

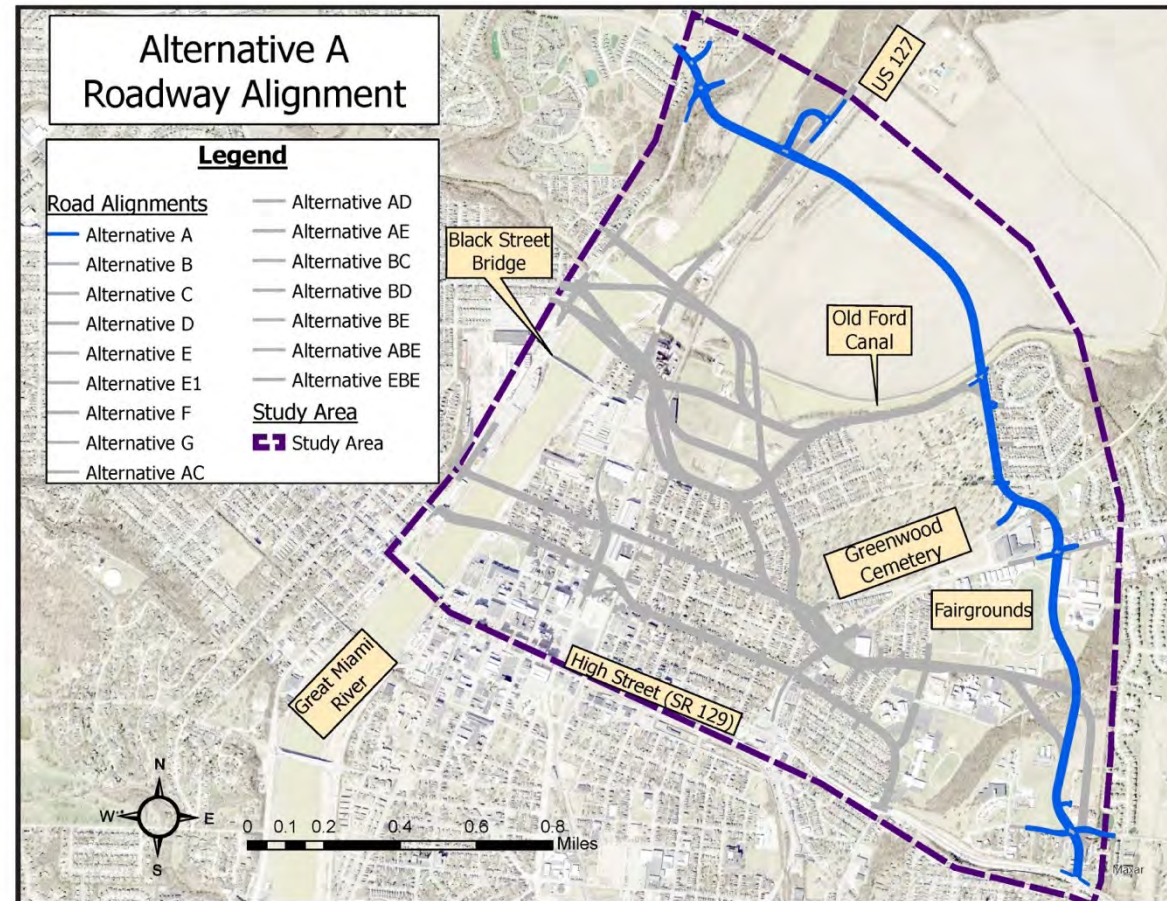


North Hamilton Crossing

PRELIMINARY PROJECT ALTERNATIVES

(Exhibited at the January 2023 and Virtual Public Open Houses)

ALTERNATIVES A & B

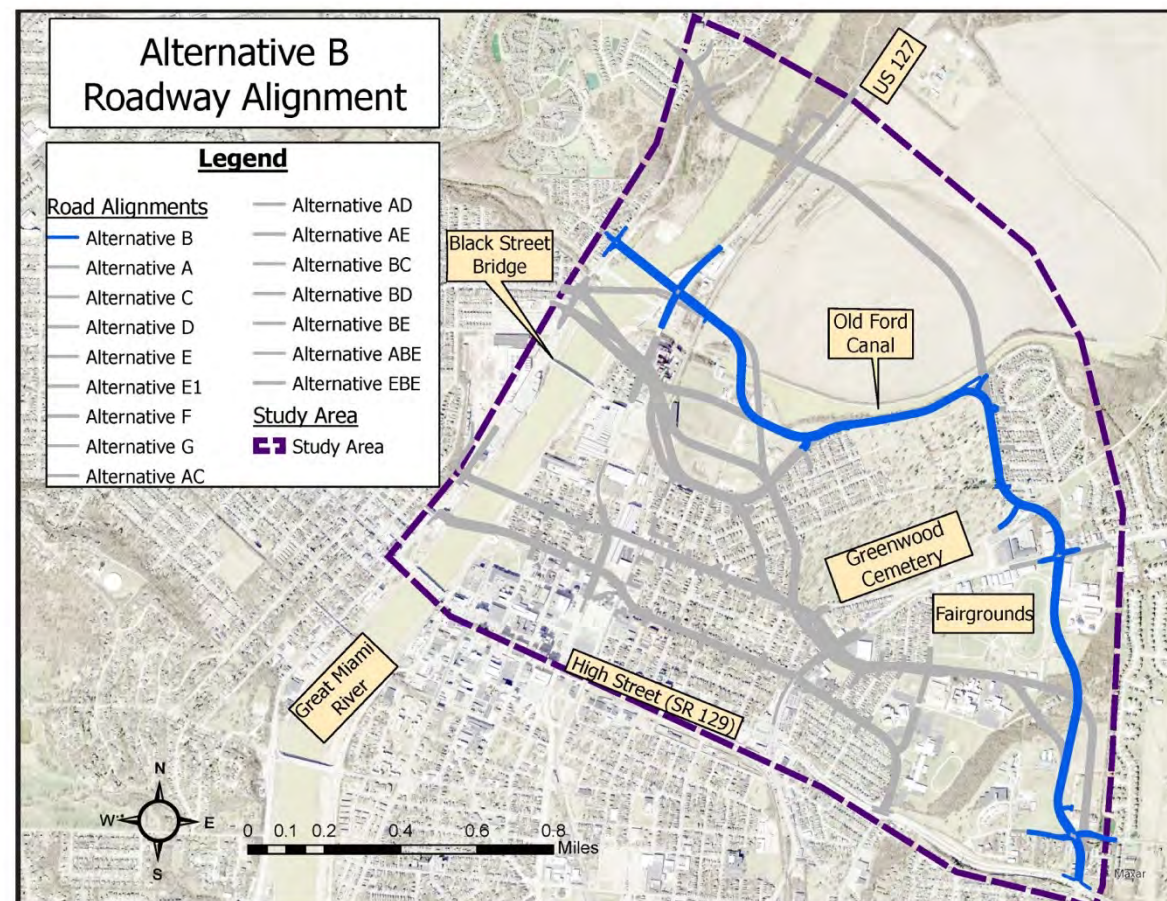


PROS

- Addresses project's Primary and Secondary Needs
- Western end point at NW Washington Blvd. provides connectivity further west

CONS

- No direct connection to US 127; will require an access road and a signal at US 127
- Alternative with high right of way impact (85-95 acres)
- Bisects Combs Park
- Alternative with greatest impact to 100-Year floodplain (20-30 acres)
- Alternative with the greatest impact to farmlands (35-45 acres)
- No reduction in AM/PM SR 129 traffic volumes & travel time
- 3rd most costly alternative



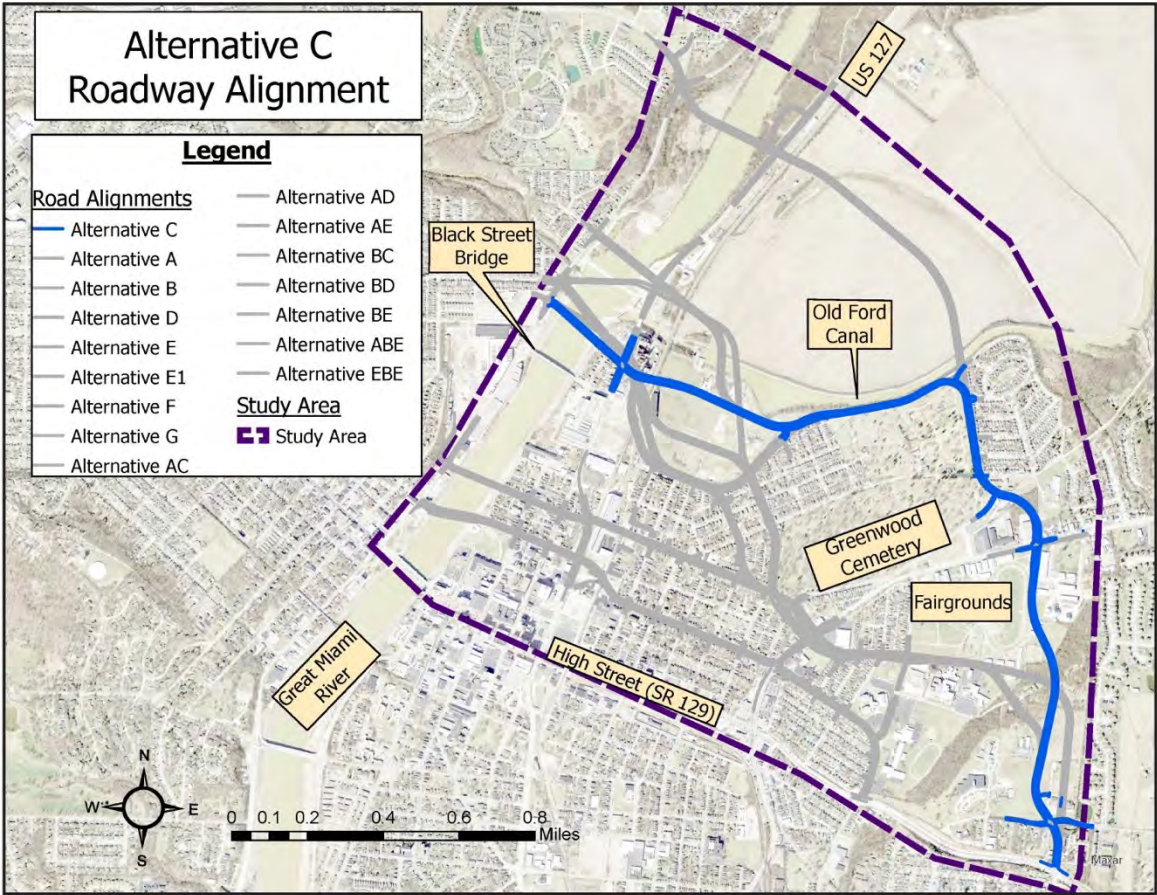
PROS

- Addresses project's Primary and Secondary Needs

CONS

- End point at North B Street ties to Lagonda Avenue with no direct connectivity further west
- High right-of-way requirements (50-60 acres)
- Bisects Combs Park and LJ Smith Park
- Impacts farmlands (20-30 acres)
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Regulated Materials concerns
- Minimal reduction in AM/PM SR 129 traffic volumes & travel time

ALTERNATIVES C & D

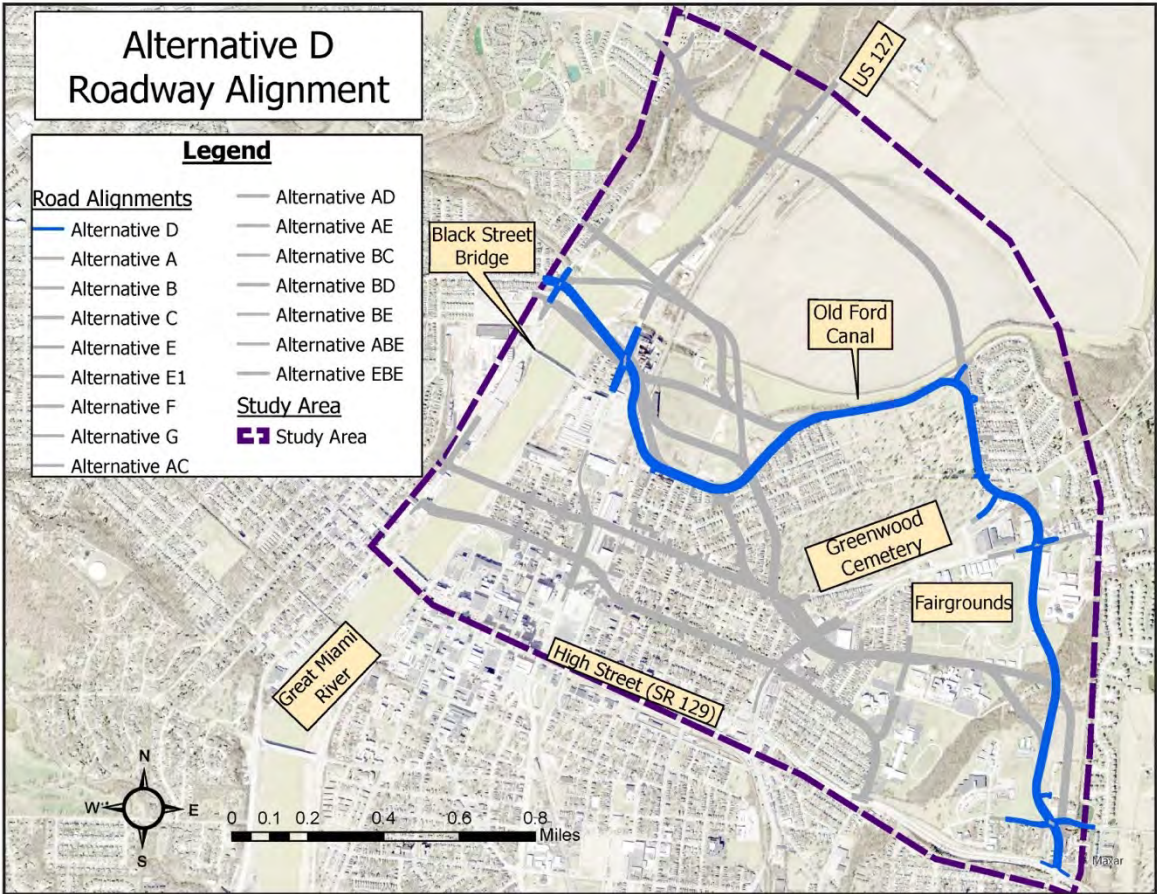


PROS

- Addresses project's Primary Needs
- End point at North B Street ties into Rhea Avenue providing connectivity further west
- 2nd least costly alternative
- Reduces SR 129 AM/PM traffic volumes & travel time

CONS

- Does not support economic development
- Bisects LJ Smith Park
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations
- Regulated Materials concerns



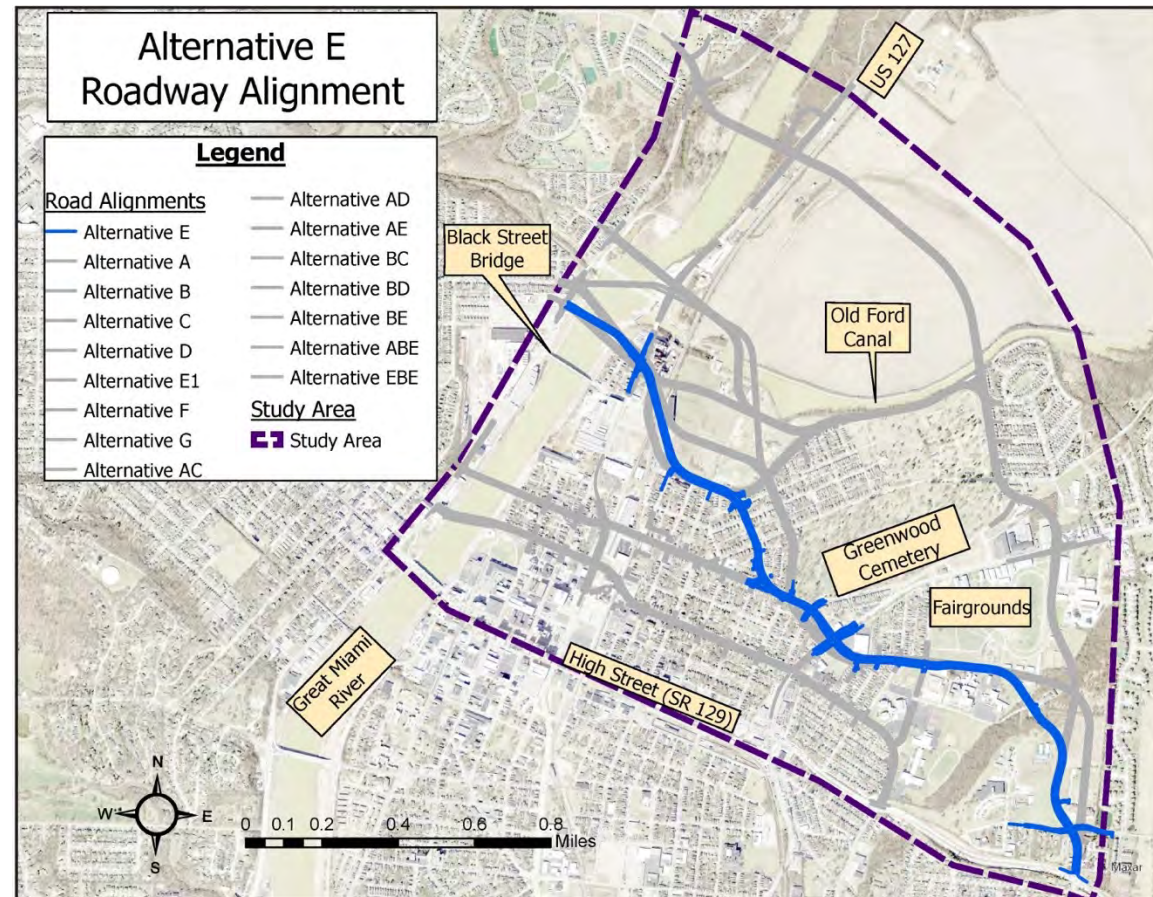
PROS

- Addresses project's Primary Needs
- End point at North B Street ties into Gordon Avenue, providing connectivity further west
- Reduces SR 129 AM/PM traffic volumes & travel time

CONS

- Does not support economic development
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations

ALTERNATIVES E & E1

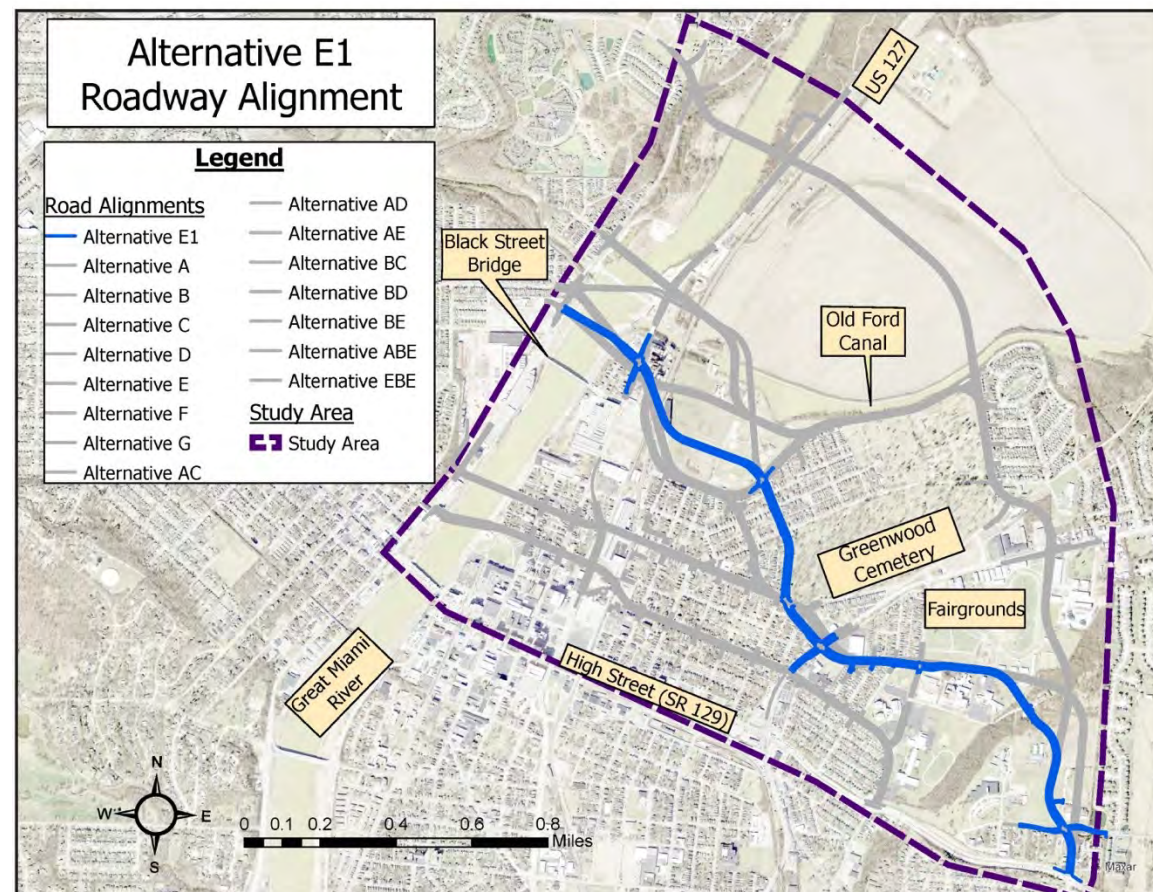


PROS

- Addresses project's Primary Needs
- End point at North B Street ties into relocated Rhea Avenue providing connectivity further west
- Significantly reduces SR 129 AM/PM traffic volumes & travel time
- Is tied with Alternative E1 for the 2nd shortest travel time (5 min. 44 sec)

CONS

- Does not support economic development
- Potential impacts to traditionally underserved populations
- High right-of-way impacts (45-55 relocations; 25-35 acres)



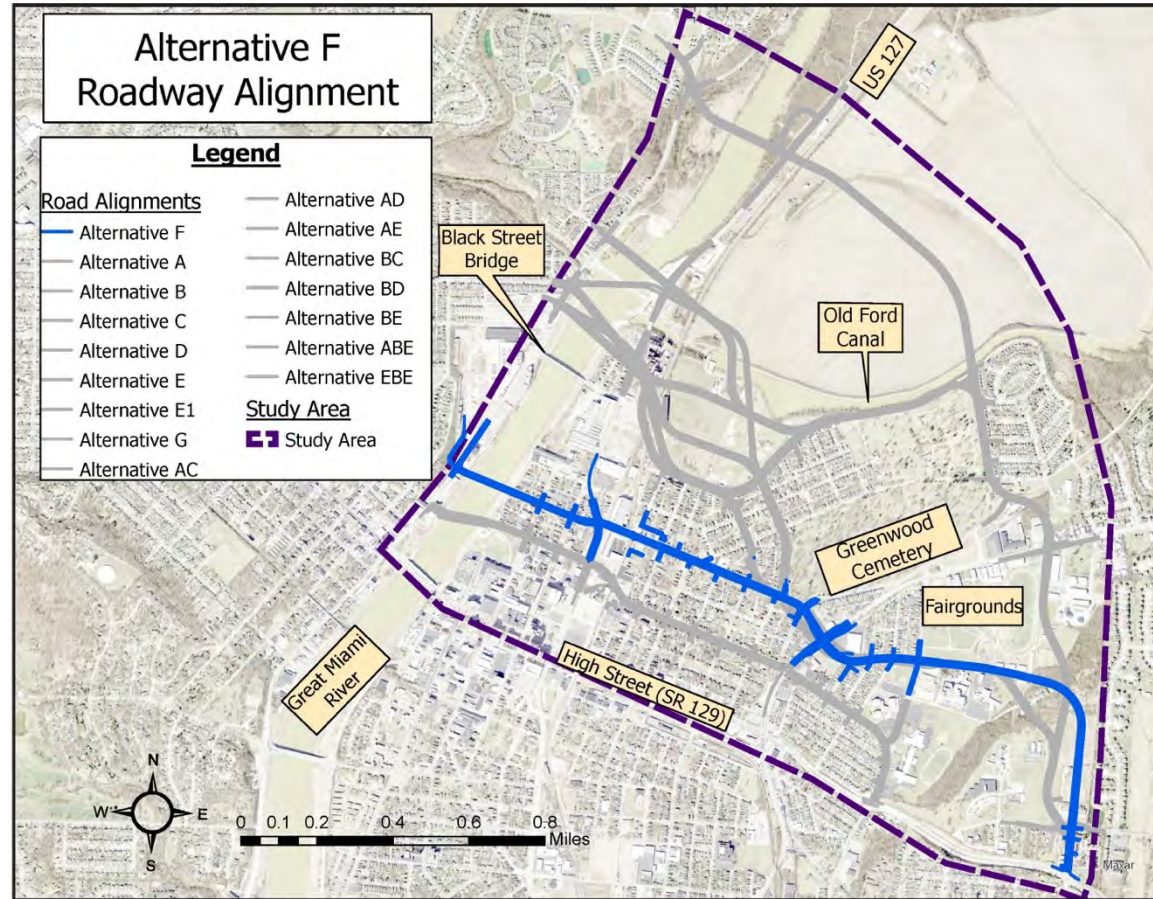
PROS

- Addresses project's Primary Needs
- End point at North B Street ties into Rhea Avenue providing connectivity further west
- Significantly reduces of SR 129 AM/PM traffic volumes & travel time
- Is tied with Alternative E for the 2nd shortest travel time (5 min. 44 sec)

CONS

- Does not support economic development
- Potential impacts to traditionally underserved populations
- Bisects LJ Smith Park
- High right-of-way impacts (55-65) relocations; 20-30 acres)
- Regulated Materials concerns

ALTERNATIVES F & G

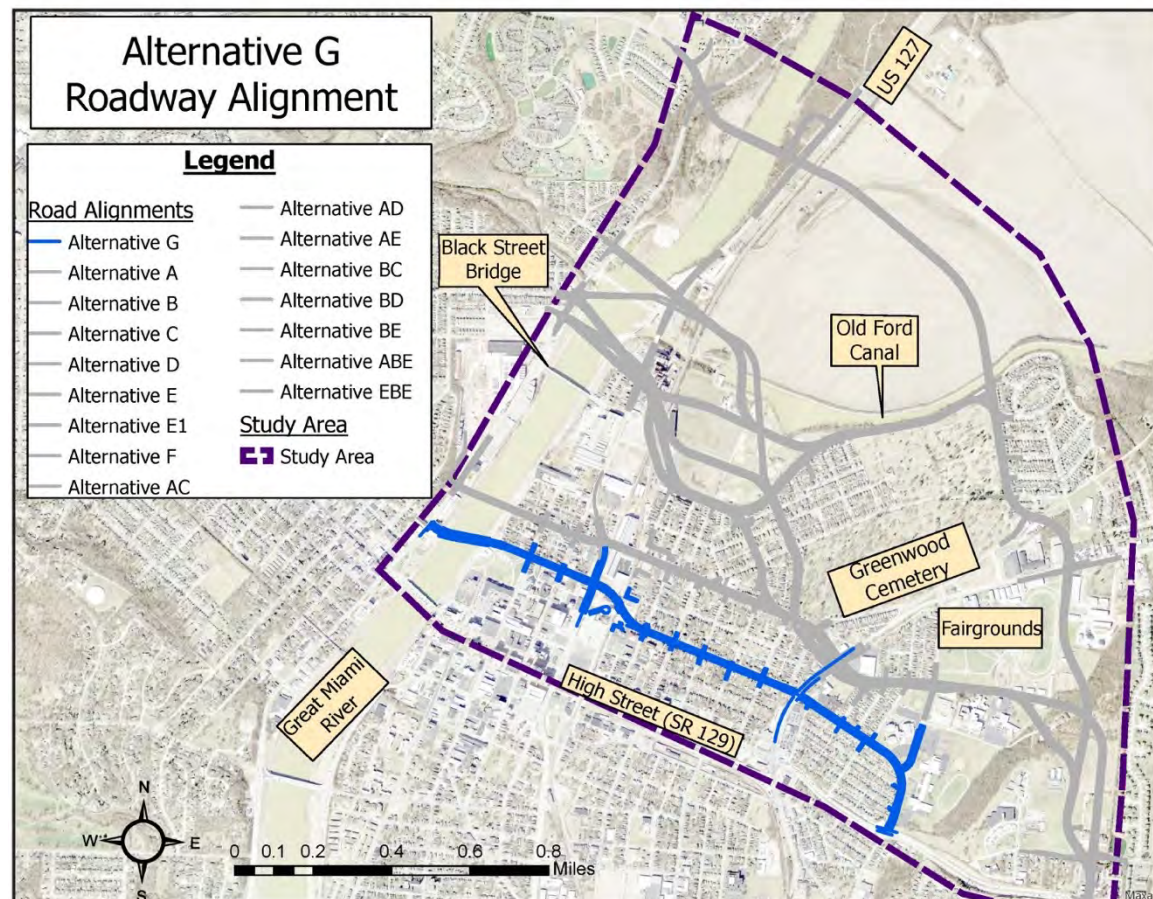


PROS

- Addresses project's Primary Needs
- 2nd greatest reduction of SR 129 AM/PM traffic volumes and travel time
- Alternative with 3rd shortest travel time (5 min 45 sec)

CONS

- End point at relocated entrance of Spooky Nook; no connectivity further west
- Impacts German Village Historic District
- Potential impacts to traditionally underserved populations
- Requires long-term closure of Heaton Street for construction of a railroad underpass
- Highest right-of-way impacts (65-75 relocations; 25-35 acres)



PROS

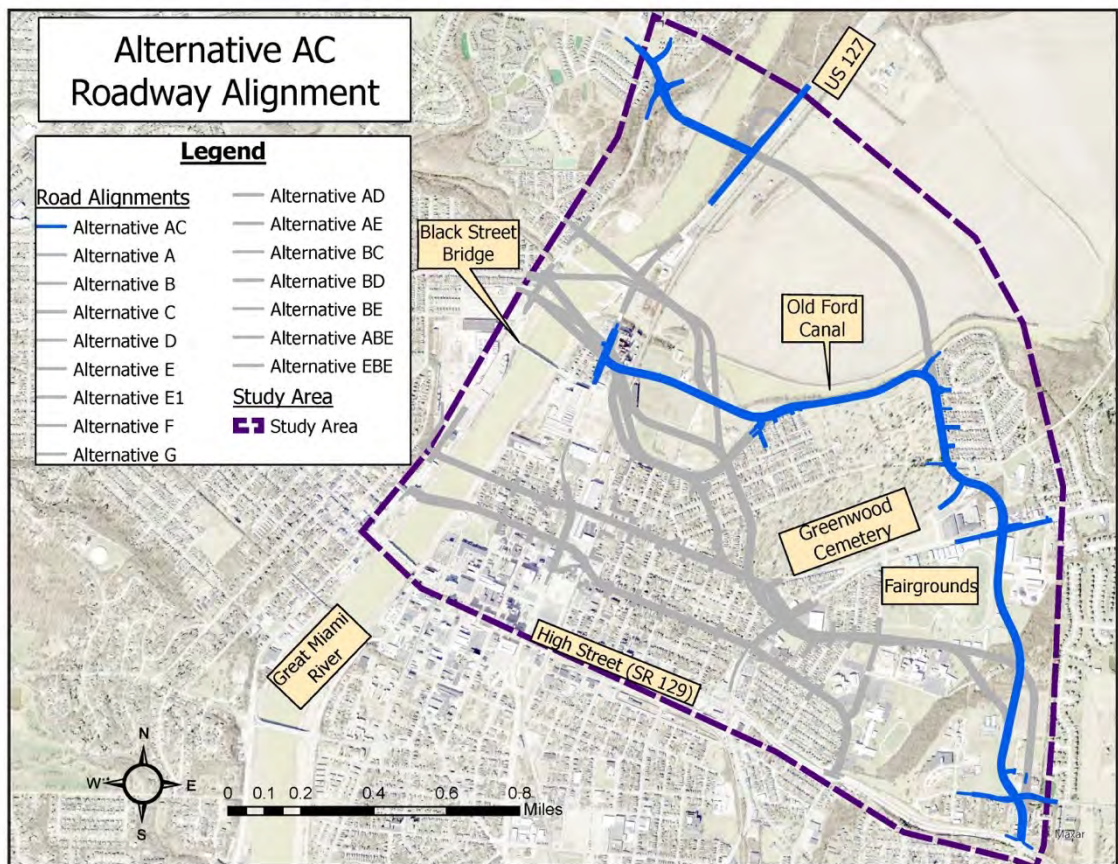
- Addresses project's Primary Needs
- Ties to Wayne Avenue, providing connectivity further west
- Greatest reduction of SR 129 AM/PM traffic volumes and travel time
- Alternative with the shortest travel time (5 min 19 sec)
- Least costly alternative (\$68 million to \$88 million)

CONS

- Impacts German Village Historic District and Dayton-Campbell Historic District
- Potential impacts to traditionally underserved populations
- High right-of-way impacts (45-55 relocations, 5-15 acres)
- Requires long-term closure of Dayton Street for construction of a railroad underpass

ALTERNATIVES AC & AD

These alternatives would use existing US 127 to connect the two segments shown.

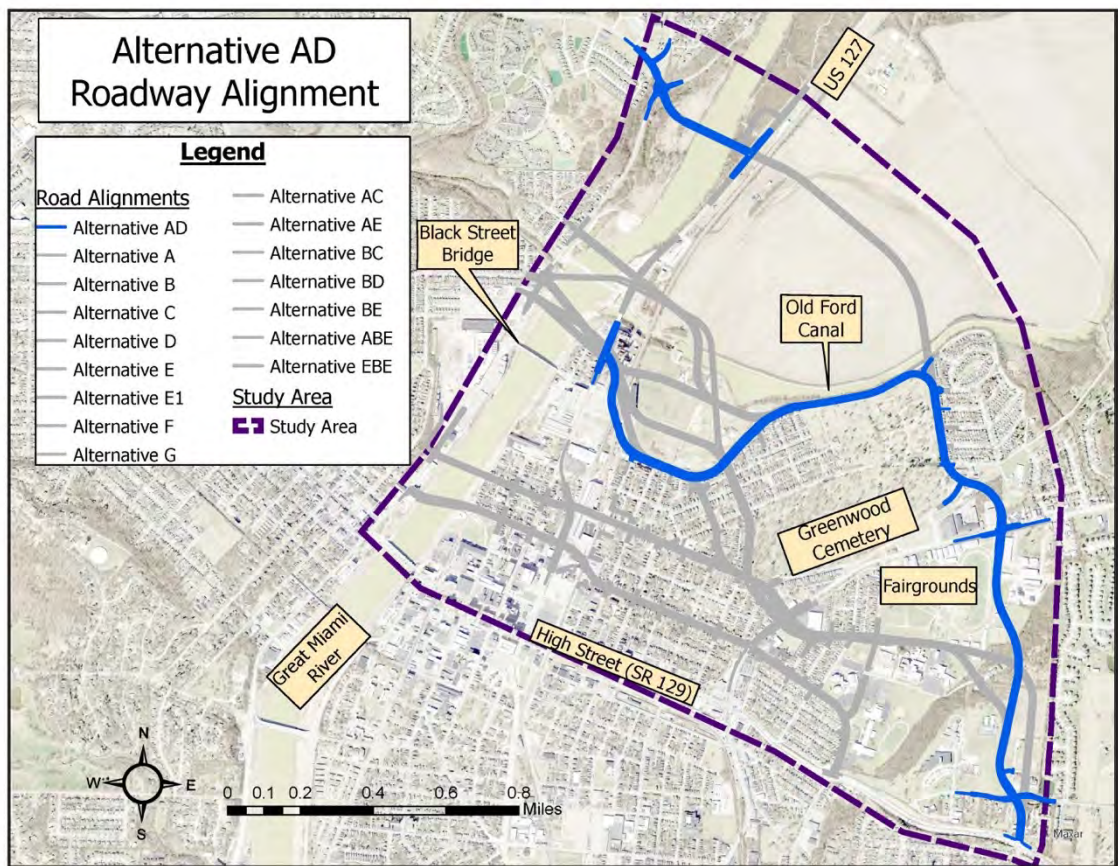


PROS

- Addresses project's Primary Needs
- Western end point at NW Washington Blvd. provides connectivity further west
- 3rd least costly alternative

CONS

- Does not support economic development
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations
- Bisects Combs Park and LJ Smith Park
- Impacts to Greenwood Cemetery (more than 0.5 acres)
- Regulated Materials concerns
- No reduction in AM/PM SR 129 traffic volumes & travel time



PROS

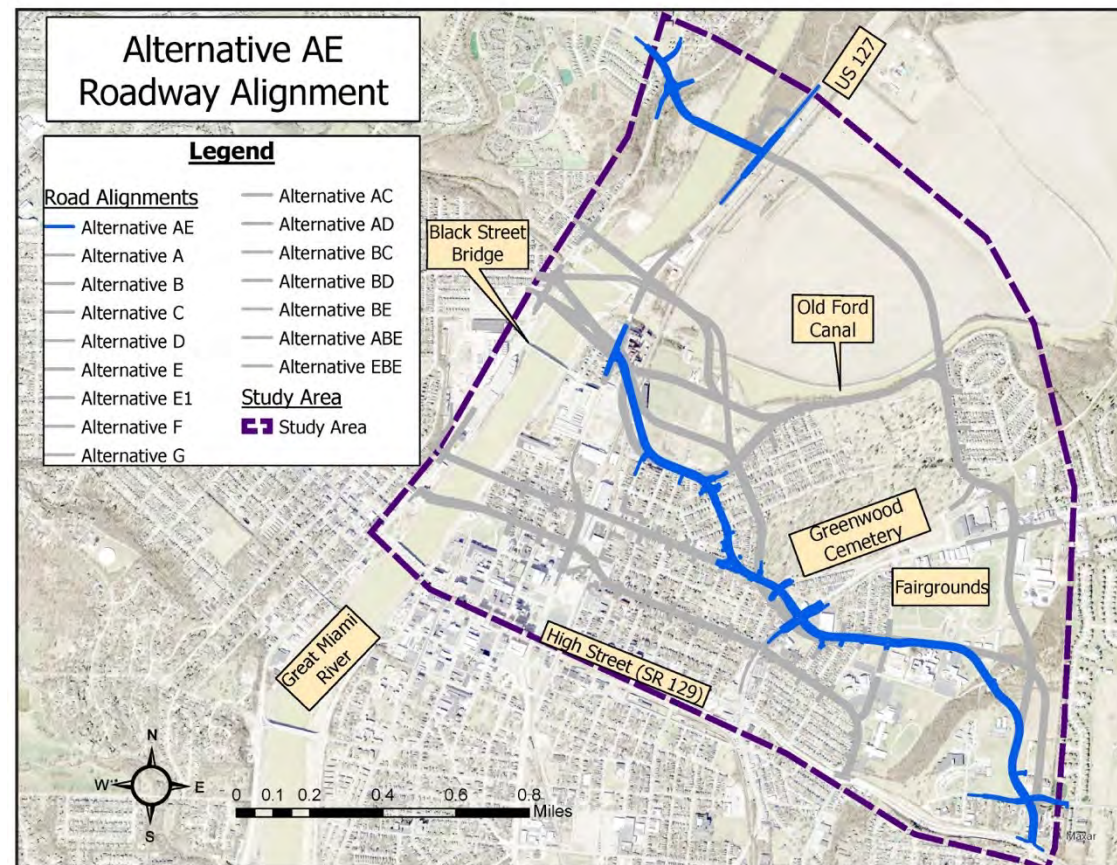
- Addresses project's Primary Needs
- Western end point at NW Washington Blvd. provides connectivity further west

CONS

- Does not support economic development
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations
- Bisects Combs Park
- Impacts Greenwood Cemetery (more than 0.5 acres)
- No reduction in AM/PM SR 129 traffic volumes & travel time

ALTERNATIVES AE & BC

These alternatives would use existing US 127 to connect the two segments shown.

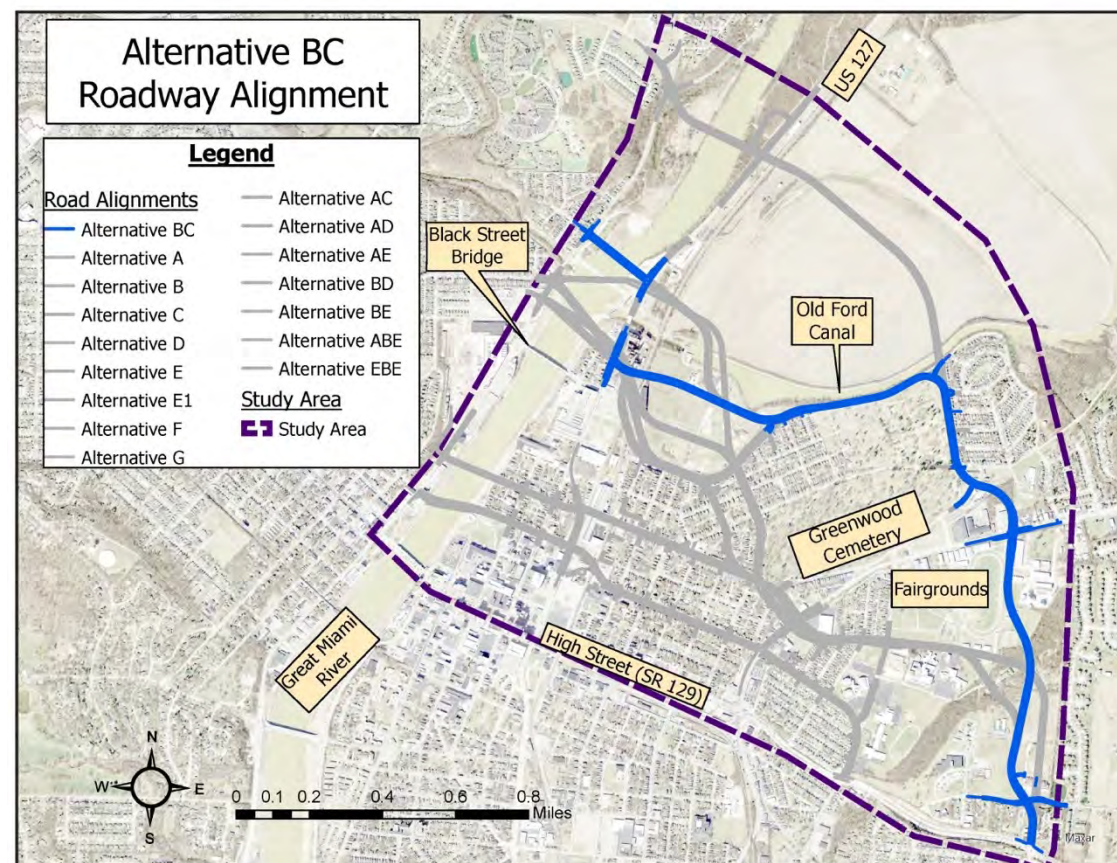


PROS

- Addresses project's Primary Needs
- Western end point at NW Washington Blvd. provides connectivity further west
- Significantly reduces SR 129 AM/PM traffic volumes & travel time

CONS

- Does not support economic development
- Potential impacts to traditionally underserved populations
- Bisects Combs Park
- High right-of-way Impacts (45-55 relocations; 25-35 acres)



PROS

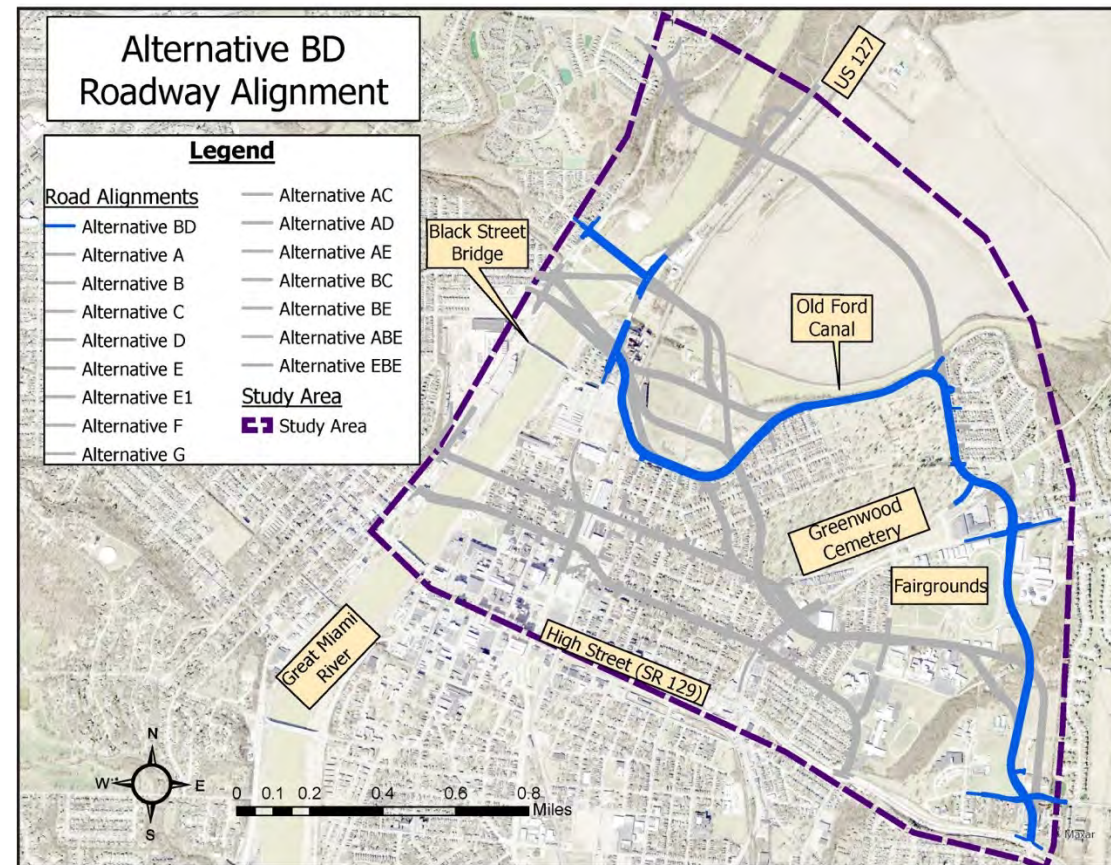
- Addresses project's Primary Needs
- 3rd least costly alternative

CONS

- End point at North B Street ties to Lagonda Avenue which has no direct connectivity to the west
- Does not support economic development
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations
- Bisects Combs Park and LJ Smith Park
- Impacts to Greenwood Cemetery (more than 0.5 acres)
- Regulated Materials concerns
- Minimal reduction in AM/PM SR 129 traffic volumes & travel time

ALTERNATIVES BD & BE

These alternatives would use existing US 127 to connect the two segments shown.

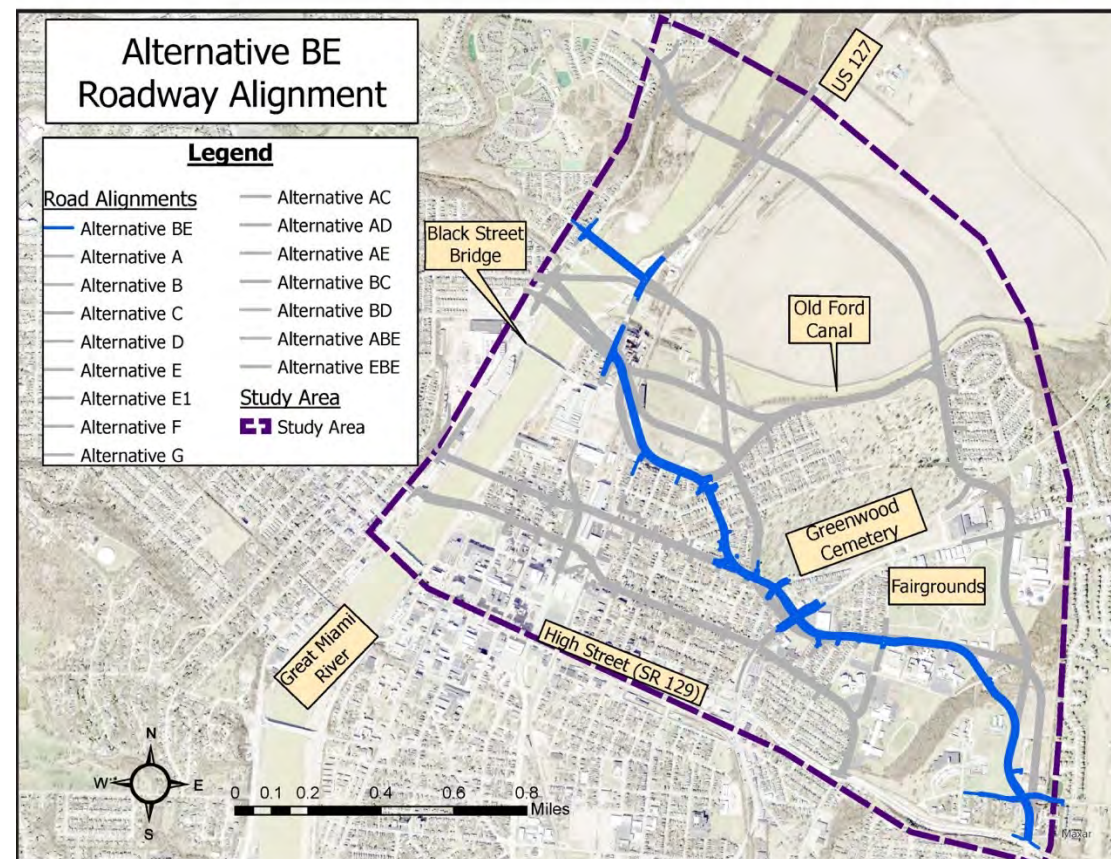


PROS

- Addresses project's Primary Needs

CONS

- End point at North B Street ties to Lagonda Avenue which has no direct connectivity to the west
- Does not support economic development
- Impacts Greenwood Cemetery (more than 0.5 acres)
- Potential impacts to traditionally underserved populations
- Bisects Combs Park
- Impacts Greenwood Cemetery (more than 0.5 acres)
- No reduction in AM/PM SR 129 traffic volumes & travel time



PROS

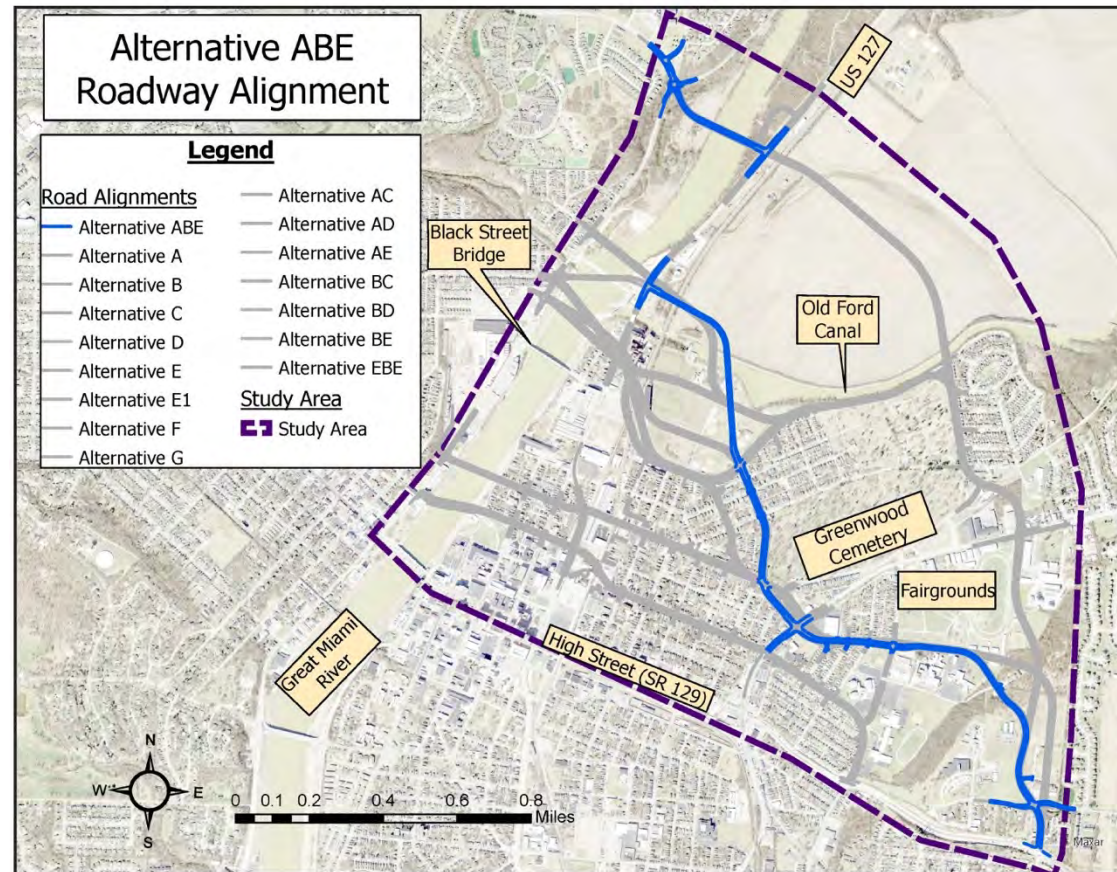
- Addresses project's Primary Needs
- Reduces SR 129 AM/PM traffic volumes & travel time

CONS

- End point at North B Street ties to Lagonda Avenue which has no direct connectivity to the west
- Does not support economic development
- Potential impacts to traditionally underserved populations
- Bisects Combs Park and LJ Smith Park
- High right-of-way Impacts (45-55 relocations; 20-30 acres)

ALTERNATIVES ABE & EBE

Alternative ABE would use existing US 127 to connect the two segments shown.

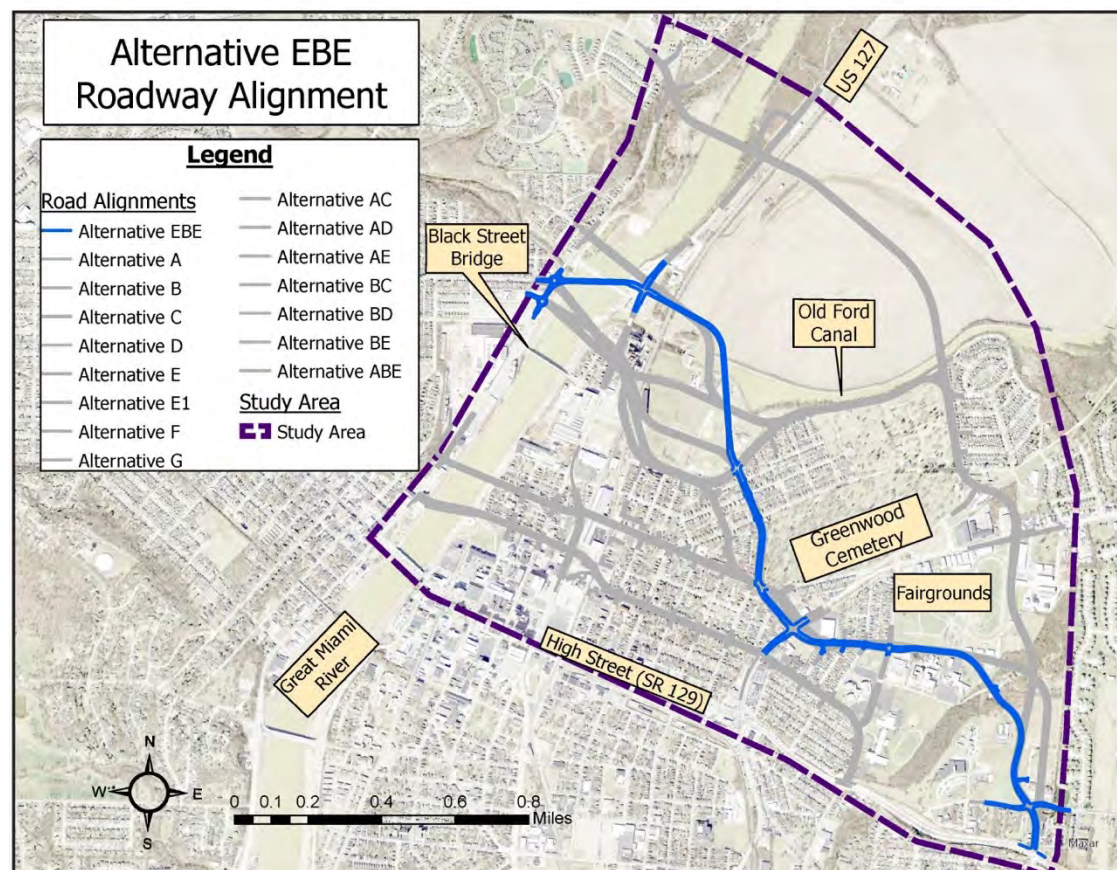


PROS

- Addresses project's Primary and Secondary Needs
- Western end point at NW Washington Blvd. provides connectivity further west
- Reduces SR 129 AM/PM traffic volumes & travel time

CONS

- Potential impacts to traditionally underserved populations
- Bisects Combs Park and LJ Smith Park
- Farmland impacts (20-30 acres)
- High right-of-way impacts (45-65 relocations; 50-60 acres)
- 2nd most costly alternative



PROS

- Addresses project's Primary and Secondary Needs
- Western end point at Gordon Avenue provides connectivity further west
- Significantly reduces SR 129 AM/PM traffic volumes & travel time

CONS

- Potential impacts to traditionally underserved populations
- Bisects LJ Smith Park
- Farmland impacts (20-30 acres)
- High right-of-way impacts (45-65 relocations; 45-55 acres)
- Most costly alternative

Feature/Consideration	DRAFT NORTH HAMILTON CROSSING (NHX) CONCEPTUAL ALTERNATIVES EVALUATION MATRIX (PID 115755)									
	Preliminary Alternatives									
	No Build A Alternative	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative E1	Alternative F	Alternative G	
Improves East-West Connectivity Crossings, Improves Lack of Grade-Separated Railroad Crossings, Improves Mobility/Congestion on Local Road Network, Improves Safety	No	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to Laponda Ave with no direct connectivity further west)	Yes (Ties to relocated Rhea Ave, providing connectivity further west)	Yes (Ties to Gordon Ave, providing connectivity further west)	Yes (Ties to relocated Rhea Ave, providing connectivity further west)	Yes (Ties to relocated Rhea Ave, providing connectivity further west)	Yes (Ties to relocated entrance of Spooky Hook, with no direct connectivity further west)	Yes (Ties to Wayne Ave, providing connectivity further west)	
	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	No	Minimal Improvement	Minimal Improvement	Yes	Yes	Yes	Yes	Yes	Yes	
	No	Minimal Improvement	Minimal Improvement	Yes	Yes	Yes	Yes	Yes	Yes	
	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Purpose and Need - Primary Needs										
Supports Economic Development	No	Yes	Yes	No, Impacts City-identified prime development parcels	No, Impacts City-identified prime development parcels	No, Impacts City-identified prime development parcels	No, Impacts City-identified prime development parcels	Yes	Yes	
Improves Bike/Pedestrian Connectivity	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Improves Multimodal Linkage	No	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	
Cultural Resources										
NRHP-Listed Sites	None	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	German Village, Dayton-Cambell
NRHP-Listed Historic Districts	None	None	None	None	None	None	None	German Village	None	
Section 4(f)(6)(i) Sites										
Section 4(f)(6)(i) Sites	None	Combs Park (bsects), Smith Park (bsects), Butler County Fairgrounds (minor), GMR Recreational Trail (minor)	LJ Smith Park (minor), Butler County Fairgrounds (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	LJ Smith Park (bsects), Butler County Fairgrounds (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	LJ Smith Park (minor), Butler County Fairgrounds (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	LJ Smith Park (bsects), Butler County Fairgrounds (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	LJ Smith Park (bsects), Butler County Fairgrounds (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	Heaton Street Park (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	Marcum Park (minor), Bellline Trail (minor), GMR Recreational Trail (minor)	
	None	2 crossings	2 crossings	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	
	None	1	1	None	None	None	None	None	None	
Ecological Resources										
Great Miami River / Hydraulic Canal Wetlands (not including Open Water features)	None	2 crossings	2 crossings	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	
100-Year Floodplain Encroachment (not including Floodway)	None	20 - 30 ac	3 - 8 ac	< 1 ac	< 1 ac	< 1 ac	< 1 ac	< 1 ac	< 1 ac	
100-Year Floodway Encroachment	None	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	
Hazardous Materials										
Regulated Materials Review	None	6 LUST, 12 UST, 2 RCRA	10 LUST, 13 UST, 5 RCRA, 1 DERR site, 1 site with Institutional Controls	8 LUST, 15 UST, 7 RCRA, 1 NPL site, 1 DERR site, 1 site with Institutional Controls, 1 spill, 3 VAP2	4 LUST, 3 UST, 4 RCRA, 2 spills	3 LUST, 4 RCRA, 1 NPL, 2 spills	3 LUST, 4 RCRA, 1 NPL, 2 spills	7 LUST, 3 UST, 4 RCRA, 1 DERR site, 3 VAP2		
Community and Land Use										
Farmstead Impacts	None	35 - 45 acres	20 - 30 acres	None	None	None	None	None	None	
Community Facilities	None	BCEO, Transitional Learning Center	BCEO, Transitional Learning Center	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	Fairwood Elementary School, Garfield Middle School, Dayton Lane Community Christian Church, Hamilton City Board of Education Office, Hamilton Lane Library, Consortium for Ongoing Reinvestment Efforts (CORE) property	
Cemeteries (Non-Historic)	None	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	
Traditionally Underserved Populations per Census Blocks	None	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	Impacts to Minority, Low Income & Over 64	
Right-of-Way										
Relocations	None	5 - 15	5 - 15	10 - 20	15 - 25	45 - 55	55 - 65	65 - 75	45 - 55	
Right-of-Way (acres)	None	85 - 95 acres	50 - 60 acres	25 - 35 acres	10 - 20 acres	25 - 35 acres	20 - 30 acres	25 - 35 acres	5 - 15 acres	
Alternative Length (mi)	N/A	2.70	2.64	2.59	2.86	2.26	2.29	2.25	1.5	
Design Speed (mph)	N/A	35	35	35	35	35	35	35	35	
Roadway Design Issues	N/A	Proximity of Elkon Road / NW Washington Blvd intersection to roundabout and steep existing grades near roundabout. Not directly connected to US 127 requiring connecting road and additional traffic signal. Significant fill required in floodplain. Steep grade on alignment near BCEO and requires retaining wall. Intersection of Princeton Road is skewed.	Requires North B Street to be raised roughly 5 feet at west terminus. Requires US 127 to be raised roughly 10 feet. Bikepath along the canal was reduced to a 10 foot width. Steep grade on alignment near BCEO and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Steep grade on alignment near BCEO and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Steep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Steep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Steep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Steep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	North B Street may require profile adjustments at west terminus. Requires US 127 intersection at US 127 is skewed. Proximity of US 127 intersection to power plant reduces sight distance. Steep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	No on-street parking or turn lanes provided along Dayton Street.
	N/A	No existing flood levy at this location	Proximity of North B Street to the existing levy system will require the profile to be elevated to avoid the levy. This will require raising the west terminus roughly 5 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.	
Number of New Structures Requiring Long-Term Maintenance	N/A	5	3	2	2	2	2	2	2	
Structural Design Issues	Black Street Bridge reaching end of serviceable life for vehicular traffic and cannot be widened. Replacement on same alignment would result in closure during construction.	No significant issues	River Bridge - tie into floodwall system required	No significant issues	River Bridge - Curve at NW end of bridge complicates design	River Bridge - Curve at SE end of bridge & taper at NW end complicates design	River Bridge - Curve at SE end of bridge & taper at NW end complicates design	2 bridges required. Temporary RR runaround required for construction of new RR bridge over roadway	2 bridges required. Temporary RR runaround required for construction of new RR bridge over roadway	
Major Utility Relocations and/or Issues	None	Electric Transmission Line relocations required at NW Washington Blvd and near SR 4.	Electric Transmission Line relocations required near SR 4. Coordination with hydroelectric plant.	Power plant located on US 127 impacted.	Electric Transmission Line relocations required for Railroad overpass and near SR 4. Power plant located on US 127 impacted.	Electric Transmission & Distribution Line relocations required near US 127. Power plant located on US 127 impacted.	Electric Transmission & Distribution Line relocations required near US 127. Power plant located on US 127 impacted.	Electric Transmission & Distribution Line, Water Line and Sanitary Sewer Line relocations required for underpass. Electric Transmission & Distribution Line relocations required behind fairgrounds.	Electric Transmission & Distribution Line, Substation Impacted, Water Line and Sanitary Sewer Line relocations required for underpass.	
Traffic/Maintenance of Traffic Considerations										
Anticipated Alternative Travel Time (MSS)	N/A	5:53	6:20	6:37	6:10	5:44	5:44	5:45	5:19	
Anticipated High Street (SR 129) Travel Time Savings (MM:SS)	AM Peak-Hour - 00:00 PM Peak-Hour - 00:00	AM Peak-Hour - 00:09 PM Peak-Hour - 00:00	AM Peak-Hour - 00:09 PM Peak-Hour - 00:00	AM Peak-Hour - 00:21 PM Peak-Hour - 00:28	AM Peak-Hour - 00:18 PM Peak-Hour - 00:20	AM Peak-Hour - 00:33 PM Peak-Hour - 00:56	AM Peak-Hour - 00:33 PM Peak-Hour - 00:56	AM Peak-Hour - 00:41 PM Peak-Hour - 02:13	AM Peak-Hour - 00:50 PM Peak-Hour - 02:19	
Anticipated % Reduction in High Street (SR 129) Traffic	AM Peak-Hour - 0% PM Peak-Hour - 0%	AM Peak-Hour - 2% PM Peak-Hour - 0%	AM Peak-Hour - 2% PM Peak-Hour - 0%	AM Peak-Hour - 8% PM Peak-Hour - 7%	AM Peak-Hour - 5% PM Peak-Hour - 5%	AM Peak-Hour - 14% PM Peak-Hour - 15%	AM Peak-Hour - 14% PM Peak-Hour - 15%	AM Peak-Hour - 17% PM Peak-Hour - 16%	AM Peak-Hour - 21% PM Peak-Hour - 17%	
Maintenance of Traffic Concerns	None	Construction of roundabout at the intersection of W Elkon Rd and N B St will likely require a closure. Intersection of Neal Blvd and Joe Nuxhall Blvd will likely require short term closures.	Complicated construction staging at North B Street. North B Street & US 127 may require closures to raise the profile. Complex detours would be required.	Complicated construction staging at North B Street. US 127 may require a complex detour.	Complicated construction staging at North B Street.	Complicated construction staging at North B Street. May require US 127 profile to be raised 1 to 2 feet requiring a complex MOT configuration.	Complicated construction staging at North B Street. May require US 127 profile to be raised 1 to 2 feet requiring a complex MOT configuration.	Complicated construction staging at North B Street. Long term closure of Dayton St for the RR underpass.	Complicated construction staging at North B Street. Long term closure of Dayton St for the RR underpass.	
Preliminary Cost Estimates										
Preliminary Construction Costs	N/A	\$85 - \$95 million	\$75 - \$85 million	\$55 - \$ 65 million	\$70 - \$80 million	\$65 - \$75 million	\$65 - \$75 million	\$50 - \$60 million	\$50 - \$60 million	
Preliminary Right of Way Costs	N/A	\$7 - \$12 million	\$7 - \$12 million	\$5 - \$10 million	\$8 - \$13 million	\$16 - \$21 million	\$12 - \$17 million	\$30 - \$35 million	\$9 - \$14 million	
Preliminary Design & Management	N/A	\$15 - \$20 million	\$14 - \$19 million	\$9 - \$14 million	\$13 - \$18 million	\$12 - \$17 million	\$10 - \$16 million	\$10 - \$15 million	\$9 - \$14 million	
Preliminary Total Cost	N/A	\$97 - \$127 million	\$96 - \$116 million	\$69 - \$89 million	\$88 - \$108 million	\$93 - \$113 million	\$88 - \$108 million	\$90 - \$110 million	\$88 - \$88 million	

EVALUATION MATRIX (Page 2)

DRAFT NHX CONCEPTUAL ALTERNATIVES EVALUATION MATRIX (PID 115755)								
Feature/Consideration	Preliminary Alternatives							
	Alternative AC	Alternative AD	Alternative AE	Alternative BC	Alternative BD	Alternative BE	Alternative ABE	Alternative EBE
Improves East-West Connectivity	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to Lagonda Ave with no direct connectivity further west)	Yes (Ties to Lagonda Ave with no direct connectivity further west)	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to NW Washington Blvd, providing connectivity further west)	Yes (Ties to Gordon Ave, providing connectivity further west)
Improves Lack of Sufficient River Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Improves Lack of Grade-Separated Railroad Crossings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Improves Mobility/Congestion on Local Road Network	Minimal Improvement	Minimal Improvement	Yes	Minimal Improvement	Minimal Improvement	Yes	Yes	Yes
Improves Safety	Minimal Improvement	Minimal Improvement	Yes	Minimal Improvement	Minimal Improvement	Yes	Yes	Yes
	Purpose and Need - Secondary Needs							
Supports Economic Development	No, impacts City-identified prime development parcels	No, impacts City-identified prime development parcels	No, impacts City-identified prime development parcels	No, impacts City-identified prime development parcels	No, impacts City-identified prime development parcels	No, impacts City-identified prime development parcels	Yes	Yes
Improves Bike/Pedestrian Connectivity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Improves Multimodal Linkage	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially
	Cultural Resources							
NRHP-Listed Sites	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery	Greenwood Cemetery
NRHP-Listed Historic Districts	None	None	None	None	None	None	None	None
	Section 4(f)(6)(f) Sites							
Section 4(f)(6)(f) Sites	Combs Park (bisects), LJ Smith Park (bisects), Butler County Fairgrounds (minor)	Combs Park (bisects), LJ Smith Park (minor), Butler County Fairgrounds (minor)	Combs Park (bisects), LJ Smith Park (bisects), LJ Smith Park (minor), Butler County Fairgrounds (minor)	Combs Park (bisects), LJ Smith Park (bisects), Butler County Fairgrounds (minor)	Combs Park (bisects), LJ Smith Park (minor), Butler County Fairgrounds (minor)	Combs Park (bisects), LJ Smith Park (minor), Butler County Fairgrounds (minor)	LJ Smith Park (bisects), Combs Park (bisects), Butler County Fairgrounds (minor), GMR Recreational Trail (minor), Bellline Trail (bisects)	LJ Smith Park (bisects), Butler Co. Fairgrounds (minor), GMR Recreational Trail (minor), Bellline Trail (bisects)
	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	1 crossing	2 crossings	2 crossings
Great Miami River / Hydraulic Canal Wetlands (not including Open Water features)	None	None	None	None	None	None	1	1
100-Year Floodplain Encroachment (not including Floodway)	< 1 ac	< 1 ac	< 1 ac	< 1 ac	< 1 ac	< 1 ac	5 - 10 ac	5 - 10 ac
100-Year Floodway Encroachment	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac	< 5 ac
	Hazardous Materials							
Regulated Materials Review	8 LUST, 15 UST, 7 RCRA, 1 NPL site, 1 DERR site, 1 site with Institutional Controls	9 LUST, 20 UST, 5 RCRA, 1 DERR site, 2 sites with Institutional Controls, 3 VAP2	4 LUST, 3 UST, 4 RCRA, 1 spill	8 LUST, 15 UST, 7 RCRA, 1 NPL site, 1 DERR site, 1 site with Institutional Controls	7 LUST, 17 UST, 5 RCRA, 1 DERR site, 2 sites with Institutional Controls, 3 VAP2	4 LUST, 3 UST, 4 RCRA, 1 spill	7 LUST, 2 UST, 3 RCRA, 1 spill	7 LUST, 2 UST, 4 RCRA, 1 spill
	Community and Land Use							
Farmland Impacts	None	None	None	None	None	None	20 - 30 acres	20 - 30 acres
Community Facilities	BCEO, Transitional Learning Center, Electric Power House, Pentecostal Apostolic Church	BCEO, Transitional Learning Center, Electric Power House, True Free Christian Church of God	BCEO, Transitional Learning Center, Electric Power House, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Electric Power House	BCEO, Transitional Learning Center, Hamilton Fire Station 25, Fairwood Elementary School, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Electric Power House	BCEO, Transitional Learning Center, Hamilton Fire Station 25, Fairwood Elementary School, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Electric Power House	BCESC Main Building, Transitional Learning Center, Fairwood Elementary School, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Pentecostal Apostolic Church (R/W)	BCESC Main Building, Transitional Learning Center, Fairwood Elementary School, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Pentecostal Apostolic Church (R/W)	BCESC Main Building, Transitional Learning Center, Fairwood Elementary School, Butler County Children Services, Juvenile Justice Center, Butler County Board of Developmental Disabilities, Pentecostal Apostolic Church (R/W)
Cemeteries (Non-Historic)	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	None	Greenwood Cemetery (>0.5 ac)	Greenwood Cemetery (>0.5 ac)	None	None	None
Traditionally Underserved Populations per Census Blocks	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64	Impacts & Displacements to Minority, Low Income & Over 64
	Right-of-Way							
Relocations	5 - 15	10 - 20	45 - 55	10 - 20	15 - 25	45 - 55	55 - 65	55 - 65
Right-of-Way (acres)	25 - 35 acres	5 - 15 acres	25 - 35 acres	20 - 30 acres	10 - 20 acres	20 - 30 acres	50 - 60 acres	45 - 55 acres
	Engineering Considerations							
Alternative Length (mi)	3.43	3.61	3.02	2.85	3.02	2.44	3.2	2.49
Design Speed (mph)	35	35	35	35	35	35	35	35
Roadway Design Issues	Proximity of Elktion Road / NW Washington Blvd intersection to roundabout and steep existing grades near roundabout. Fill required in floodplain. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Sleep grade on Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Proximity of Elktion Road / NW Washington Blvd intersection to roundabout and steep existing grades near roundabout. Fill required in floodplain. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Sleep grade on Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Proximity of Elktion Road / NW Washington Blvd intersection to roundabout and steep existing grades near roundabout. Fill required in floodplain. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Sleep grade on Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Requires North B Street to be raised roughly 5 feet at west terminus. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Sleep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Requires North B Street to be raised roughly 5 feet at west terminus. Proximity of US 127 intersection to power plant reduces sight distance. Bikepath along the canal was reduced to a 10 foot width. Sleep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Proximity of Elktion Road / NW Washington Blvd intersection to roundabout and steep existing grades near roundabout. Sleep grade approaching US 127 intersection from the west due to elevation of railroad crossing. Sleep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	Sleep grade approaching US 127 intersection from the west due to elevation of railroad crossing. Sleep grade on alignment near Humane Society and requires retaining wall. Intersection of Princeton Road is skewed.	The offset of North B Street to the existing levy system will allow a smooth transition of the proposed alignment over the levy to North B Street. This will limit raising at the west terminus to less than 2 feet.
Existing Flood Levy Design Issues	No existing flood levy at this location	No existing flood levy at this location	No existing flood levy at this location	Proximity of North B Street to the existing levy system will require the profile to be elevated to avoid the levy. This will require raising the west terminus roughly 5 feet.	Proximity of North B Street to the existing levy system will require the profile to be elevated to avoid the levy. This will require raising the west terminus roughly 5 feet.	No existing flood levy at this location	3	3
Number of New Structures Requiring Long-Term Maintenance	2	2	2	2	2	2	3	3
Structural Design Issues	No significant issues	RR bridge - Severe skew complicates design	RR bridge - Severe skew complicates design	River Bridge - tie into floodwall system required complicates design	River Bridge - tie into floodwall system required complicates design	No significant issues	River Bridge - Curve at the SE end of bridge, skewed alignment and location of dam complicates design. Potential scour concerns.	River Bridge - Curve at the SE end of bridge, skewed alignment and location of dam complicates design. Potential scour concerns.
Major Utility Relocations and/or Issues	Electric Transmission Line relocations required at NW Washington Blvd. Power plant located on US 127 impacted.	Electric Transmission Line relocations required at NW Washington Blvd. Power plant located on US 127 impacted.	Electric Transmission Line relocations required at NW Washington Blvd. Power plant located on US 127 impacted.	Power plant located on US 127 impacted.	Power plant located on US 127 impacted.	Coordination with hydroelectric plant. Potential power substation impacts at US 127.	High voltage power-line tower relocation required. Coordination with hydroelectric plant. Potential power substation impacts at US 127.	High voltage power-line tower relocation required. Coordination with hydroelectric plant. Potential power substation impacts at US 127.
	Traffic/Maintenance of Traffic Considerations							
Anticipated Alternative Travel Time (M:SS)	7:00	7:35	6:26	6:48	7:39	5:48	5:53	5:50
Anticipated High Street (SR 129) Travel Time Savings (MM:SS)	AM Peak-Hour - 00:00 PM Peak-Hour - 00:00	AM Peak-Hour - 00:00 PM Peak-Hour - 00:00	AM Peak-Hour - 00:28 PM Peak-Hour - 00:31	AM Peak-Hour - 00:07 PM Peak-Hour - 00:13	AM Peak-Hour - 00:03 PM Peak-Hour - 00:00	AM Peak-Hour - 00:18 PM Peak-Hour - 00:20	AM Peak-Hour - 00:24 PM Peak-Hour - 00:22	AM Peak-Hour - 00:28 PM Peak-Hour - 00:31
Anticipated % Reduction in High Street (SR 129) Traffic	AM Peak-Hour - 0% PM Peak-Hour - 0%	AM Peak-Hour - 0% PM Peak-Hour - 0%	AM Peak-Hour - 11% PM Peak-Hour - 12%	AM Peak-Hour - 1% PM Peak-Hour - 2%	AM Peak-Hour - 0% PM Peak-Hour - 0%	AM Peak-Hour - 5% PM Peak-Hour - 5%	AM Peak-Hour - 8% PM Peak-Hour - 6%	AM Peak-Hour - 11% PM Peak-Hour - 12%
Maintenance of Traffic Concerns	Construction of roundabout at the intersection of W Elktion Rd and N B St will likely require a closure. Complex detour would be required.	Construction of roundabout at the intersection of W Elktion Rd and N B St will likely require a closure.	Construction of roundabout at the intersection of W Elktion Rd and N B St will likely require a closure.	Complicated construction staging at North B Street. North B Street may require a closure to raise the profile. Complex detour would be required.	Complicated construction staging at North B Street. North B Street may require a closure to raise the profile. Complex detour would be required.	Complicated construction staging at North B Street. North B Street may require a closure to raise the profile. Complex detour would be required.	Construction of roundabout at the intersection of W Elktion Rd and N B St will likely require a closure.	Construction of roundabouts on North B Street will likely require a closure.
	Preliminary Cost Estimates							
Preliminary Construction Costs	\$65 - \$75 million	\$75 - \$85 million	\$75 - \$85 million	\$60 - \$70 million	\$70 - \$80 million	\$90 - \$100 million	\$90 - \$100 million	\$115 - \$125 million
Preliminary Right of Way Costs	\$5 - \$10 million	\$5 - \$10 million	\$17 - \$22 million	\$5 - \$10 million	\$5 - \$10 million	\$17 - \$22 million	\$10 - \$20 million	\$10 - \$20 million
Preliminary Design & Management	\$12 - \$17 million	\$14 - \$19 million	\$17 - \$18 million	\$11 - \$16 million	\$13 - \$18 million	\$12 - \$17 million	\$16 - \$21 million	\$21 - \$26 million
Preliminary Total Cost	\$82 - \$104 million	\$94 - \$114 million	\$105 - \$125 million	\$76 - \$96 million	\$88 - \$108 million	\$98 - \$118 million	\$111 - \$141 million	\$146 - \$171 million