



## Countywide Bikeway Plan

This study expands upon the existing bikeway system planning efforts to identify:

- ✓ Opportunities to expand the existing bikeway system network to cover all of Douglas County.
- ✓ Potential on-road and off-road bikeway improvements.
- ✓ Possible bikeway connections from Douglas County to other areas including Metro Kansas City and the Topeka Area.
- ✓ Improvements at key locations including:
  - 6<sup>th</sup> and Iowa Interchange Area in Lawrence
  - Burroughs Creek Trail/Hobbs Park to Riverfront/Constant Park Connector in Lawrence
  - Eudora Elementary and Middle Schools
  - Baldwin City Elementary

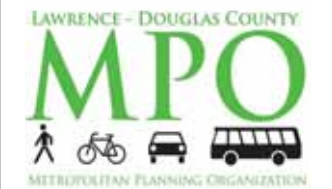


Expanding On-road Facilities. Sharrow on Connecticut Street in Lawrence.



Extending and Connecting Local and Regional Trails. Burroughs Creek Trail in Lawrence

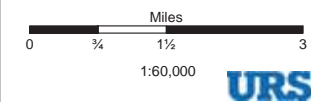
**Draft Figure**



### Legend

- Bikeway System**
- Bike Lane
  - Bike Route
  - Recreational Trail
  - Shared Use Path
  - Bike Lane (Future)
  - Bike Route (Future)
  - Shared Use Path (Future)

- Streets**
- Interstate
  - US Highway
  - State Highway
  - Street
  - Future Road
  - SLT Alignment
  - City Limits

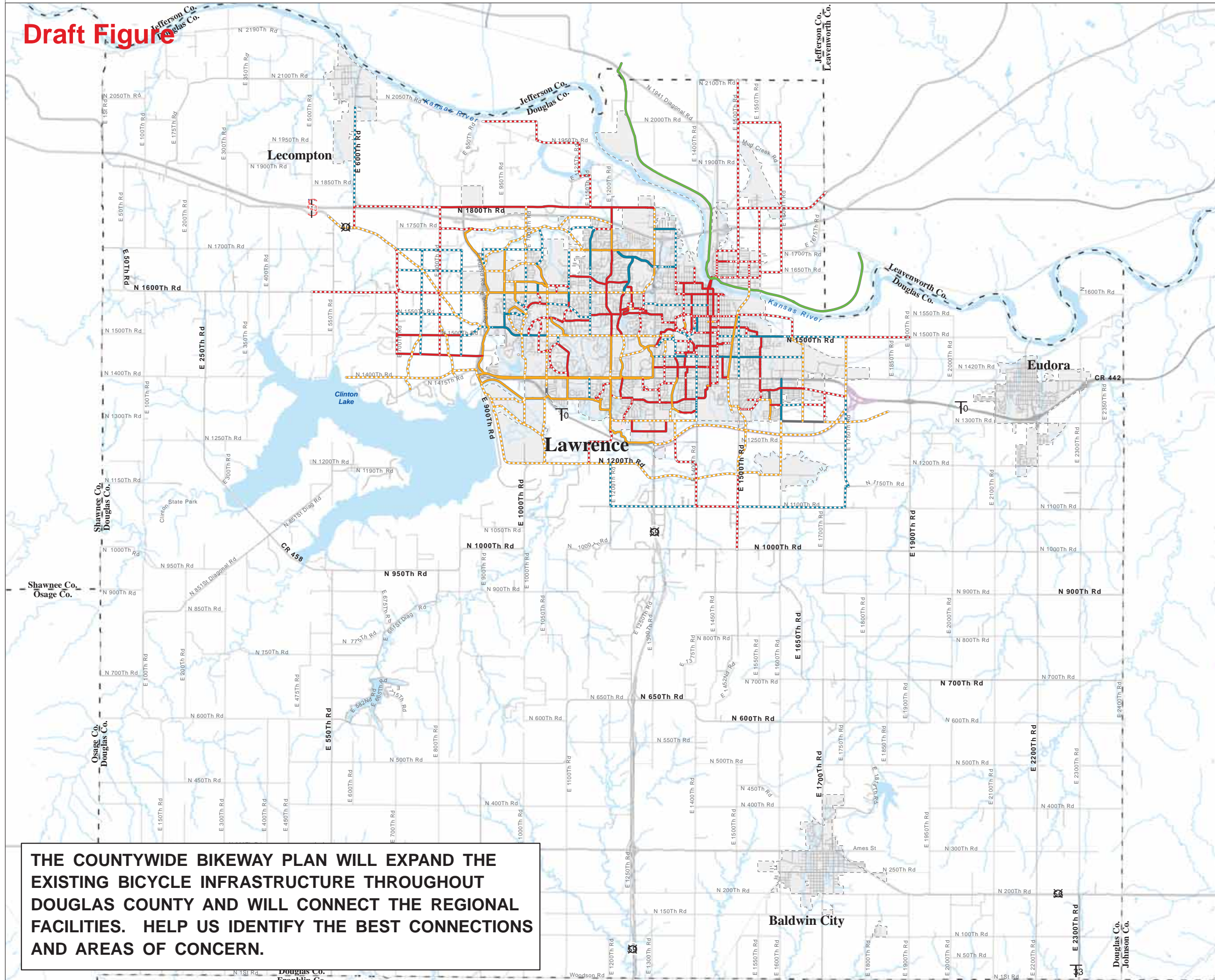


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Based on T2040  
Metropolitan Transportation Plan

**THE COUNTYWIDE BIKEWAY PLAN WILL EXPAND THE EXISTING BICYCLE INFRASTRUCTURE THROUGHOUT DOUGLAS COUNTY AND WILL CONNECT THE REGIONAL FACILITIES. HELP US IDENTIFY THE BEST CONNECTIONS AND AREAS OF CONCERN.**



HELP US IDENTIFY ANY SAFETY AND CONNECTIVITY ISSUES.  
YOU CAN MARK UP THE MAPS ON THE TABLE OR USE THE OUTLINE MAP.

**Draft Figure**

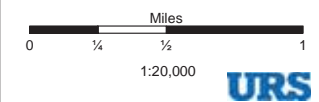


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### Streets

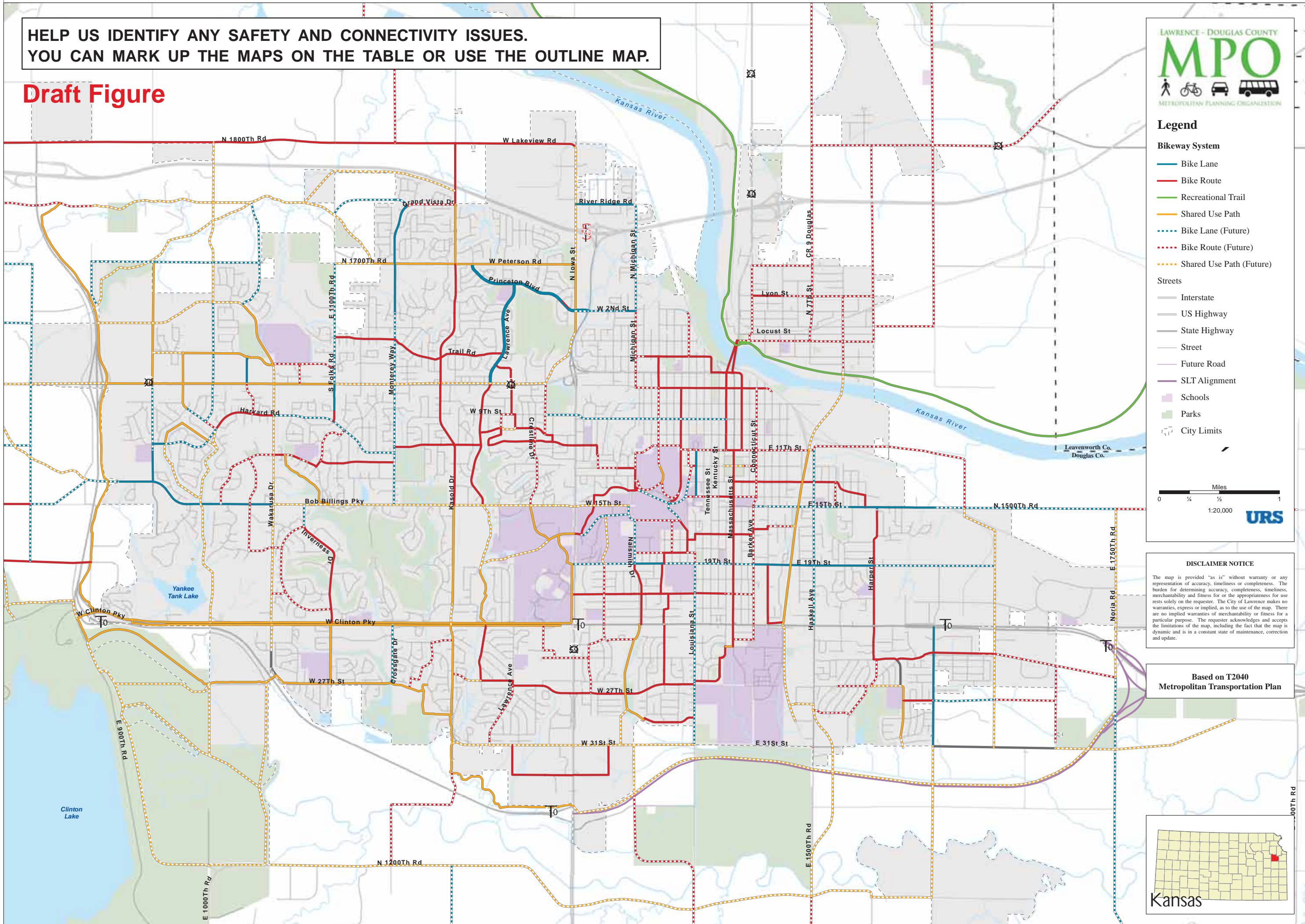
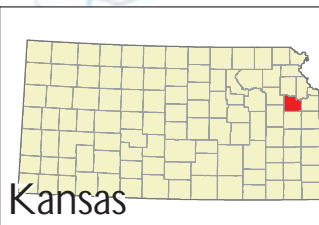
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- Schools
- Parks
- City Limits



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## Bicycle and Pedestrian Facility Types

### Bicycle Lane - Conventional



- Designates an exclusive space for bicyclists through pavement markings and signage
- Located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic
- Typically on the right side of the street, between the adjacent travel lane and curb, road edge or parking lane
- Used on medium and high volume streets

### Shared Use Path



- Path separated from street or road travel lane used by motor traffic
- Typically paved and 10 feet wide
- Open to most non-motorized uses
- Often installed in urban areas in abandoned rail corridors, utility corridors or along waterway streams, rivers, land, drainages or other linear features
- May be located in separate rights-of-ways or in part of highway/roadway rights-of-ways

### Bicycle Lane - Buffered



- Conventional bicycle lanes paired with a designated painted buffer space
- Buffer may separate the bicycle lane from the adjacent motor vehicle travel lane, the parking lane or both
- Increases operating space and comfort for bicyclists
- Typically used on medium and high volume streets

### Sidewalk



- The pedestrian designed facility adjacent to most streets
- Typically concrete and 5 feet wide
- May be used by bicyclists in Lawrence except in the downtown area where it is prohibited
- Bicyclists should always yield to pedestrians when using sidewalks
- Bicyclists should act as pedestrians when crossing streets from a sidewalk
- Space commonly used by child cyclist when learning to ride

### Bicycle Lane - Protected (Cycle Track)



- Bicycle facility within the street right of way that provides physical separation from the adjacent travel lane
- Separation may be provided with curbs, bollards, parked cars or other means
- Cycle track may be at street level, sidewalk level or an intermediate level
- Typically used on medium and high volume streets with few intersections or driveways

### Crosswalk - Marked



- A marked portion of a street for pedestrian use
- Connect pedestrian facilities on one side of a street to facilities on the other side of the street
- Pedestrians always have right-of-way in a crosswalk except at a signalized intersection where they must follow the appropriate signal

### Shared Lane Marking ("Sharrow")



- Street markings used to indicate a shared lane for bicyclists and motorists
- Sharrows indicate to bicyclists where they should position themselves in a lane
- Sharrows reinforce to motorists that bicyclists belong in the lane
- Typically used on low- and medium-volume streets where bicycle lanes cannot be accommodated

### Crosswalk - Unmarked



- The unmarked connection between a pedestrian facility on one side of a street to a pedestrian facility on the other side of the street
- Pedestrians always have right-of-way in a crosswalk except at a signalized intersection where they must follow the appropriate signal

### Bicycle Boulevard



- Streets with low motorized traffic volumes and speeds designated to provide priority to bicyclists
- Designed to discourage speeding and cut-through traffic
- Often used to connect schools and parks and as an alternative to a nearby busy street
- May include traffic calming devices such as speed tables or traffic circles

### Wayfinding Signage



- Signage to indicate to users the direction to specific locations
- May include distance and approximate travel time
- Placed at key intersections and decision points

## The Five E's of Bicycle Planning

Bicycle and Pedestrian Plans commonly refer to the Five E's: Engineering, Education, Encouragement, Enforcement and Evaluation.

Simply providing bicycle facilities will not ensure that people will bicycle more or that a community will be bicycle friendly. Plans and recommendations focused on the Five E's help ensure that a plan is comprehensive and encourages bicycling and walking through a variety of means.

### Engineering



- Engineering refers to physical infrastructure. This is the category that is typically thought of when people think about plans.
- Engineering recommendations are typically divided into short-term, medium-term and long-term priorities based on cost, ease of implementation and other factors.
- Engineering recommendations may include:
  - On-street facilities such as bike lanes, sharrows and traffic calming
  - Off-street paths
  - Directional and wayfinding signage
  - Bicycle and pedestrian bridges and tunnels
  - Bike parking facilities
  - Anything physical in nature that facilitates walking and bicycling for travel



### Education



- Education efforts typically focus on educating people about the rules of the road.
- Education may focus on teaching bicyclists, particularly children, how to properly interact with motorists and how to avoid the most dangerous situations that commonly occur for bicyclists.
- Education may also focus on making bicyclists aware that they have the same responsibility as motorists to follow the rules of the road.
- Motorist education typically focuses on reminding motorists of the rules of the road and how to properly interact with bicyclists and pedestrians.
- Education efforts may include:
  - Bike rodeos and helmet fairs
  - Public Service Announcements (PSAs)
  - Workshops for planners, engineers and law enforcement officials
  - Driver education and safe cycling classes



### Encouragement



- Encouragement activities focus on increasing bicycling and walking through fun and interesting activities.
- Encouragement activities may include:
  - Bike to Work Week activities
  - Bike and Walk to School Day
  - Workplace wellness programs
  - Ciclovias
  - Community bike rides
  - Providing bicycling maps
  - Bike share systems

### Enforcement



- Enforcement activities focus on enforcing the rules of the road for all users - motorists, bicyclists and pedestrians.
- Enforcement also prioritizes having links between the law enforcement community and the bicycling community.
- Enforcement activities may include:
  - Efforts to reduce speeding
  - Efforts to increase yielding to pedestrians
  - Efforts to reduce bicycle theft

### Evaluation



- Evaluation efforts seek to quantify the impact of the other "E's."
- Evaluation efforts may include:
  - Measuring the growth of bicycle and pedestrian facilities in a region
  - Measuring the rate of bicycling in an area or the number of users on a specific facility
  - Evaluating crash data for patterns or frequency