WHY A COMPREHENSIVE BIKE PLAN FOR NEWARK?

A comprehensive bike plan includes all elements for a stronger community. It supports all levels of bicyclists, connects key destinations, including safe routes to schools, and integrates with the existing regional bike network. It also incorporates education to allow a safer, more comfortable environment for both cyclists and motorists alike, making it easy to integrate cycling into daily life.
TABLE OF CONTENTS

INTRODUCTION 1-9

TRAILHEAD RECOMMENDATIONS 10-21
   In the Canal District
   From an Existing Building
   Temporary Solution

TRAIL RECOMMENDATIONS 22-52
   Options
   Cost Estimates

APPENDIX 1-76
   Public Involvement
   Survey Responses
   User Profiles
   Alternatives and Extras
Do you feel that adding more trails in the area would be a community benefit?

- Definitely 96.8%
- Maybe 3.2%
- Not sure/ No 0.0%

How often do you currently use the bike trails in the area?

- Every day or once a week 77.8%
- Once a month 18.5%
- Once a year 7.4%
- Never 0.0%

(Responses from survey 1. See appendix for additional information.)
What do you think are the main issues with the existing bike trails?

- Viewshed (not scenic, low quality natural areas): 6.7%
- Location (not located where you need them to go): 13.3%
- **Condition** (not maintained and/or falling in disrepair): 60.0%
- Safety (not in areas you are comfortable traveling through): 6.7%
- Convenience (not enough nearby amenities/facilities): 13.3%
- **Connectivity** (not connected to destinations you need to access): 86.7%
- No issues: 3.3%

Would you increase your usage if the issues above were addressed?

- Definitely: 83.3%
- Maybe: 13.3%
- Not sure: 3.3%
- No: 0.0%

(Responses from survey 1. See appendix for additional information.)
TRAIL RECOMMENDATIONS
Why put a Trailhead in the Canal District

- Brings in **visitors** from other cities and towns, and presents them with a mental picture of this **culturally rich** area
- Provides **easy access** to the restaurants and businesses within the heart of **downtown** Newark
- Helps give a clearer sense of **identity** to the Canal District
- Gives pedestrians access to **public restrooms** - something that is currently not available
- Shows a growing support for a **pedestrian and biker-friendly** community
- Attracts more people to the area during **times of the day/week** that are not currently busy
- Displays a layout of the area to help people **find where they are** or where they **want to go**
- Can **double** as a source of information, an educational tool, a memorial, or a display of local art

**Trailhead Examples**

Mandeville, Louisiana

Hilliard, Ohio
What is The Canal District?

The Canal District is the area around Canal St. and Market St. from S. 1st St. to S. 4th St.

It is rich in history and culture, and provides a great opportunity for community activity for in the heart of Newark.
Current Uses

Pros
- culturally rich area to work with
- lots of on-street parking
- many opportunities for shared parking

Cons
- lots of impervious surfaces
- lack of connection and continuity of open spaces
- lack of bicycle parking
- lack of public restrooms
Future Uses

Pros
- culturally rich area to work with
- lots of on-street parking
- many opportunities for shared parking

Cons
- lots of impervious surfaces
- lack of connection and continuity of open spaces
- lack of bicycle parking
- lack of public restrooms
Preferred Trailhead Location: The Walnut Building to Pavilion Conversion

Pros

- buffs up the north-south axis
- reusing the shell of the current building shows the community’s environmentally friendly attitude
- renovation costs of an existing building would be cheaper than building a new building
- provides space for vendors to move in (food,
- deals with excess parking in a more environmentally-friendly way (175 pervious parking spaces for overflow)
- close parking for bike

Cons

- view from Courthouse of actual trailhead blocked by parking garage
Proposed Trailhead
Current Open Space
New Open Space
Overflow Pervious Parking
Bicycle Parking
Vehicular Parking

Pavilions

N. Park Pl.
S. Park Pl.
W. Main St.
S. 1st St.
E. Canal St.
N. 4th St.
S. 2nd St.
S. 3rd St.
S. 4th St.
S. 5th St.
W. Market St.
E. Main St.
N. 3rd St.
N. Park Pl.
Railroad
The Walnut Building to Pavilion Conversion

Pros
- buffs up the north-south axis
- reusing the shell of the current building shows the community’s environmentally friendly attitude
- renovation costs of an existing building would be cheaper than building a new building
- provides space for vendors to move in (food,
- deals with excess parking in a more environmentally-friendly way (175 pervious parking spaces for overflow)
- close parking for bike

Cons
- view from Courthouse of actual trailhead blocked by parking garage
Pre-Trailhead

Goal
1. Prepare bikers for limited restroom access in the downtown area

How to Accomplish This
Place temporary restrooms
- near YMCA Bike Trail Entrance
Types of Trails

For user profiles (expert, casual, and amateur see appendix)
### Route Options:

<table>
<thead>
<tr>
<th>Current Trail Connectivity</th>
<th>1a</th>
<th>1b</th>
<th>2a</th>
<th>2b</th>
<th>3a</th>
<th>3b</th>
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<td>Bike Trail off-street</td>
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<td>Safe Intersections</td>
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#### What Does That Mean?

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</tbody>
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**Route Review:** Compare and Choose Routes to make Newark a biker friendly community!
Orange Line: Goosepond-Waterworks Route

1a

1b

Deo Dr.

Goosepond Rd.

Waterworks Rd.

Licking Trail

Current Trails

Goosepond-Waterworks Route A

Goosepond-Waterworks Route B
Pros
- creates new outer bike belt for Newark, increasing overall accessibility
- easy access to the bike trail for northern Newark
- scenic route along the Licking River meets with current trail
- relatively flat route, making it easy for all users
- provides connectivity to the Deo Dr. shopping centers

Cons
- addition of riverside path could be more expensive than on-street trails
- requires some pot hole repair
- Waterworks Rd. requires additional signage due to concentration of cars
**Pros**
- creates new outer bike belt for Newark, increasing overall accessibility
- easy access to the bike trail for northern Newark
- scenic route along the Licking River meets with current trail
- relatively flat route, making it easy for all users
- provides connectivity to the Deo Dr. shopping centers

**Cons**
- addition of riverside path could be more expensive than on-street trails
- requires some pot hole repair
- Waterworks Rd. requires additional signage due to concentration of cars
For the northern route, which types of trails do you prefer?

(Responses from survey 2. See appendix for additional information.)

Comments
1. The traffic in that area from commercial properties would be too dangerous for on-street bike trails
2. This area may see use by many inexperienced and younger riders. Safety concerns at the Deo Dr. area with heavy traffic.
Green Line: Racoon Creek Trail
Pros
- utilizes the Raccoon Creek and South Fork Licking River to create great views and atmosphere
- provides an off-road option for bikers and pedestrians
- well shaded
- connects to the current bike trails on the east and west side of Newark
- easy access to the YMCA and Babe Ruth League Ball Fields
- presents water quality improvement opportunities (provides additional outlets for funding)

Cons
- more costly since it doesn’t rely on existing infrastructure
- property may need to be purchased
- requires orchestration with those who live adjacent to the path
Pros
- connects to the current bike trails on the east and west side of Newark as well as other routes for more on trail flexibility
- provides connection to the Children’s garden as well as the YMCA and Babe Ruth League Ball Fields
- utilizes the Raccoon Creek and South Fork Licking River to create great views and atmosphere
- provides an off-road option for bikers and pedestrians
- well shaded
- presents water quality improvement opportunities
  (provides additional outlets for funding)
- Would not require as much bank path engineering or property to be purchased due to on-street options

Cons
- more costly since it doesn’t rely on existing infrastructure
- property may need to be purchased
- requires orchestration with those who live adjacent to the path
For the southern route, which trail route do you prefer?

(Responses from survey 2. See appendix for additional information.)

Comments
1. Worried about cost but I like.
2. Natural areas are attractive but trash is often visible in this section of river and this part of town is not particularly attractive.
Red Line: Granville Route

Current Trails

3b Raccoon Creek Trail B

3a Raccoon Creek Trail A

Granville Route
Pros
- bridges the gap in the bike trails surrounding Newark
- connects to the current bike trails in three locations
- brings bikers directly to the YMCA, downtown Newark, Canal District, the Works, and other destination points
- exciting entrance into downtown Newark with the view of the Courthouse
- inviting atmosphere within neighborhoods
- trails on main roads helps to give awareness of bikers to vehicles
- roads are wide enough to employ on-street trails

Cons
- Canal St. intersections require signage or cross signals for bike and pedestrian safety
- Granville Rd. requires a safer tree clearance (trimming)
- sunken and parallel drains would need to be addressed
Pros
- bridges the gap in the bike trails surrounding Newark
- connects to the current bike trails in three locations
- brings bikers directly to the YMCA, downtown Newark, Canal District, the Works, the Babe Ruth League Ball Fields, and other destination points
- exciting entrance into downtown Newark with the view of the Courthouse
- engages southern residential areas with downtown Newark
- trails on main roads helps to give awareness of bikers to vehicles
- roads are wide enough to employ on-street trails

Cons
- Canal St. intersections require signage or cross signals for bike and pedestrian safety
- Granville Rd. requires a safer tree clearance (trimming)
- sunken and parallel drains would need to be addressed
- if not on Ohio St. there would be higher costs of creating a new trail
For the Granville route, which trail route do you prefer?

(Responses from survey 2. See appendix for additional information.)

30.4% 69.6%

Comments
1. I run this route now but use the sidewalks along Granville Rd.
**Pros**
- connects to Woodrow Wilson Jr. High School, Newark Catholic High School, and Excel Academy
- easy access to Flory Park, the YMCA, and Y.E.S. (Youth Engaged in Service) Center
- provides a more direct route for residents
- helps to complete the smaller bike belt around downtown

**Cons**
- poorly shaded
- changing road widths
- diagonal street parking in downtown area
- YMCA access may require better traffic coordination
For the Downtown route, which trail route do you prefer?

- 52.2% Both
- 26.1% Granville
- 17.4% Church

Comments
1. I run this route now (Granville A) but use the sidewalks along Granville Rd.
2. I would ride these routes. My wife likes only bike devoted lanes. Not with traffic.
Do you like the locations of the additional spokes?

(Responses from survey 2. See appendix for additional information.)

- **Yes**: 85.7%
- **No**: 4.8%

Comments

1. I have run the King Grafton for years and tying into Baker Blvd. Has its merits.
## Construction Costs and Alternative Segments

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>TYPE</th>
<th>LENGTH</th>
<th>ESTIMATED COSTS</th>
<th>TOTAL ESTIMATED COSTS</th>
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<td><strong>ALTERNATIVE ROUTES</strong></td>
<td></td>
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<td></td>
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<tr>
<td>North</td>
<td>GOOSEPOND A</td>
<td>Multi-purpose Trail</td>
<td>3.3 Miles</td>
<td>$633,600</td>
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<tr>
<td>North</td>
<td>GOOSEPOND B</td>
<td>Sharrow and Multi-purpose Trail</td>
<td>1.8 Miles S and 1.3 Miles MPT</td>
<td>$4,320 and $249,600</td>
</tr>
<tr>
<td>South</td>
<td>RACCOON CREEK A</td>
<td>Multi-purpose Trail</td>
<td>2.8 Miles</td>
<td>$537,600</td>
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<tr>
<td>South</td>
<td>RACCOON CREEK B</td>
<td>Multi-purpose Trail and Sharrow</td>
<td>1.8 Miles MPT and 1.4 Miles S</td>
<td>$345,600 and $3,360</td>
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<tr>
<td>DT</td>
<td>GRANVILLE A</td>
<td>Bike Lane</td>
<td>3.9 Miles</td>
<td>$47,520</td>
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<td>DT</td>
<td>GRANVILLE B</td>
<td>Bike Lane</td>
<td>4.4 Miles</td>
<td>$17,280</td>
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<td>CHURCH</td>
<td>Bike Lane</td>
<td>1.6 Miles</td>
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<td>KING-GRAFTON (A)</td>
<td>Bike Lane</td>
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<td>MOULL-MANNING (B)</td>
<td>Bike Lane</td>
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<td>Central</td>
<td>21ST ST XING A (C1)</td>
<td>Multi-purpose Trail</td>
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<tr>
<td>Central</td>
<td>21ST ST XING B (C2)</td>
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### ALTERNATIVE SEGMENTS

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<td>1</td>
<td>GOOSEPOND TO WATERWORKS</td>
<td>Multi-purpose Trail</td>
<td>2.0 Miles</td>
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<td>2</td>
<td>GOOSEPOND TO WATERWORKS</td>
<td>Sharrow</td>
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<td>3</td>
<td>LICKING RIVER</td>
<td>Multi-purpose Trail</td>
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### SOUTH | | | | |
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<tr>
<td>4</td>
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<td>Multi-purpose Trail</td>
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<td>MAIN TO 6TH TO RIVER</td>
<td>Sharrow</td>
<td>6 Miles</td>
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<td>7</td>
<td>MIDDLE RIVER PIECE (Main past V.F.W.)</td>
<td>Multi-purpose Trail</td>
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<td>Multi-purpose Trail</td>
<td>9 Miles</td>
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<td>9</td>
<td>2ND TO OHIO</td>
<td>Multi-purpose Trail</td>
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### DOWNTOWN-GRANVILLE | | | | |
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<tr>
<td>10</td>
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<td>Multi-purpose Trail</td>
<td>1.7 Miles</td>
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### DOWNTOWN-CHURCH | | | | |
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<td>17</td>
<td>6TH TO MAIN</td>
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### CENTRAL OPTIONS/ADDITIONAL SPOKES | | | | |
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*These estimates are approximate and should be used as a guideline. Contractor bids should be obtained to determine the actual costs.

**Assumptions**

Entire route distances were calculated by segments. Each segment was rounded to the nearest tenth. Segments are shown on pages 28, 31, 34, 38, 40, 43, 46, and 49.

Multi-purpose trail construction costs were provided by an engineering firm. This cost is based on the construction of 5 miles of trails at a width of 10' with a 12” berm on each side. With this assumption, one mile of a multi-purpose trail is equivalent to $192,000.

Bike lane and sharrow cost estimate figures were based on information provided by the city engineering department.

A bike lane includes two white stripes of thermoplastic pavement marking paint ($2,100 per mile per edge line) as well a symbol ($75 each) or word at a maximum spacing of 330’. The estimated total is $10,800 per mile.

A sharrow simply includes a symbol marking ($75 each) or word. Recommended spacing is one marking at a maximum of every 120’ or a minimum of every 330’. For this estimate a spacing of 330’ was assumed, providing a cost of $1,200 per mile.
## Alternative Variations and Applicable Grants

### Table of Estimated Costs and Termini

<table>
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<th>Area</th>
<th>Route &amp; Direction</th>
<th>Termini</th>
<th>Estimated Costs</th>
<th>Funding*</th>
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<td><strong>NORTH</strong></td>
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<td></td>
</tr>
<tr>
<td>Goosepond A (1)</td>
<td>Goosepond(E), Deo(E) or Van Tassel(E), Mt. Vernon(N), Waterworks(E)</td>
<td>Diversion Channel to Hollander Pool</td>
<td>$384,000</td>
<td>TE, CDBG</td>
</tr>
<tr>
<td>Goosepond B (2)</td>
<td>Goosepond(E), Deo(E) or Van Tassel(E), Mt. Vernon(N), Waterworks(E)</td>
<td>Diversion Channel to Hollander Pool</td>
<td>$4,320</td>
<td></td>
</tr>
<tr>
<td>Goosepond A/B (3)</td>
<td>Licking River (S)</td>
<td>Hollander Pool to Licking River Trail</td>
<td>$249,600</td>
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</tr>
<tr>
<td><strong>DOWNTOWN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granville (12-13-14)</td>
<td>Hull(N), Granville(E), 6th(S), Main(E), 4th(S), Canal(E), 2nd (N), Main(E)</td>
<td>YMCA to Main St. Bridge</td>
<td>$23,760</td>
<td>COTF, RTP, TE, CDBG</td>
</tr>
<tr>
<td>Granville (12-13-15)</td>
<td>Hull(N), Granville(E), 6th(S), Main(E), 4th(S), Canal(E), 2nd (S), Racoon Crk(E)</td>
<td>YMCA to Licking River</td>
<td>$29,160</td>
<td></td>
</tr>
<tr>
<td>Granville (12-17)</td>
<td>Hull(N), Granville(E), 6th(S), Church(E), Easy(S)</td>
<td>YMCA to Main St. Bridge</td>
<td>$18,360</td>
<td></td>
</tr>
<tr>
<td>Church (16-17)</td>
<td>Church(E), Easy(S)</td>
<td>YMCA to Main St. Bridge</td>
<td>$18,360</td>
<td></td>
</tr>
<tr>
<td>Church (16-13-14)</td>
<td>Church(E), 6th(S), Main(E), 4th(S), Canal(E), 2nd (N), Main(E)</td>
<td>YMCA to Main St. Bridge</td>
<td>$169,920</td>
<td>COTF, RTP, CDBG</td>
</tr>
<tr>
<td>Church (16-13-15)</td>
<td>Church(E), 6th(S), Main(E), 4th(S), Canal(E), 2nd (S), Racoon Crk(E)</td>
<td>YMCA to Licking River</td>
<td>$175,320</td>
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</tr>
<tr>
<td>Racoon Crk (4-9-17)</td>
<td>Racoon Crk(E), Main(E), 6th(N), Church(E), Easy(S)</td>
<td>YMCA to Main St. Bridge</td>
<td>$15,360</td>
<td></td>
</tr>
<tr>
<td>Racoon Crk (4-9-13-14)</td>
<td>Racoon Crk(E), Main(E), 4th(S), Canal(E), 2nd(N), Main(E)</td>
<td>YMCA to Main St. Bridge</td>
<td>$15,360</td>
<td></td>
</tr>
<tr>
<td>Racoon Crk (4-9-13-15)</td>
<td>Racoon Crk(E), Main(E), 4th(S), Canal(E), 2nd(S), Racoon Crk(E)</td>
<td>YMCA to Licking River</td>
<td>$18,360</td>
<td></td>
</tr>
<tr>
<td>Racoon Crk (5-9-17)</td>
<td>Racoon Crk(E), 11th(N), Western(E), 8th (S), Main (E), 6th(N), Church(E), Easy(S)</td>
<td>YMCA to Main St. Bridge</td>
<td>$180,720</td>
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</tr>
<tr>
<td>Racoon Crk (5-9-13-14)</td>
<td>Racoon Crk(E), 11th(N), Western(E), 8th (S), Main (E), 4th(S), Canal(E), 2nd(N), Main(E)</td>
<td>YMCA to Main St. Bridge</td>
<td>$172,800</td>
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</tr>
<tr>
<td>Racoon Crk (5-9-13-15)</td>
<td>Racoon Crk(E), 11th(N), Western(E), 8th (S), Main (E), 4th(S), Canal(E), 2nd(S), Racoon Crk(E)</td>
<td>YMCA to Licking River</td>
<td>$82,080</td>
<td></td>
</tr>
<tr>
<td><strong>SOUTH</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Racoon Creek A (4-7-8)</td>
<td>Racoon Crk (entire length)</td>
<td>YMCA to Licking River</td>
<td>$5,180,400</td>
<td>COTF, RTP, CDBG</td>
</tr>
<tr>
<td>Racoon Creek B (4-6-8)</td>
<td>Racoon Crk(E), Main(E), 6th(S), ~Poplar(W), Racoon Crk(S-E)</td>
<td>YMCA to Licking River</td>
<td>$327,840</td>
<td></td>
</tr>
<tr>
<td>Racoon Creek B (5-6-8)</td>
<td>Racoon Crk(E), 11th(N), Western(E), 8th (S), Main (E), 6th(S), ~Poplar(W), Racoon Crk(S/E)</td>
<td>YMCA to Licking River</td>
<td>$229,200</td>
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<tr>
<td><strong>CENTRAL</strong></td>
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<tr>
<td>Sharon Valley (10)</td>
<td>Sharon Valley(E), Granville (E), Hull (S)</td>
<td>Div Channel to YMCA</td>
<td>$326,400</td>
<td>SRTS, CDBG, BB</td>
</tr>
<tr>
<td>Sharon Valley (11)</td>
<td>Sharon Valley(E), Granville (E), Hull (S)</td>
<td>Div Channel to YMCA</td>
<td>$18,360</td>
<td></td>
</tr>
<tr>
<td>King (20-18)</td>
<td>King (N), Grafton (N)</td>
<td>Granville Rd to Deo Dr</td>
<td>$17,280</td>
<td></td>
</tr>
<tr>
<td>Moull (19)</td>
<td>Moull (E), Mt. Vernon(S), North (E), Maple(N), Manning(E)</td>
<td>Sharon Valley to Licking River Trail</td>
<td>$31,320</td>
<td></td>
</tr>
<tr>
<td>Central (21)</td>
<td>Central(N)</td>
<td>Granville Rd to Moull St</td>
<td>$6,480</td>
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</tr>
<tr>
<td>21st St Xing A (22)</td>
<td>Log Pond Run(S/E)</td>
<td>Baker Blvd to King Ave</td>
<td>$230,400</td>
<td></td>
</tr>
<tr>
<td>21st St Xing B (23)</td>
<td>Log Pond Run(S/E), 21st St(S), Catalina(E)</td>
<td>Baker Blvd to King Ave</td>
<td>$97,200</td>
<td></td>
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<tr>
<td>Legend Elementary (24)</td>
<td>School Private Drive(S)</td>
<td>Bake Blvd to Sharon Valley Rd</td>
<td>$11,880</td>
<td></td>
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<tr>
<td><strong>TRAILHEADS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>YMCA &amp; Walnut St. Building</td>
<td>Variable</td>
<td>RTP, NW, LWCF</td>
<td></td>
</tr>
</tbody>
</table>

*See Appendix for Funding details

*These estimates are approximate and should be used as a guideline. Contractor bids should be obtained to determine the actual costs.

Assumptions

Entire route distances were calculated by segments. Each segment was rounded to the nearest tenth. Segments are shown on pages 28, 29, 33, 34, 38, 39, 42, and 46.

Multi-purpose trail construction costs were provided by an engineering firm. This cost is based on the construction of 5 miles of trails at a width of 10’ with a 12” berm on each side. With this assumption, one mile of a multi-purpose trail is equivalent to $192,000.

Bike lane and sharrow cost estimate figures were based on information provided by the city engineering department.

A bike lane includes two white stripes of thermoplastic pavement marking paint ($2,100 per mile per edge line) as well a symbol ($75 each) or word at a maximum spacing of 330’. The estimated total is $10,800 per mile.

A sharrow simply includes a symbol marking ($75 each) or word. Recommended spacing is one marking at a maximum of every 120’ or a minimum of every 330’. For this estimate a spacing of 330’ was assumed, providing a cost of $1,200 per mile.
Final Alternative Groups
Summary
Interaction of Trailheads and Bike Trail Options

Walnut Building Proposed Trailhead
The Courthouse
Temporary Restroom at YMCA