

# Rural Road Standards

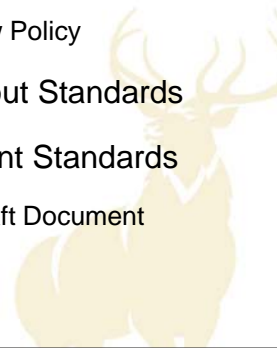
Workshop #5

Tuesday, March 20<sup>th</sup>, 2007



## Workshop Agenda

- Feedback Loop
  - Area signage comments from Council
- Rural Road Improvement Policy
  - Traffic Counts
  - Key Components of New Policy
- Traffic Circle/Roundabout Standards
- Rural Road Improvement Standards
  - Annotated Outline of Draft Document
- Next Steps





## Feedback Loop

- Area signage to be discussed at conclusion of citywide branding effort



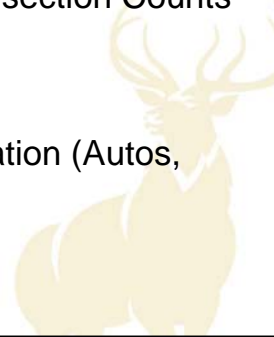
## Rural Road Improvement Policy

- New Traffic Counts Conducted
  - Intersections: March 8th, 13th, 14th
  - Roadways: Occurring 20th and 28th
  - Traditional and Year-round School in Session

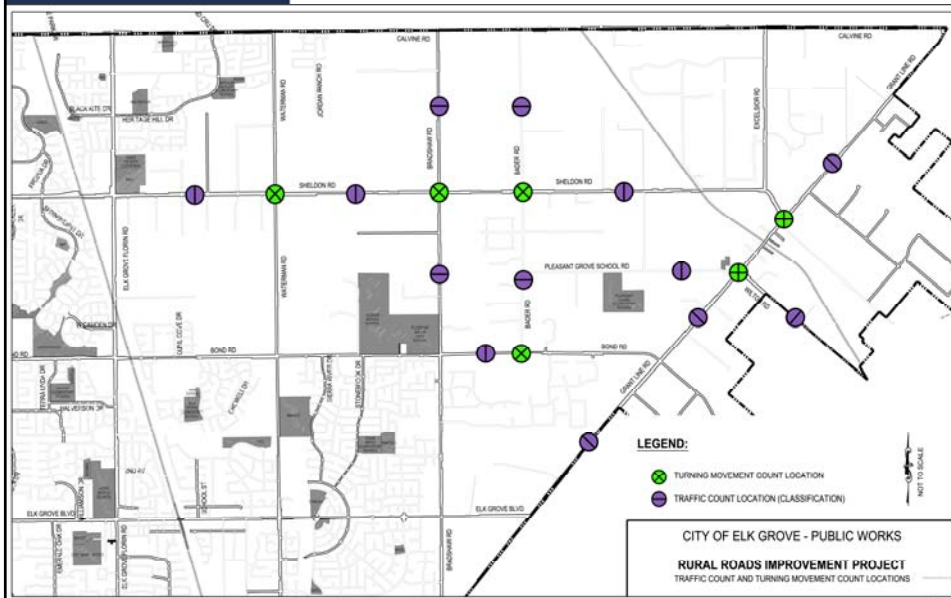


## Rural Road Improvement Policy

- New Traffic Count Data Collection Included...
  - 7 Day Roadway Counts at 13 locations
  - Peak Period Intersection Counts at 6 locations
    - 6:30 to 8:30 AM
    - 4:30 to 6:30 PM
  - Vehicle Classification (Autos, Trucks, Other...)



## Traffic Count Locations





## Rural Road Improvement Policy – Key Components

- Purpose and Intent
  - GP Implementation
  - Value based approach
- Roadway Phasing Concept
  - How it works
  - Phasing of roads/intersections
  - Relationship to standards
- Roadway Phasing Criteria
  - Volume thresholds/service level
  - Safety
  - Tolerance for delay



## Rural Road Improvement Policy – Key Components

- Roadway Phasing Methodology
  - Initial Traffic Counts
  - Traffic Modeling
  - Periodic Traffic Counts
- Roadway Phasing Process
  - Identification of Need
  - Consideration of Phasing Options
  - Public Process
  - Analysis and Determination

## Traffic Circles vs. Roundabouts

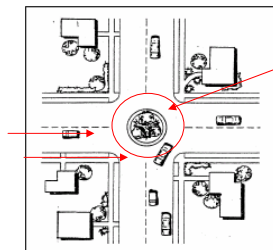


- **Traffic Circles** typically fit within the existing curb line and are used as a traffic calming device at intersections



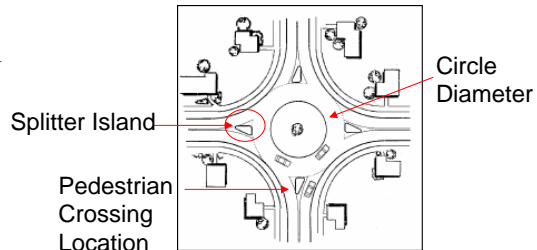
- **Roundabouts** are much larger and are used to allocate right-of-way for competing movements

### Traffic Circle



- Used at lower volume unsignalized single-lane intersections
- Can be controlled with stop or yield signs
- Diameters range from 10 – 30 feet
- Circulatory speed is usually <15 mph
- Larger vehicles may turn left in front

### Roundabout



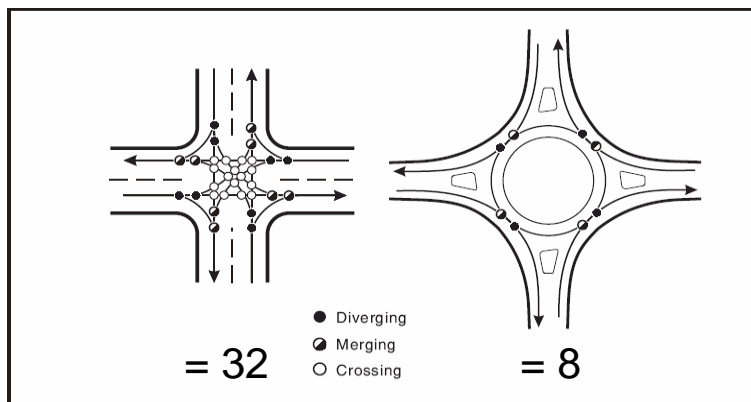
- An alternative to all-way stops or traffic signals at higher volume intersections
- 2-4 lane cross section roadways
- Yield control used at each approach
- Diameters range from 45 - 130 feet
- Circulatory speed of 20 mph

## Key Considerations for Roundabouts

- Relatively balanced volumes on each approach
- Peak hour circulatory flows < than 1,200 vehicles/hour
- Daily approach volumes < 20,000 ADT
- Typically requires more right-of-way
- Roundabouts present trade-offs for pedestrians and visually impaired
- Maintenance costs are less than a traffic signal
- Construction costs may be similar due to rising traffic signal equipment costs

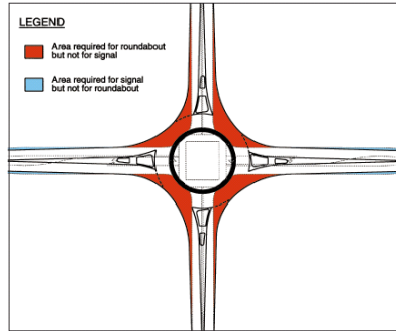


### Reduction in Vehicle Conflicts

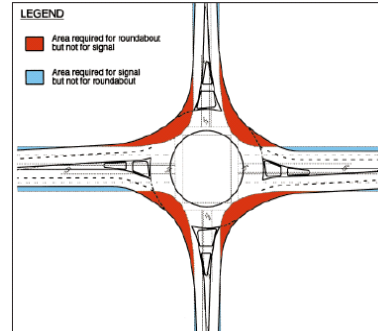


Source: *Roundabouts: An Informational Guide* FHWA, 2000

## ROW Requirements

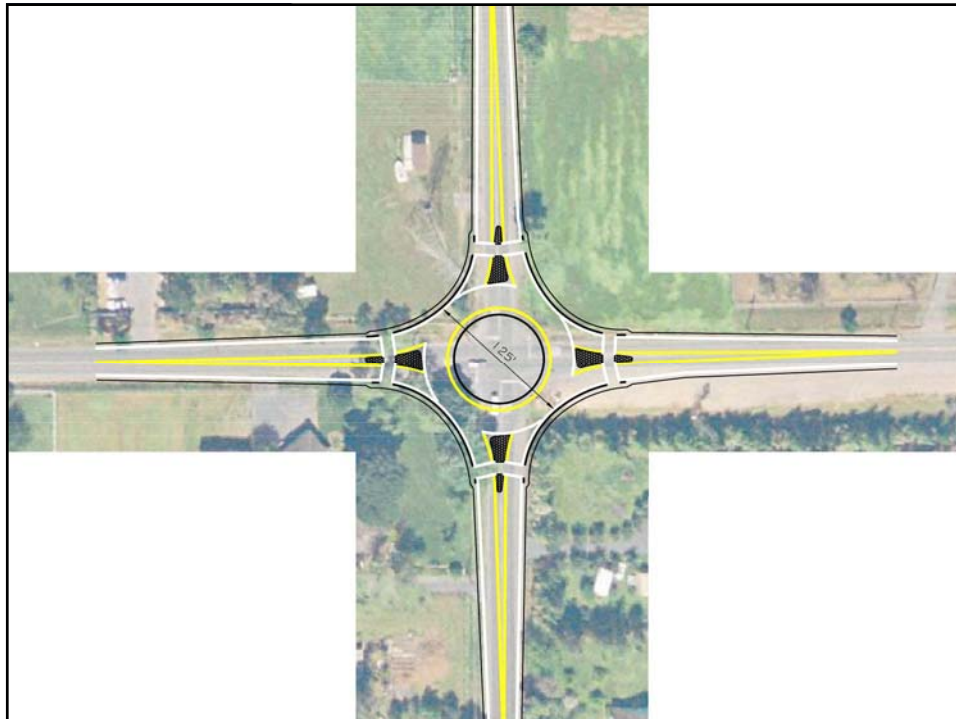


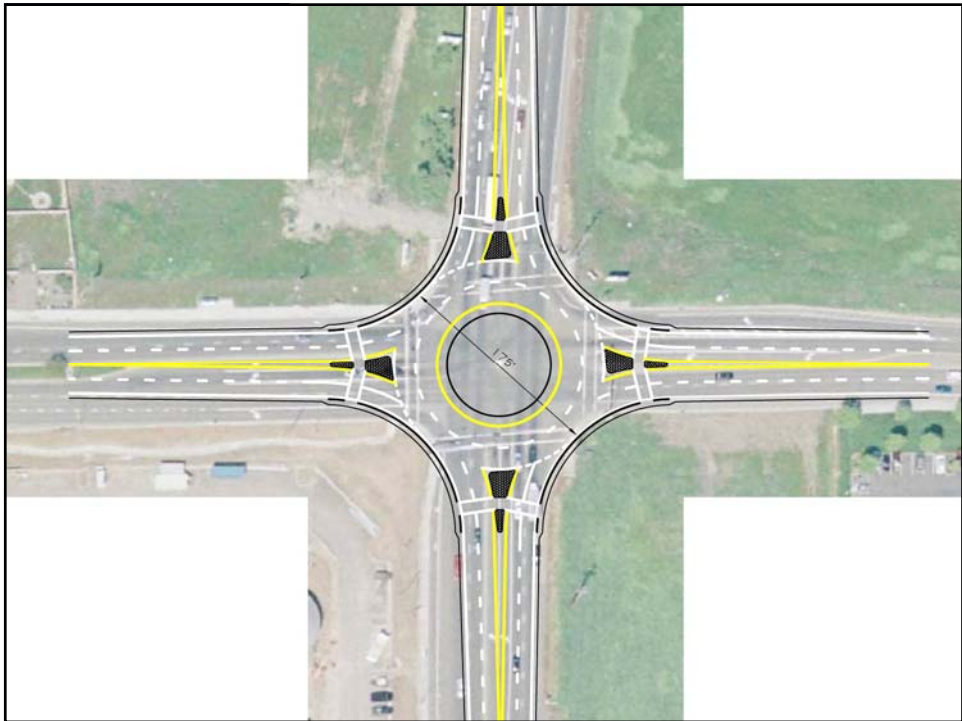
Area required for Urban Single-lane Roundabout vs. comparable signalized intersection



Area required for Urban Double-lane Roundabout vs. comparable signalized intersection

Source: *Roundabouts: An Informational Guide* FHWA, 2000





## Rural Road Improvement Standards

- Annotated Outline - listing points of agreement and identifying outstanding issues



## Rural Road Improvement Standards Draft Outline

- Purpose and Applicability
- Definitions
- General Requirements
- Street Design
- Intersection Design
- Street Light Design
- Utilities
- Signage
- Storm Drain Design
- Noise Attenuation Design Options





## Next Steps

- Completed 5 Workshops
- Propose 3 Additional Workshops
  - Early May
  - Mid June
  - Late July
- Requires PC recommendation and CC approval/adoption
- Continue to access project information on the project website  
[http://www.egplanning.org/rural\\_roads/](http://www.egplanning.org/rural_roads/)

