianapolis, IN. 46268
Email: rccondre@cmtengr.com

Re: Town of McCordsville Bike and Pedestrian Plan – IN-19-136

Dear Ms. Robbins,

AT&T has contracted the services of JMC Engineers & Associates, Inc. as a professional consultant to AT&T's long distance network for reviewing projects such as the one above.

In reviewing our cable-mapping program, we find that <u>AT&T Long Distance</u> is **not involved** with your project as it is engineered. If there are any changes, please notify us.

If you have any questions or concerns, please contact me at 317-361-0594.

Sincerely,

Lake Dillow

Luke Dillow Project Engineer Idillow@jmceainc.com

Cc: Kenneth Colwell, Sr. Tech Project Management, AT&T Corp.
John Overmyer, Operations Manager, JMC Engineers & Associates, Inc.

Fax: (574) 842-8836

Phone: (574) 842-8830

PHONE:

Utilities Coordination

UTILITY COORDINATION LOG

CONTACT INFORMATION

UTILITY COMPANY: CEG-Gas DESCRIPTION OF UTILITY COMPANY: Gas

AUTHORIZED REPRESENTATIVE: **DESIGNATED CONTACT:** Miller **Utility Coordinator** Rich

ADDRESS: 2150 Dr. Martin Luther **ADDRESS:** 2150 Dr. Martin Lut

> Indianapolis Indianapolis IN IN

PHONE: 317-927-4684

CELL: CELL:

EMAIL: utilitycoordination@citizensenergy.com EMAIL: rmiller@citizensenergygroup.com

UTILITY SCHEDULE INFORMATION

BY: **DELIVERY METHOD:** RESPONSE DATE: **DATE SENT:**

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: **Conflict Analysis Request:** Request for Work Plans:

Executed Reimbursement Agreement: Recommend Work Plan Approval: INDOT Approval of Work Plan: NTP/Permit Letter sent to utility: Relocation Start Date:

Relocation Complete Date: **UTILITY CONTACT LOG**

FROM: TO: DATE: NATURE OF DISCUSSION

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-ER W 900 N from Carroll Road to CR N 500 W Richy Condre **Utility Coordination** 10/14/2019

-ER W 800 N from Carroll Road to CR N 500 W

-PR W 750 N from Carroll Road to CR N 500 W

-ØR W 700 N from CR N 600 W to CR N 500 W

-ØR W 650 N from Carroll Road to CR N 600 W

-ØR W 600 N from Carroll Road to CR N 500 W

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Automated email message the request GIS Information email has been delivered. **Utility Coordination** Richy Condre 10/14/2019

Automated email message the request GIS Information email has been read. 10/14/2019 **Utility Coordination** Richy Condre

Attached is Citizens' response for this utility coordination request. **Utility Coordination** Richy Condre 11/11/2019

CONTACT INFORMATION

PHONE:

UTILITY COMPANY: **CEG-Sanitary** DESCRIPTION OF UTILITY COMPANY: Sanitary Sewer

DESIGNATED CONTACT: AUTHORIZED REPRESENTATIVE: **Utility Coordinator** David Clark

ADDRESS: 2150 Dr. Martin Luther ADDRESS: 2015 Dr. Martin Lut

Indianapolis Indianapolis

317-429-3993 PHONE:

CELL: CELL:

EMAIL: utilitycoordination@citizensenergy.com EMAIL: dclark@citizensenergygroup.com

UTILITY SCHEDULE INFORMATION

DATE SENT: BY: **DELIVERY METHOD:** RESPONSE DATE:

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: Conflict Analysis Request: Request for Work Plans:

Executed Reimbursement Agreement: Recommend Work Plan Approval: INDOT Approval of Work Plan: NTP/Permit Letter sent to utility:

Relocation Start Date: Relocation Complete Date: **UTILITY CONTACT LOG**

FROM: NATURE OF DISCUSSION TO: DATF:

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Richy Condre 10/14/2019 -ØR W 800 N from Carroll Road to CR N 500 W

> -ØR W 750 N from Carroll Road to CR N 500 W -ØR W 700 N from CR N 600 W to CR N 500 W -ØR W 650 N from Carroll Road to CR N 600 W

-ØR W 600 N from Carroll Road to CR N 500 W

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Utility Coodination Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

Utility Coordination Richy Condre 10/14/2019 Automated email message the request GIS Information email has been read.

Utility Coordination Richy Condre 11/11/2019 Attached is Citizens' response for this utility coordination request.

APPENDIX

Utilities Coordination



2150 Dr. Martin Luther King Jr. St. | Indianapolis, IN | 46202

 ${\bf Citizens Energy Group.com}$

November 11, 2019

Richy Condre CMT 8790 Purdue Road Indianapolis, IN 46268

Re: McCordsville Bike and Pedestrian Plan

Dear Richy Condre,

In response your request, to project [Owner Project No. not provided] within 30 days after receiving the initial notice, representatives from Citizens have reviewed the information for the McCordsville Bike and Pedestrian Plan Utility Coordination Request and have noted the following responses about our existing facilities.

Owner:	
Owner's Project No.:	[Owner Project No. not provided]
DES No.:	[DES no. not provided]
General Description:	Bike and Pedestrian Plan Study
Geographical Limits:	CR N 700 W: 65th- 96th St
	SR 67: Carroll Rd-CR N 500 W
	CR N 500 W: Carroll Rd-96th St
	96th St: Carroll Rd-Georgia St
	CR W 900 N, CR W 800 N, CR W 750 N, CR W 700 N, CR W 650 N and CR W 600 N:
	Carroll Rd-CR N 500 W
	CR W 500 N: between Town Boundaries
Gas Response:	For Information Only
Thermal Response:	Outside of service territory
Sanitary Response:	Outside of service territory
Water Distribution Response:	Possible conflict with utilities in area
Water Plant Response:	No conflict with utilities in area
Westfield Water Response:	Outside of service territory

Attached is our facility location information and/or utility work plans as requested. If any potential conflicts are noted in the table above, please contact directly the specific utility representative for additional coordination efforts. Contact information for Citizens utility representatives is:

Citizens Representative	Phone	Email
Gordon Rundle or	(317) 693-8854	grundle@citizensenergygroup.com
Mark Vogler (Thermal)	(317) 927-4632	mvogler@citizensEnergygroup.com
Rich Miller (Gas)	(317) 927-4684	rmiller@citizensenergygroup.com
David Clark (Sanitary or Westfield Water)	(317) 429-3993	dclark@citizenseneregygroup.com
Scott Ritter (Water Distribution)	(317) 927-4434	sritter@citizensenergygroup.com
Dustin Reed (Water Plant)	(317) 264-7712	DReed@citizensenergygroup.com

For ALL utility coordination requests on other projects, please email UtilityCoordination@CitizensEnergyGroup.com.

Sincerely,

Citizens Energy Utility Coordination Team

cc: 7554File

Citizens BU Reps

CONTACT INFORMATION

UTILITY COMPANY: CEG-Water
DESCRIPTION OF UTILITY COMPANY: Water

AUTHORIZED REPRESENTATIVE: Utility Coordinator DESIGNATED CONTACT: Scott Rictter

ADDRESS: 2150 Dr. Martin Luther ADDRESS: 2016 Dr. Martin Lut

Indianapolis IN Indianapolis I

PHONE: PHONE: 317-927-44334

CELL: CELL:

EMAIL: utilitycoordination@citizensenergy.com EMAIL: sritter@citizensenergygroup.com

UTILITY SCHEDULE INFORMATION

DATE SENT: BY: DELIVERY METHOD: RESPONSE DATE:

Initial Notice of Project:
Verification Notice Request:
Verification of Property Interest:
Conflict Analysis Request:
Request for Work Plans:

Executed Reimbursement Agreement: Recommend Work Plan Approval: INDOT Approval of Work Plan: NTP/Permit Letter sent to utility:

Relocation Start Date: Relocation Complete Date:

UTILITY CONTACT LOG

FROM: TO: DATE: NATURE OF DISCUSSION

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-OR W 800 N from Carroll Road to CR N 500 W -OR W 750 N from Carroll Road to CR N 500 W

-ØR W 700 N from CR N 600 W to CR N 500 W

-ØR W 650 N from Carroll Road to CR N 600 W

-ØR W 600 N from Carroll Road to CR N 500 W

-ER W 500 N from McCordsville to Boundary to McCordsville Town Boundary

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Utility Coordination Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

Utility Coordination Richy Condre 10/14/2019 Automated email message the request GIS Information email has been read.

Utility Coordination Richy Condre 11/11/2019 Attached is Citizens' response for this utility coordination request.

Citizens Energy Group (Citizens) has reviewed the initial notice provided on October 14, 2019, with Citizens GIS data to determine what known Citizens-owned water mains exist in the proposed project

area.

Based on the work items identified in the initial notice, there are Citizens-owned water facilities within the project limits. This determination is based on the October 14, 2019, initial notice provided. No field

Scott Ritter Richy Condre 11/8/2019 check was condu

- Citizens has existing 6, 8, 12, 16, and 20-inch PVC, PE, and DI water mains (installation dates range from 1991 to 2016), and associated hydrants and valves within the project limits identified.

- Portions of the watermains are within Citizens easements.

- GIS map exports, intersection cards, construction records, and easement documents are attached. If you have any questions about the above-mentioned project, please contact Scott Ritter, at 317-927-

4434 or email at sritter@CitizensEnergyGroup.com at your convenience.



MEMO

UNDERGROUND ENGINEERING & CONSTRUCTION

From:	Scott Ritter
То:	Richy Condre, Crawford, Murphy & Tilly
Date:	11/8/19
	Citizens Energy Group Water Initial Response
RE:	Project Name: Town of McCordsville Bike and Pedestrian Plan
	Project Owner: Town of McCordsville, IN

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Sincerely,

Scott Ritter

Underground Engineering and Construction, Water Distribution Citizens Energy Group

CONTACT INFORMATION

UTILITY COMPANY: Comcast

DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: William Morris DESIGNATED CONTACT:

ADDRESS: ADDRESS:

PHONE: PHONE:
CELL: CELL:
EMAIL: Morris.William@comcast.com EMAIL:

UTILITY SCHEDULE INFORMATION

DATE SENT: BY: DELIVERY METHOD: RESPONSE DATE:

Initial Notice of Project:
Verification Notice Request:
Verification of Property Interest:
Conflict Analysis Request:
Request for Work Plans:

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Richy Condre 10/14/2019 10/14/2019 -®R W 800 N from Carroll Road to CR N 500 W

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William Morris Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

William Morris Richy Condre 10/29/2019 This is asking a lot. I will have to break this up into multiple emails.

UTILITY COORDINATION LOG

CONTACT INFORMATION

UTILITY COMPANY: Indianapolis - City of

DESCRIPTION OF UTILITY COMPANY: Utility

AUTHORIZED REPRESENTATIVE: Mendoza **DESIGNATED CONTACT:** Theresa

ADDRESS: 1200 S Madison Ave, Su

> Indianapolis IN

PHONE: 317-327-2302 PHONE: CELL: CELL:

EMAIL: utilitycoordination@indy.gov EMAIL:

UTILITY SCHEDULE INFORMATION

RESPONSE DATE: DATE SENT: BY: **DELIVERY METHOD:**

ADDRESS:

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: **Conflict Analysis Request:** Request for Work Plans:

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FROM: TO: DATF: NATURE OF DISCUSSION

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Automated email message the request GIS Information email has been delivered. Richy Condre Theresa Medoza 10/14/2019

Automated email message the request GIS Information email has been read Theresa Medoza Richy Condre 10/14/2019

This project is in Hancock County. The areas where it intersects with Marion County is in the City of Theresa Medoza Richy Condre 10/22/2019

Lawrence which has their own storm and sanitary utility. So there are no conflicts with any City of

Indianapolis facilities. Thank you!

Richy Condre Theresa Mendoza 10/22/2019 Thank you, I assumed that was the case; however, I did want to be sure.

ADDRESS:

CONTACT INFORMATION

UTILITY COMPANY: Fisher-Town of

DESCRIPTION OF UTILITY COMPANY: Utility

AUTHORIZED REPRESENTATIVE: Heiking **DESIGNATED CONTACT:** Jeff

ADDRESS: 1 Municipal Drive

Fishers

PHONE: 3175953160 PHONE: CELL: CELL: EMAIL: heikingi@fishers.in.us EMAIL:

UTILITY SCHEDULE INFORMATION

DATE SENT: BY: **DELIVERY METHOD:** RESPONSE DATE:

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Richy Condre

FROM: DATF: TO: **NATURE OF DISCUSSION**

10/14/2019

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-ØR W 700 N from CR N 600 W to CR N 500 W

-ØR W 650 N from Carroll Road to CR N 600 W

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CONTACT INFORMATION

UTILITY COMPANY: Indianapolis Power & Light

DESCRIPTION OF UTILITY COMPANY: Electric

AUTHORIZED REPRESENTATIVE: **DESIGNATED CONTACT:** Snodgrass lanet

ADDRESS: 1230 W. Morris Street

Indianapolis

PHONE: 317-261-8617 PHONE: CELL: CELL:

EMAIL: janet.snodgrass@aes.com

UTILITY SCHEDULE INFORMATION

RESPONSE DATE: DATE SENT: BY: **DELIVERY METHOD:**

UTILITY COORDINATION LOG

ADDRESS:

EMAIL:

Initial Notice of Project: Verification Notice Request: Verification of Property Interest: Conflict Analysis Request: Request for Work Plans:

Executed Reimbursement Agreement: Recommend Work Plan Approval: INDOT Approval of Work Plan: NTP/Permit Letter sent to utility: Relocation Start Date: Relocation Complete Date:

UTILITY CONTACT LOG

Richy Condre

FROM: TO: DATE: NATURE OF DISCUSSION

CMT, along with Context Design, LLC, is performing a Bike and Pedestrian Plan Study for the Town of McCordsville, as part of this study CMT needs to determine the utilities and facility type within the

corridors being discussed.

Here is a listing of the corridors currently being reviewed: -Darroll Road (CR N 700 W), from 65th to 96th Street -W. Broadway (SR 67) from Carroll Road to CR N 500 W

-ØR N 500 W from Carroll Road to 96th Street -96th Street from Carroll Road to Georgia Street

-ØR W 900 N from Carroll Road to CR N 500 W 10/14/2019

-ØR W 800 N from Carroll Road to CR N 500 W -ØR W 750 N from Carroll Road to CR N 500 W -ØR W 700 N from CR N 600 W to CR N 500 W -ØR W 650 N from Carroll Road to CR N 600 W

-ØR W 600 N from Carroll Road to CR N 500 W

-ØR W 500 N from McCordsville to Boundary to McCordsville Town Boundary

CMT requests any GIS information that can be shared to determine a conceptual analysis for the study

of the impact to utilities. Attached is a map showing the area of interest for the study. If you have any questions or need any additional information, please contact this office. Automated email message the request GIS Information email has been delivered.

Janet Snodgrass Richy Condre

Janet Snodgrass

ADDRESS:

CONTACT INFORMATION

UTILITY COMPANY: Lawrence - City of

DESCRIPTION OF UTILITY COMPANY: Utility

AUTHORIZED REPRESENTATIVE: Andrew Hall DESIGNATED CONTACT:

ADDRESS: 9201 Harrison Park Ct.

Indianapolis IN

PHONE: 317-524-6301 PHONE:
CELL: CELL:
EMAIL: ahall@cityoflawrence.org EMAIL:

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-BM. Broadway (SR 67) from Carroll Road to CR N 500 -®R N 500 W from Carroll Road to 96th Street

Richy Condre 10/14/2019 -®R W 900 N from Carroll Road to CR N 500 W

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-96th Street from Carroll Road to Georgia Street

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Andrew Hall Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

UTILITY COORDINATION LOG

CONTACT INFORMATION

UTILITY COMPANY: McCordsville Public Works

DESCRIPTION OF UTILITY COMPANY: Utility

AUTHORIZED REPRESENTATIVE: Crider **DESIGNATED CONTACT:** Ron

ADDRESS: 5759 W. Broadway

Ron Crider

McCordsville

PHONE: 317-335-3493 PHONE: CELL: CELL:

EMAIL: mrcousins@hrtc.net EMAIL:

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Richy Condre

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10/14/2019

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-MR W 800 N from Carroll Road to CR N 500 W

-OR W 750 N from Carroll Road to CR N 500 W

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Automated email message the request GIS Information email has been delivered. Ron Crider Richy Condre 10/14/2019

CONTACT INFORMATION

UTILITY COMPANY: MCI-Verizon Business DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: **DESIGNATED CONTACT:** Dean **Boyers**

ADDRESS: 400 Internation Pkway ADDRESS:

> Ricahrdson TX

PHONE: 469-886-4238 PHONE: CELL: CELL: EMAIL: investigations@verizon.com EMAIL:

UTILITY SCHEDULE INFORMATION

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-ØR W 800 N from Carroll Road to CR N 500 W -ØR W 750 N from Carroll Road to CR N 500 W -ER W 700 N from CR N 600 W to CR N 500 W -ER W 650 N from Carroll Road to CR N 600 W -ØR W 600 N from Carroll Road to CR N 500 W

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Dean Boyers Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

Verizonbusiness (MCI) has NO facilities at ANY of the locations. PLEASE DO NOT REPLY TO THIS

MESSAGE. THIS E-MAIL DOES NOT ACCEPT MESSAGES. John Bachelder Richy Condre 10/17/2019

PLEASE SEND INQUIRIES TO Investigations@verizon.com

UTILITY COORDINATION LOG

CONTACT INFORMATION

UTILITY COMPANY: Nine Star Connect

DESCRIPTION OF UTILITY COMPANY: Telecommunication

AUTHORIZED REPRESENTATIVE: Greg Plisinski

ADDRESS: 2243 E. Main Street

Greenfield IN

 PHONE:
 317-223-2090
 PHONE:

 CELL:
 CELL:

 EMAIL:
 gplisinski@ninestarconnect.com
 EMAIL:

UTILITY SCHEDULE INFORMATION

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UTILITY CONTACT LOG

Richy Condre

Greg

Plisinski

FROM: TO: DATE: NATURE OF DISCUSSION

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10/14/2019 -@R W 800 N from Carroll Road to CR N 500 W

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10/14/2019

CONTACT INFORMATION

UTILITY COMPANY: Vectren Energy

DESCRIPTION OF UTILITY COMPANY: Gas

AUTHORIZED REPRESENTATIVE: Eastham **DESIGNATED CONTACT:** Jon

ADDRESS: 1800 W. 26th Street **ADDRESS:**

Muncie

PHONE: 765-287-2119 PHONE: CELL: CELL: EMAIL: johnathon.eastman@centerpointenergy. EMAIL:

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Richy Condre

FROM: NATURE OF DISCUSSION TO: DATF:

10/14/2019

Jon Eastham

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Jon Eastham Richy Condre 10/14/2019 Automated email message the request GIS Information email has been delivered.

See the attached map for reference only. Let me know if you need anything else at this time. Thanks. Jon Eastham Richy Condre 10/15/2019

UTILITY COORDINATION LOG

CONTACT INFORMATION

PHONE:

CELL:

EMAIL:

UTILITY COMPANY: Western Hancock Utilities

DESCRIPTION OF UTILITY COMPANY: Utility

DESIGNATED CONTACT: AUTHORIZED REPRESENTATIVE: Shields James Kieran Tansy

ADDRESS: 5750 Castle Pkway N. D **ADDRESS:**

JEShields@aguaamerica.com

5750 Castle Pkway

317-577-1390

Indianapolis Indianapolis IN PHONE:

CELL:

317-577-1390

EMAIL: KFTansy@aquaamerica.com

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Richy Condre

James Shields

FROM: TO: DATE: NATURE OF DISCUSSION

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Automated email message the request GIS Information email has been read James Shields Richy Condre 10/15/2019

Please find the sanitary sewer map GIS for Aqua Indiana. Should you have any further request, please Jim Shields Richy Condre 10/15/2019

send directly to my attention.

Richy Condre Jim Shields 10/17/2019 Thank you for your response. Is there a legend to know what the different colors represent?

Jim Shields Emailed a legend for their facilities GIS Richy Condre 10/18/2019

10/14/2019

10/14/2019

James Shields

Richy Condre