

# CITY OF SHREVEPORT

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**Administrative  
Action Plan  
2015-2017:  
Roadway  
Improvements**



Ollie S. Tyler  
Mayor



*COLLECTOR  
STREETS  
BIKE LANES*



# Street Overview

- The last two years represent one of the most aggressive citywide street improvement efforts in Shreveport's history
- 148 street improvement projects at a cost of \$45.9 million:
  - 122 street projects were completed from January 2015 to December 2016 - \$25.6 million
  - 26 street projects are currently on-going and carried over into 2017 from 2016
    - \$20.3 million is the total for these 26 projects



# Street Overview

## Plans for 2017

- In 2017, there will be 50 new streets scheduled for repairs at a cost of \$6.77 million (Appendix C). By the end of 2017, all minor arterial and collector streets in the city will have been resurfaced. At that point, the City will begin addressing local roadway networks with remaining funds



# Street Overview – Bike Path Selection

- Bike Paths: The Administration proposed Shreveport's first bike true paths (Appendix D) for designated streets in its Collector Roadways Asphalt Program to be overlaid in 2017
  - Streets already identified and funding in the COS 2017 Street Plan – thus no significant cost (paint and signage)
  - Streets previously identified in the (NLCOG) Shreveport Bicycle Plan
  - Supports the Shreveport-Caddo Master Plan for “Complete Streets” to provide space for bicycles, pedestrians, automobiles, and transit vehicles ...



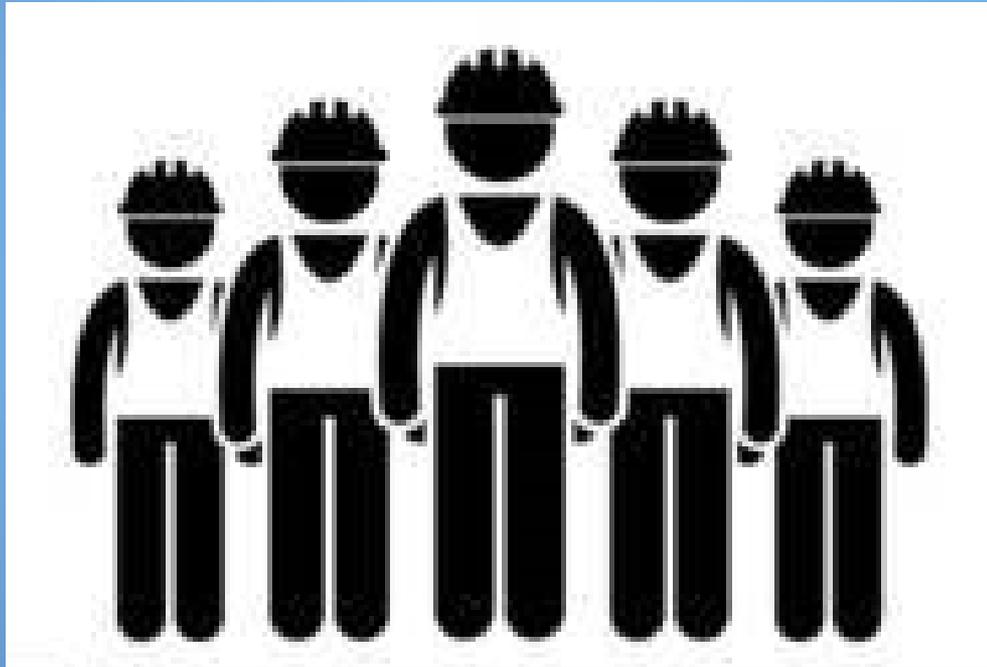
# Street Overview – Bike Path Selection

The original Administrative 2017 Street Plan identified the following streets for bike facility consideration

- **Centenary Boulevard – Stoner Ave. to Kings Hwy.**
  - One (1) bike lane southbound
- **Ockley Drive – Line Ave. to Gilbert Dr.**
  - One (1) bike lane westbound
- **Fairfield Ave. – Pierremont Rd. to Southern Ave.**
  - From Pierremont Rd. to Stephenson St. one (1) bike lane northbound
  - From Stephenson St. to Kirby St. one (1) shared bike and vehicle lane (Sharrow) northbound
  - From Kirby St. to Jordan St. one (1) bike lane northbound
- **Gilbert Drive – Stoner Avenue to Ockley Drive**
  - From Stoner Ave. to Kings Hwy. two (2) bike lanes north and south bound
  - From Kings Hwy. to Ockley Dr. two (2) bike lanes north and south bound



Bring on the Engineers ...



# Development of Bike Facilities



# Development of Bicycle Facilities

- While recreational cycling is still the primary use of bicycles in this country, the number of people using bicycles for commuting and other travel purposes has been increasing since the early 1970s.
- Nationwide, people are recognizing the energy efficiency, cost effectiveness, health benefits and environmental advantages of bicycling.
- The City is responding to the increased use of bicycles by implementing test cases of bicycle-related improvements and programs. The emphasis now being placed on bicycle transportation requires an understanding of bicycles, bicyclists and bicycle facilities.



# Development of Bicycle Facilities

- Plans for implementing bicycle projects should be consistent with a community's transportation plan and should reflect overall community goals. The NLCOG in working with Caddo Parish and the City of Shreveport developed a bike route system.
- With the development of a plan, a guide needs to be prepared to provide information on the development of facilities to enhance and encourage safe bicycle travel.
- The selection of a bicycle facility may depend on many factors, including vehicular and bicycle traffic characteristics, adjacent land use and expected growth patterns. Safe, convenient and well-designed facilities are essential to encourage bicycle use.



# All Roads Are Bicycle Facilities

**Bicycles are allowed on all roads with the exception of freeways.**

- A freeway, by definition, has no at-grade intersections with other roads, railroads or multi-use trails. The crossing of freeways by other roads is typically achieved with under- or overpasses. Because traffic never crosses at-grade, there are generally no traffic lights or stop signs on a freeway. Bicycles are not allowed because freeways are specifically designed for high speed operation of motor vehicles.



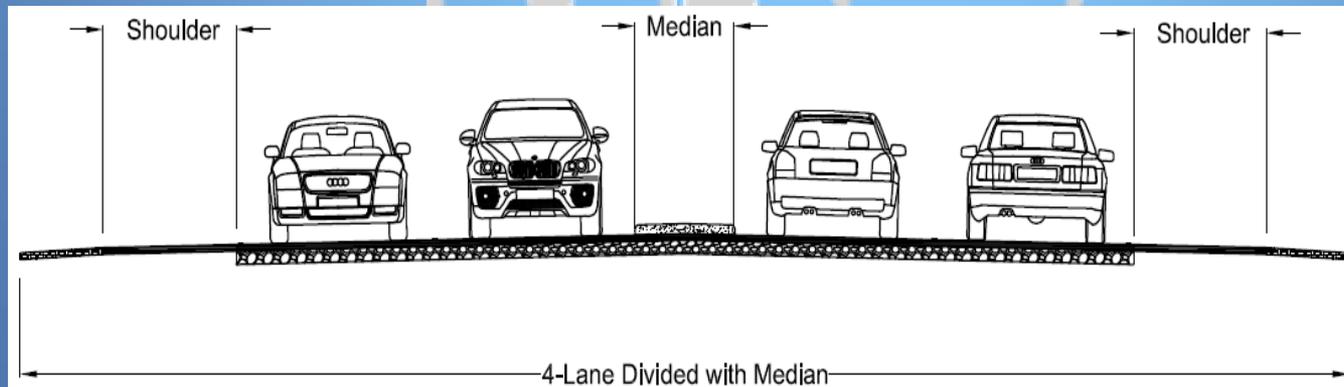
# Roadway Classifications



# Roadway Classifications

## Minor Arterial

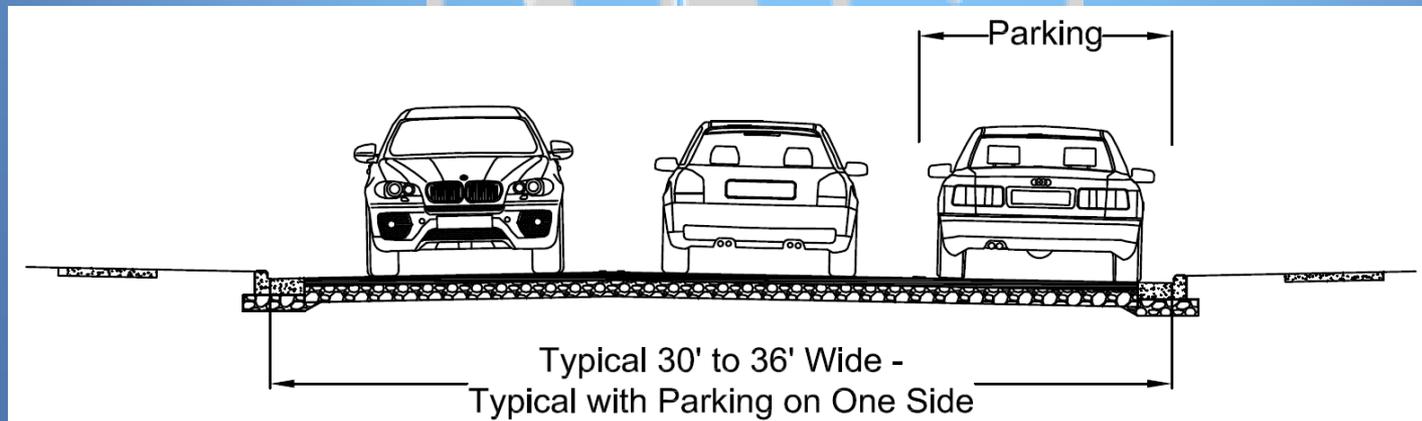
The minor arterial street system interconnects with and augments the urban principal arterial system and provides service to trips of moderate length at a somewhat lower level of travel mobility than principal arterials. This system also distributes travel to geographic areas smaller than those identified with the higher system. *Examples: Lakeshore Drive, Pines Road, Linwood Avenue, Hollywood Avenue, Buncombe Road, Line Avenue, and East Kings Highway.*



# Roadway Classifications

## Collector

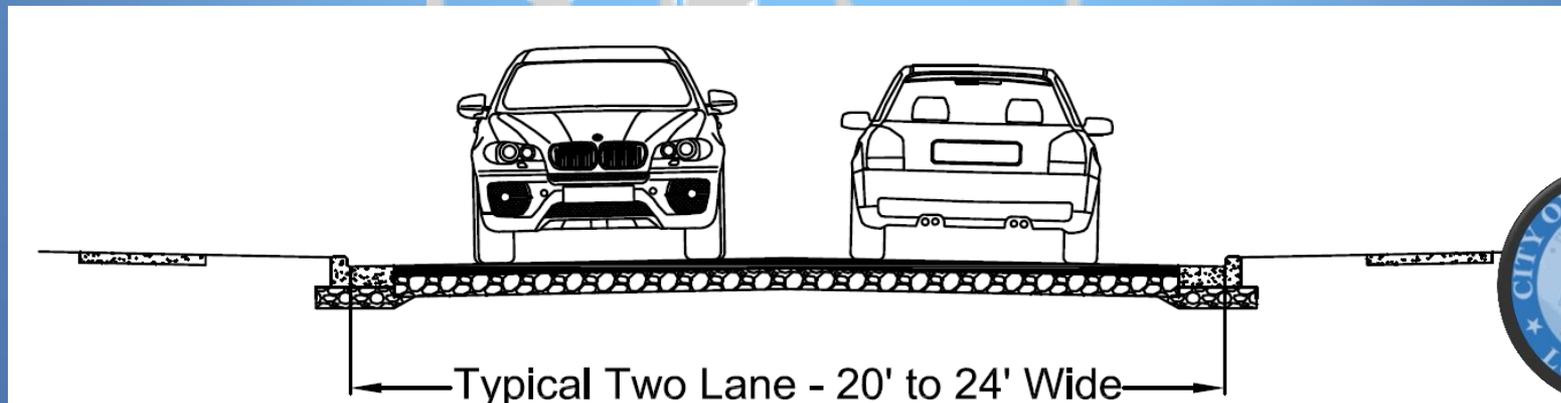
The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials through the area to the ultimate destination. Conversely, the collector street also collects traffic from local streets in residential neighborhoods and channels it into the arterial system. *Examples: Fairfield Avenue, Gilbert Drive, Norris Ferry Road, Flournoy Lucas Road, Ockley Drive, Pierre Avenue, Russell Road, and Southern Avenue.*



# Roadway Classifications

## Local

The local street system comprises all facilities not on one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes. Service to through, traffic movement usually is deliberately discouraged. *Example: Subdivision Streets*



# Different Types of Bicycle Facilities



# Shared Roadway (No Bikeway Designation)

- Most bicycle travel in the United States now occurs on streets and highways without bikeway designations. This probably will be true in the future as well. In some instances, a community's existing street system may be fully adequate for efficient bicycle travel, and signing and striping for bicycle use may be unnecessary.
- In other cases, some streets and highways may be unsuitable for bicycle travel at present, and it would be inappropriate to encourage bicycle travel by designating the routes as bikeways.
- Finally, some routes may not be considered high bicycle demand corridors, and it would be inappropriate to designate them as bikeways regardless of roadway conditions (e.g., minor residential streets).



# Shared Lane Markings (SLMs), or “Sharrows”



- Sharrows are road markings used to indicate a shared lane environment for bicycles and automobiles. Among other benefits shared lane markings reinforce the legitimacy of bicycle traffic on the street, recommend proper bicyclist positioning, and may be configured to offer directional and wayfinding guidance.
- The shared lane marking is a pavement marking with a variety of uses to support a complete bikeway network; it is not a facility type and should not be considered a substitute for bike lanes, cycle tracks, or other separation treatments where these types of facilities are otherwise warranted or space permits.
- The MUTCD (Manual of Uniform Traffic Control Devices) outlines guidance for shared lane markings.



# Bike Lanes

“A bike lane is a portion of a roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs.”

- Improve conditions for bicyclists on the streets.
- Delineate the right of way assigned to bicyclists and motorists and provide for more predictable movements.
- Better accommodate bicyclists where insufficient space exists for comfortable bicycling on existing streets.



# Bike Facility Planning



# Bicycle Facility Planning

- Planning for bicycle facilities begins with observing and gathering data on the existing conditions for bicycle travel. Problems, deficiencies, safety concerns and bicyclists' needs should be identified.
- The existing bicycling environment should be observed. Bicycle facilities as well as roads not typically used by bicyclists should be examined for their suitability for bicycling.
- Motor vehicle traffic volume, the percentage and volume of bus and truck traffic, and the speed of traffic should be considered, since they have a significant impact on bicyclists.
- In addition, obstructions and impediments to bicycle travel should be noted, such as incompatible grates, debris, shoulder rumble strips, narrow lanes, driveways, rough pavements, curbside auto parking, bridge expansion joints, metal grate bridge decks, railroad tracks, poor sight distance and traffic signals that are not responsive to bicycles.



# Bicycle Facility Planning

- Public participation is essential during the inventory of existing conditions. Observations and surveys of existing bicyclists, as well as the non-bicycling public, can be very useful. Additional sources of information include citizen bicycle advisory committees, citizen groups, and individuals responsible for recreation planning.



# Bicycle Facility Planning

- Several factors should be considered in determining the appropriate bicycle facility type, location and priority for implementation.
- The Federal Highway Administration provides guidance on facility selection in the 1994 publication “Selecting Roadway Design Treatments to Accommodate Bicycles”. Some of these factors include; Skill Level of Users, Motor Vehicle Parking, Barriers, Accessibility, Traffic Volumes and Speed, Bridges, Intersections, Cost and Funding, and so forth.



# Shreveport Test Applications

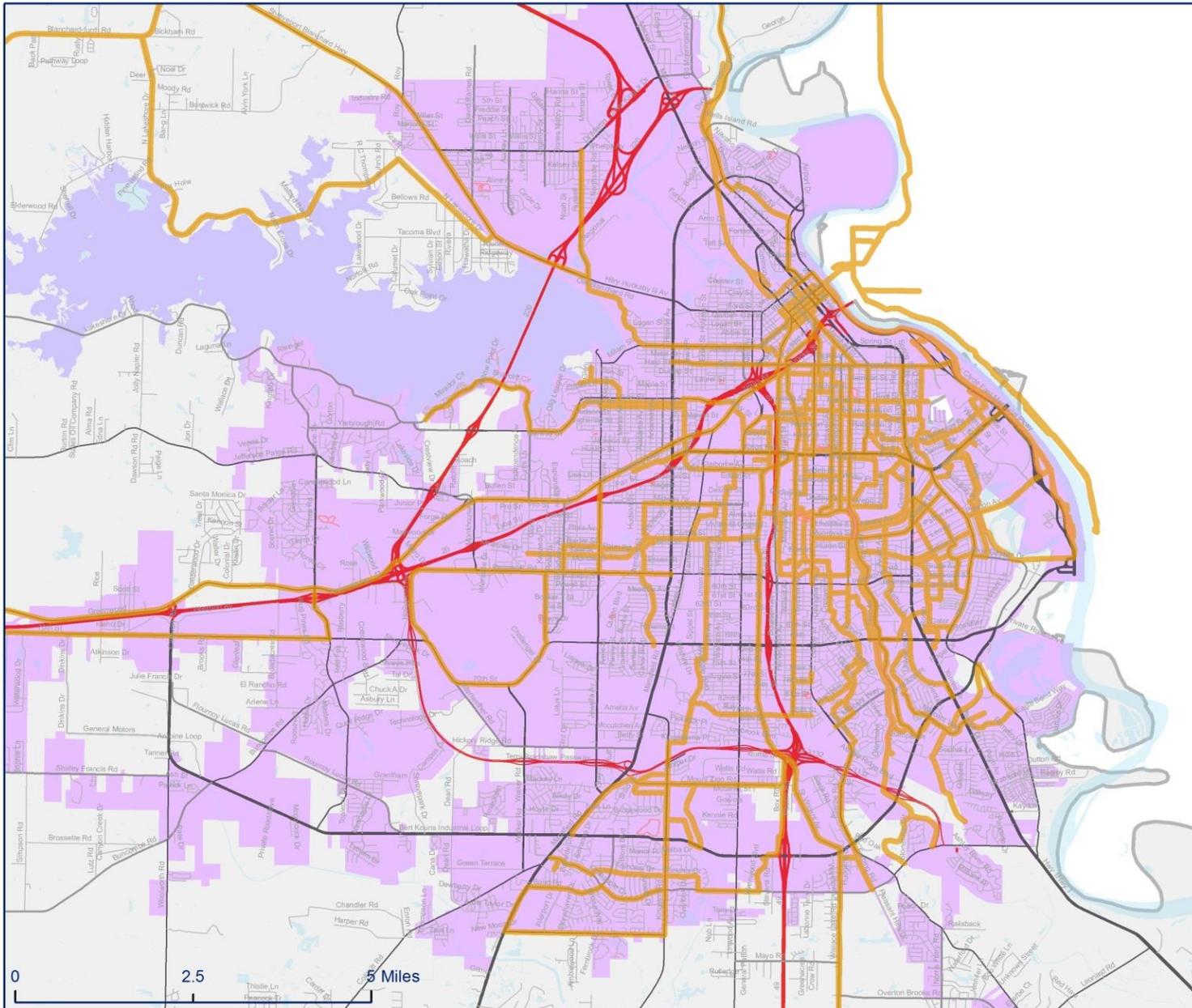


# Shreveport Test Applications

- In the City's first test case for bike transportation facilities, the City selected four candidate streets for consideration of bike facilities. The streets were selected for this application due to the resurfacing of the roadways. This would make any restriping of the roadways for bike facilities a much easier process. The four streets selected were Fairfield Avenue, Gilbert Drive, Ockley Drive, and Centenary Avenue. Each of these four streets is identified on the Bike Plan developed by NLCOG as candidate streets for bike facilities.



# Shreveport Area Bicycle Plan



**Legend**

- Existing Walking Path
- Cyclist Desire Lines

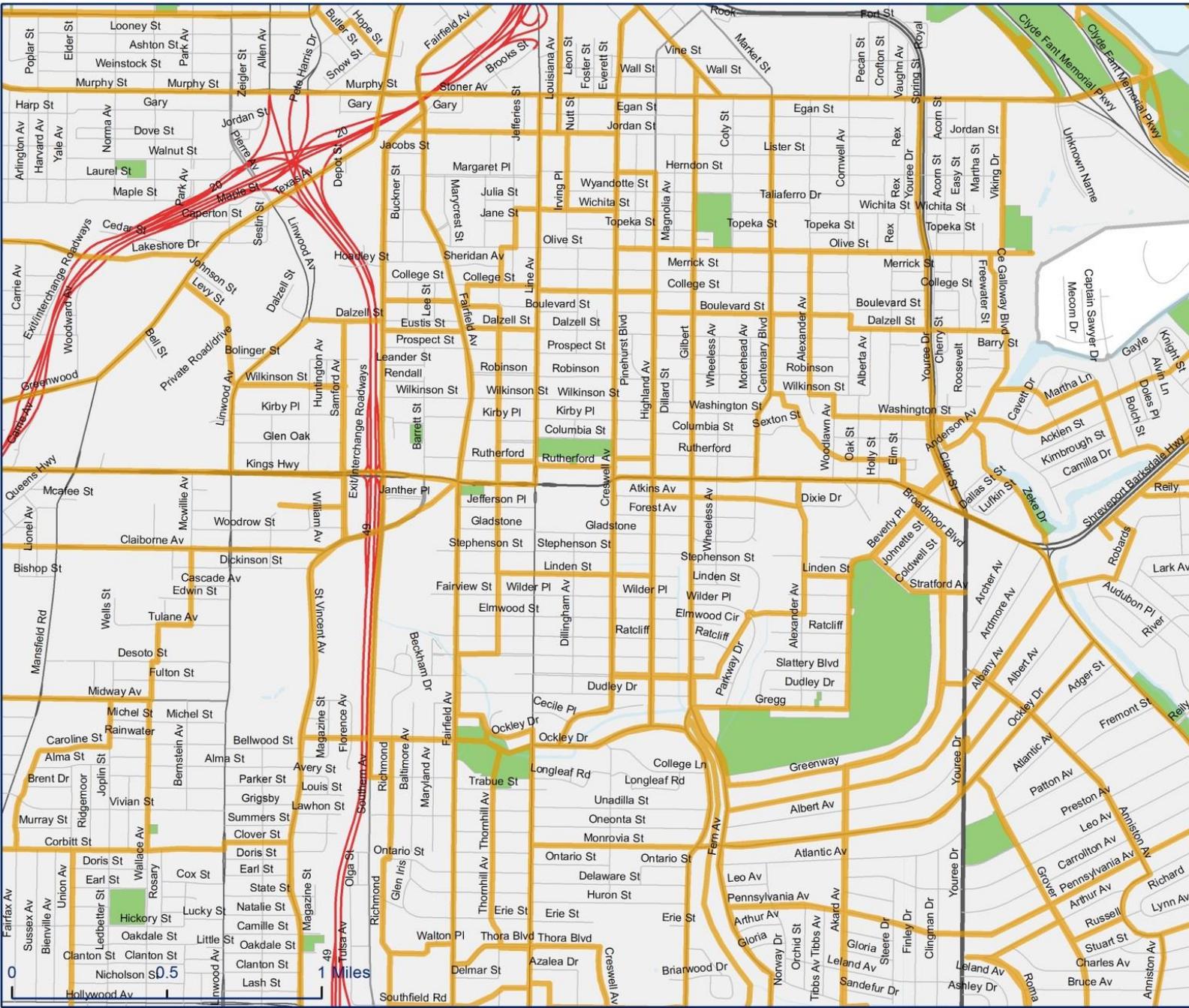
**Roadways (by Functional Class)**

- Interstate
- Freeway/Expressway
- Principal Arterial
- Minor Arterial
- Collector
- Local

- Water Features and Wetlands
- City Limits
- Parks



# Shreveport Area Bicycle Plan



**Legend**

- Bicyclist Desire Lines
- Roadways (by Functional Class)**
- Interstate
- Freeway/Expressway
- Principal Arterial
- Minor Arterial
- Collector
- Local
- Water Features and Wetlands
- Parks



# Shreveport Test Applications

- On Monday evening February 6, 2017, at Centenary College, the City presented potential test applications to the local community. As a result of the public meeting and with additional comments provided in an online format, the City revised the proposed plan to include Creswell Avenue as a candidate street. These five streets, and information about these streets, are as follows:



# Shreveport Test Applications

| Name                    | Limits               | Daily Traffic | Speed Limit | Road Width |
|-------------------------|----------------------|---------------|-------------|------------|
| <b>Fairfield Avenue</b> | Jordan to Pierremont | 6100 vpd      | 35 mph      | 31'        |
| <b>Gilbert Avenue</b>   | Stoner to Gregg      | 4100 vpd      | 35 mph      | 37'        |
| <b>Creswell Avenue</b>  | Stoner to Ockley     | 2650 vpd      | 35 mph      | 31'        |
| <b>Ockley Drive</b>     | Gilbert to Line      | 2590 vpd      | 35 mph      | 31'        |
| <b>Centenary Ave</b>    | Stoner to Kings      | 5120 vpd      | 35 mph      | 37'        |

# Shreveport Test Applications

- In selecting the type of facility marking to be used, the speed and volume of traffic generally will determine the type of facility marking to be used. The use of sharrows should be limited to roadways with a speed limit of 35 mph or less and less than 3000vpd.



# Shreveport Test Applications

Based on the listed criteria, the following were determined to be acceptable bike facility uses for test applications

1. **Centenary Boulevard (Bike lane)**
  - Stoner Avenue to Kings Highway
2. **Ockley Drive (Sharrows)**
  - Line Avenue to Gilbert Drive
3. **Fairfield Avenue (Bike lane)**
  - Pierremont Road to Jordan Street
4. **Gilbert Drive (Bike lane)**
  - Stoner Avenue to Ockley Drive
5. **Creswell Avenue (Sharrows)**
  - Stoner Avenue to Ockley Drive



A light blue silhouette of a person riding a bicycle, positioned centrally behind the title and text.

# Recommendations

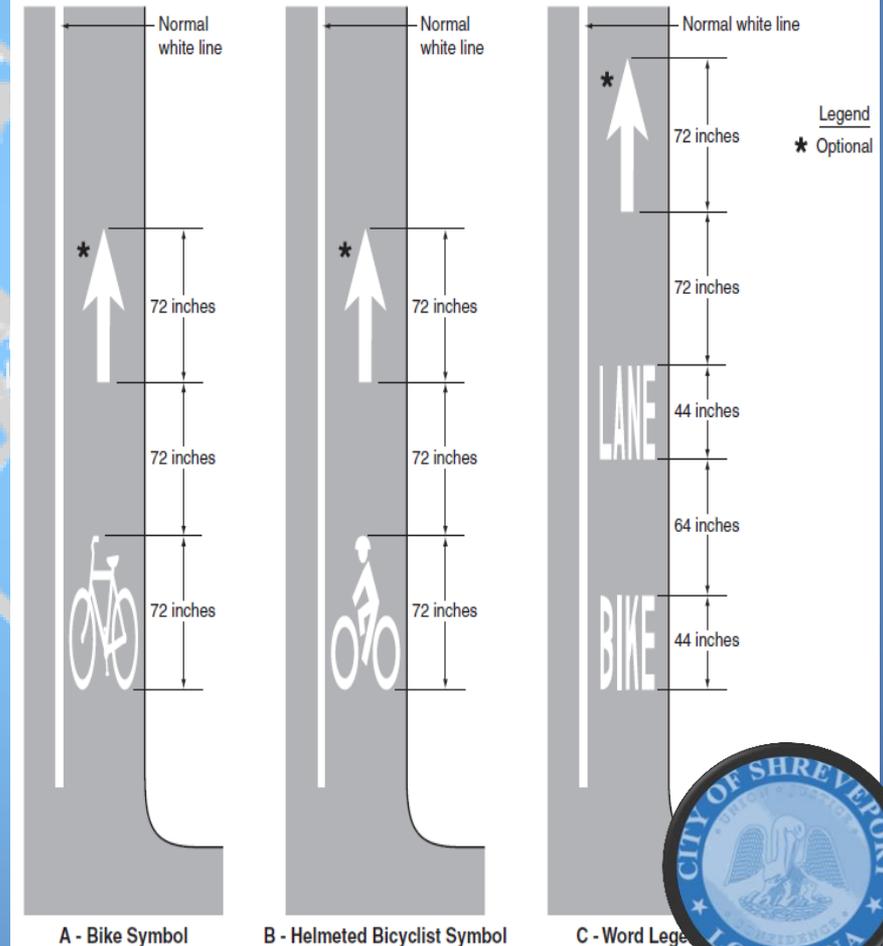
In considering the limitations in the use of bike type facilities, and following suggestions and recommendations from the public hearing and online communications, the following recommendations are made for the City's first test case.

# Recommendations

## Bike Lane

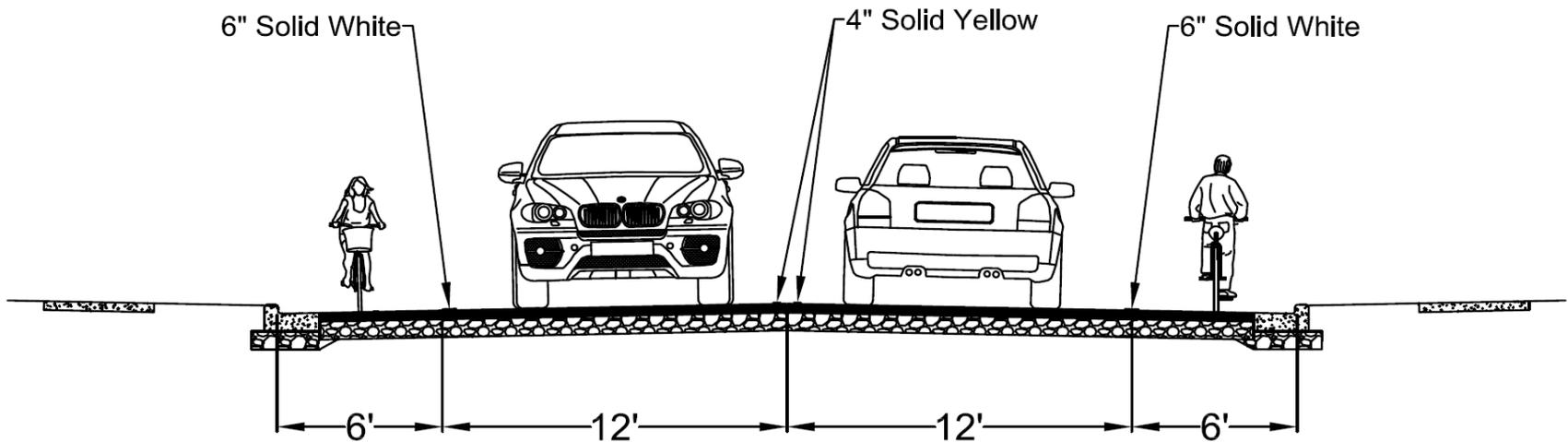
1. Gilbert Avenue from Stoner Avenue to Ockley as a two lane roadway with two bike lanes for north and south bound movement. The use of Gilbert and connecting to Marshall Street as a future resurfacing will connect this to the downtown area.
  - Striping in accordance to the Manual of Uniform Traffic Control Devices (MUTCD)

Figure 9C-3. Word, Symbol, and Arrow Pavement Markings for Bicycle Lanes



# Recommendation 1

## Gilbert Drive (A) - Bike Lane



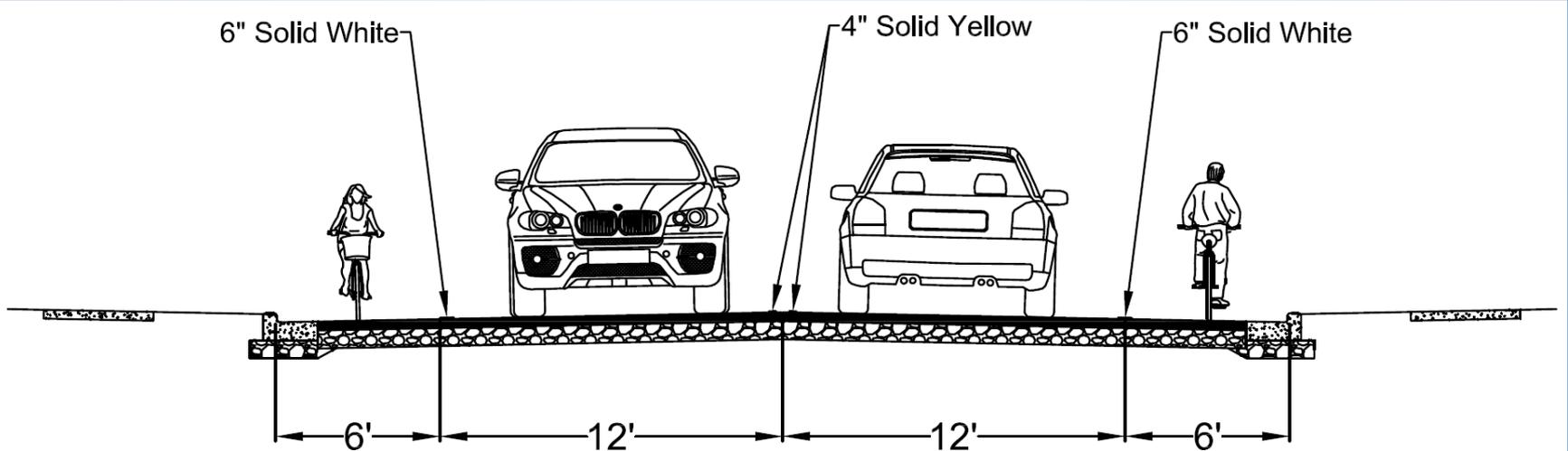
Gilbert Drive - Stoner Avenue to Kings Highway  
*Northbound and Southbound Bike Lanes*

*\*Will require the removal of the left turn only center lane  
to accommodate bike lanes.*



# Recommendation 1

## Gilbert Drive (B) - Bike Lane



Gilbert Drive - Kings Highway-Ockley Drive  
*Northbound and Southbound Bike Lanes*

\*Will require the removal of one northbound lane and one southbound lane to accommodate bike lanes.

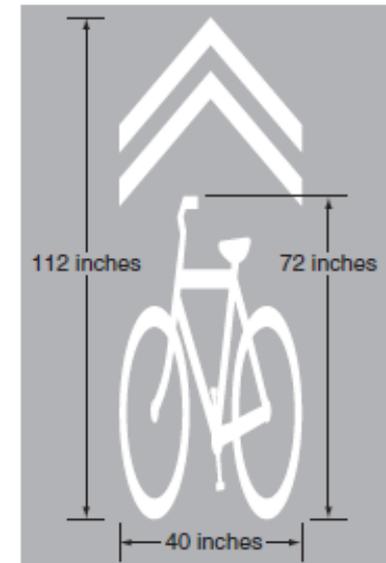


# Recommendations

## Sharrows

2. Creswell Avenue from Stoner to Ockley as a sharrow bike type facility for north and south bound movement. This was the addition to the plan as per comments received in the public meeting as well as the online communications.
3. Ockley Drive from Gilbert to Line Avenue as a sharrow bike type facility for east and west bound movement. The original proposal called for a single bike lane. The consensus of opinion from the public hearing and online comments requested this to be considered as a sharrow facility.

Figure 9C-9. Shared Lane Marking

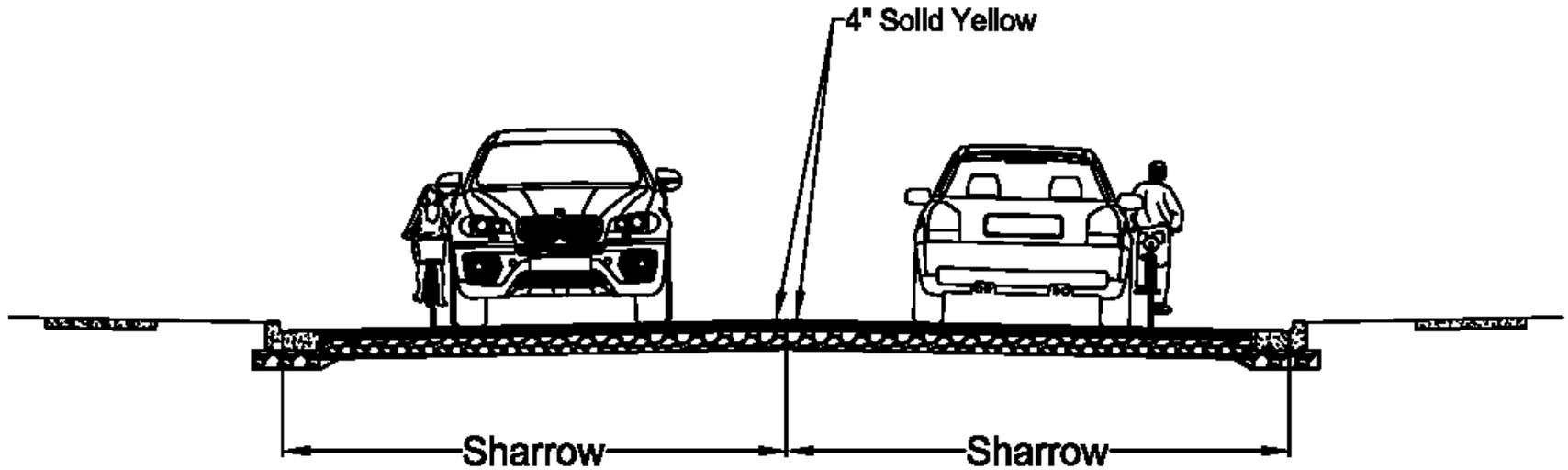


Striping in accordance to the Manual of Uniform Traffic Control Devices (MUTCD)



# Recommendation 2

## Creswell Avenue - Sharrow

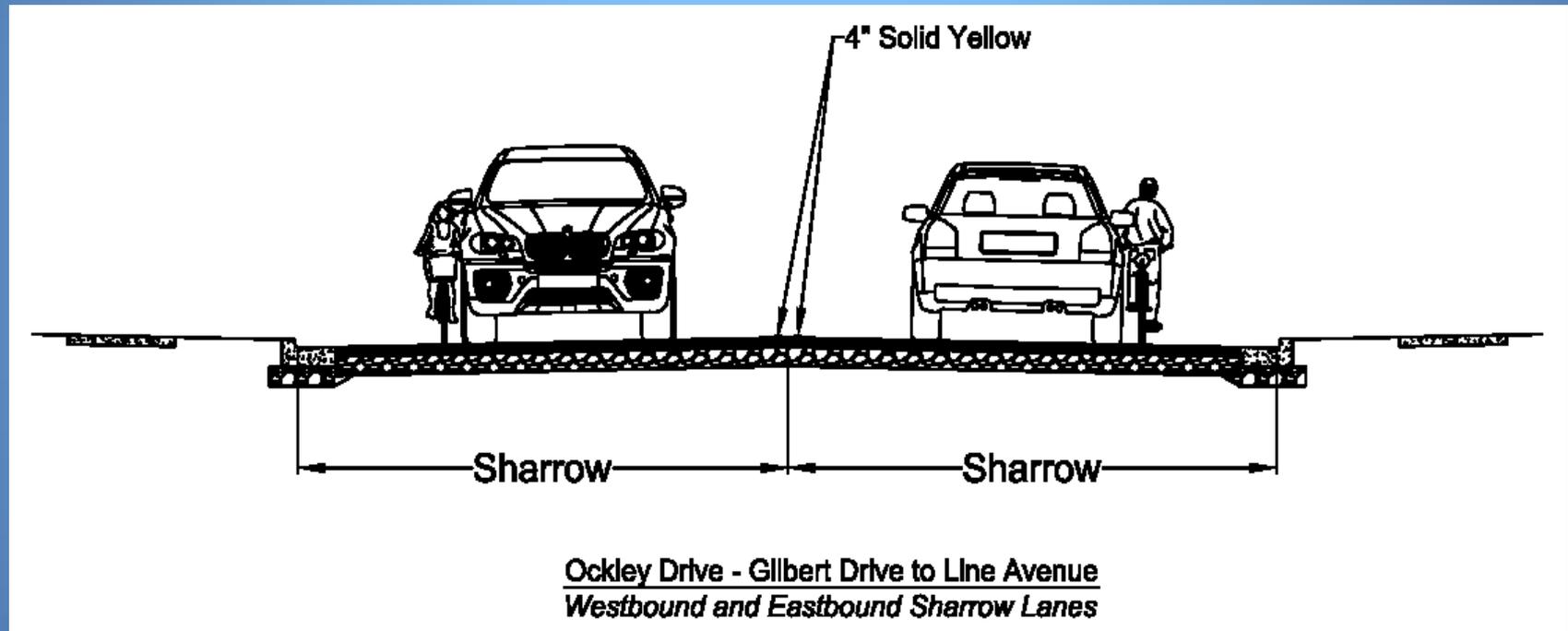


Creswell Avenue - Stoner Avenue to Ockley Drive  
*Northbound and Southbound Sharrow Lanes*



# Recommendation 3

## Ockley Drive - Sharrow



# Recommendations

## Elimination from Consideration

4. Centenary Avenue as a dedicated bike type facility due to no interconnecting bike type facility at the current time. Once other facilities are provided in the future, then reconsideration for a bike type facility will be made. This is consistent with the comments received at the public hearing and from comments on the online suggestions.
5. Fairfield Avenue from Pierremont to Jordan for use as a bike type facility due to the use of only one bike lane and insufficient roadway width for two bike lanes. This is consistent with the comments received at the public hearing and from comments on the online suggestions



# Discussion

Thanks for your attention!!

