City of Norman Floodplain Map

Population - 120,000
190 square miles

1/3 Urban
2/3 Rural

800 Miles of Roadway

Legend
- Base_Map.GIS.Flood_2005
- Flood Type
- 100 yr Floodway
- Base_Map.GIS.Parcel
- Base_Map.GIS.City_Boundary

Norman Background

Lindsey St. Reconstruction
• No. 1 rated storm water problem in Norman
• No. 1 traffic congestion corridor in Oklahoma City metropolitan area
• Crash rate is nearly 3 times the national average for similar roadways
• Opportunity to coordinate with I-35/Lindsey Street Interchange Project
Traffic Counts

Lindsey St. Reconstruction

Lindsey Street
Average Daily Traffic Counts

1 inch equals 1,150 feet
0 300 600 1,200 Feet

21,000 Vehicles per Day
(2008)

20,402 Vehicles per Day
(2010)

15,864 Vehicles per Day
(2012)

23,037 Vehicles per Day
(2012)

20,564 Vehicles per Day
(2012)

17,029 Vehicles per Day
(2010)
Crash History

- Data from Norman PD
- 80 Accidents / 27 Injuries per year
- W. Lindsey Crash Rate: 10.3 crashes per MVM
- Oklahoma Crash Rate: 1.8 crashes per MVM
- National Average (6-States): 3.6 crashes per MVM

Crash Types

- 42% of Reported Crashes
- 58% of Reported Crashes
• **West Lindsey Street Widening Conceptual Plan** (Cabbiness/Garver) April 12, 2012
  – Contract Awarded January 26, 2012
  – Purpose was to provide a conceptual design for possible bond election
  – Design charrette was held March 1, 2012
    • 40 stakeholders shared their vision and concerns
    • The results were considered in the final conceptual plan
  – Public meeting March 12, 2012 at Sooner Legends Inns and Suites
    • Stakeholder Feedback
      1. No new R/W
      2. Solve storm water
      3. No center median access control
- Level of Service/Safety Improvements
  - Improve by widening (4 lanes with raised median & U-turns)
  - Access Management for driveways
- Flooding Problems
  - Proposed Stormwater Diversion System running the entire project length and joining the Canadian River
- Multimodal Corridor
  - Sidewalks, Bike lanes and Bus stops with shelters, exclusive bus pullouts
- Common Utility Trench
Lindsey St. Reconstruction

- October 5, 2012 - The Request for Proposals was advertised
- December 18, 2012 – Council approved the design contract with the team of Benham and Poe and Associates
June 26-28, 2013 the University of Oklahoma Institute for Quality Communities (IQC) invited Mr. Dan Burden to discuss project enhancements with the community

I. Ideas included:
   - Continuous center median (triple canopy)
   - Roundabouts at key intersections
   - Future development of an “Urban Village”
   - On street parking
   - Enhancements to accommodate pedestrian and bicycle traffic
   - Aesthetic enhancements
   - Livable, walkable Lindsey Street
- 2 vehicular travel lanes with 12 foot lanes and auxiliary lanes
- 6-foot bike lanes
- 9-foot Auxiliary lanes (could be used for bus pull outs or egress/ingress)
- Total distance curb to curb - 67 feet (same paving as current cross section)
- Road fits within the 100 foot ROW (roundabouts may require additional ROW)
Lindsey St. Reconstruction

Traffic Volumes
- Existing 2013 Peak Hour = 2175 vph
- Future 2036 Peak Hour = 3380 vph

- **Existing Traffic Operations**
  - Capacity = LOS A
  - Overall Delay = 6.1 seconds/vehicle
  - Maximum Queue Length = 200 feet

- **Future Traffic Operations**
  - Capacity = LOS B
  - Delay = 7.2 seconds/vehicle
  - Maximum Queue Length = 250 feet

- **Existing Traffic Operations**
  - Capacity = LOS B
  - Overall Delay = 17.0 seconds/vehicle
  - Maximum Queue Length = 135 feet

- **Future Traffic Operations**
  - Capacity = LOS E
  - Delay = 72.2 seconds/vehicle
  - Maximum Queue Length = 1355 feet
Property owners submitted request for raised center medians

**Pros**
- On schedule
- Within budget limits
- Provides multiple IQC proposals
- Improves traffic safety
- Improves traffic capacity
- Improves aesthetics
- Acknowledges property owner interest

**Cons**
- No modern roundabouts
- Possible stakeholder resistance (reduced access)
- Additional City maintenance cost
July 22-25, 2013 the IQC invited Mr. Burden back for further development of enhancements

Meetings included
- Technical sessions with City staff and project team
- Stakeholder meetings
- Meetings with community leaders
- Final public presentation

Common Ground
- Increase traffic capacity
- Reduce driveways
- Triple canopy
- Minimum 6-foot planter strip on edge
- Drought tolerant landscaping
- Maximize project aesthetics
- Colorized bike lanes
- Current/future transit opportunities
- Full ADA compliance
- LED Street lights
- Wayfinding signage
- Minimum 5-foot sidewalk

Major recommendations
- Continuous center median with mid block u turns
- Modern Roundabouts at Murphy Street, Wylie Road, Berry Road
University of Oklahoma Input

- New Bridge over Imhoff Creek With Aesthetic Details
# Lindsey Street Reconstruction

- **Estimated Construction Cost**
  - $26.8 Million Roadway and Box Construction
    - $14 Million in Federal Funding
    - $12.8 Million in City of Norman Funding
      - From the 2012 Bond Election to finance the local share of eight transportation/storm water improvement projects
  - $10.2 Million spent to Date on Utility Relocation, ROW and Box Construction

# ODOT I-35 Construction

- $70 Million

**Total Construction Costs - $107 Million**
Permitted u-turn at an intersection

Permitted u-turn at mid-block
Lindsey St. Reconstruction

Construction Progress
Construction Progress

Lindsey St. Reconstruction
Questions & Answers