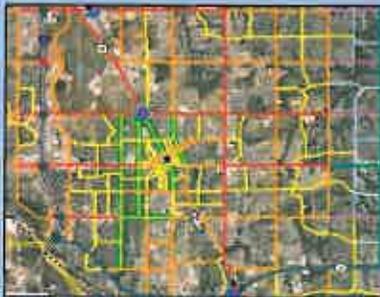




2014 City of Norman

*Moving Forward*

# DRAFT CTP APPENDICES



In Association with:  
Alliance Transportation Group  
Garver

Draft: May 13, 2014  
Ordinance No.: XXX-XXXX-XX

## Appendix A: Public Involvement in Developing the Norman CTP

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## Norman Community Transportation Survey

During November and December of 2011, the city retained ETC Institute to conduct a survey of citizen opinions of transportation programs and services. The citizen input confirmed the impetus for the development of the city's first Comprehensive Transportation Plan. **A copy of the report is available on the City's website.** Major findings for the survey included:

- **Satisfaction:** The highest levels of satisfaction with transportation issues, based upon the combined percentage of "very satisfied" and "satisfied" responses among residents who had an opinion, were the ease of traveling from home to work or school (64%), the ease of traveling from home to parks and recreation facilities (62%), the ease of traveling from Norman to other cities in Oklahoma (62%) and the flow of traffic at non—peak times (62%).
- **Dissatisfaction:** Several issues were rated by respondents as "very" or "somewhat dissatisfied" by half or nearly half of those responding. Those issues were east/west travel in Norman, traffic calming devices, availability of "off street" shared use paths, availability of "on street" bicycle lanes, the availability of public parking in downtown Norman and Campus Corner, and the flow of traffic on area streets during rush hour.
- **Level of Support for Various Transportation Improvements:** The highest levels of support for transportation improvements were; 1) improving traffic and eliminating bottlenecks and congestion (89%), 2) improving the maintenance of existing roadways and bridges (88%), and 3) improving major roads around the outer edges of Norman (81%).
- **Sections of Roads that are Most Problematic and Resident Willingness to Fund Change:** From a list of ten sections of roads that are too congested or have high accident rates, the top three chosen by residents were; 1) Porter Avenue (Alameda to Robinson), 2) Robinson Street between 24th Avenue NW and 36th Ave. NW, and 3) Lindsey Street (West of Berry Road). Willingness to Fund Change: If funding were provided for their top three choices, 80% were either "extremely likely" or "somewhat likely" to vote in favor of a bond issue to address a solution.
- **Transit in Norman:** The top three barriers to use of transit in Norman are 1) just a preference to drive, 2) unavailable service, and 3) current bus service takes too long to get to destination.
- **Bike Riding in Norman:** Thirty-three percent (33%) of those surveyed have ridden a bike in Norman in the last year, and the majority (57%) did not feel safe on streets in the area where they live.
- **Walking in Norman:** Eighty-five percent (85%) of those surveyed have walked in the area where they live, and the majority (81%) feel very or somewhat safe.
- **Budgeting Transportation Dollars:** Residents were instructed to divide \$100 into the various needs for transportation. Thirty-eight dollars or 38% was allotted to maintaining existing roads, 16% went to widening existing streets, and 10% went to bike paths and lanes. Sidewalks, public bus service, and transportation for seniors and disabled each got 9% , passenger rail got 7%, and 2% was allocated to other.
- **Support for Funding a New North/South Roadway:** This roadway would run along the railroad corridor from North Flood Street to Downtown, to the OU Campus. Twenty-one percent (21%) of those surveyed were "extremely likely" to support the funding, 32% were "somewhat likely", 23% were "neutral", 13% were "somewhat unlikely" and 11% were "extremely unlikely" to support funding.

## Citizens Visioning Committee

A Citizens Visioning Committee (CVC) was convened by the Mayor and City Council to provide direct input in the formative stages of the Plan development. As part of the information gathering during the formative stages of the Plan, the Citizens Survey (described previously) was conducted. With this input and that of the CVC, the guiding principles and a set of draft goals were developed to initiate the development of the Plan.

For the development of the (CTP) vision and goals, the CVC was comprised of the following community representatives:

- Chris Applegate (Red Earth Group, Sierra Club),
- Roger Brown (Norman Public Schools),
- Teresa Capps (Chair--Social and Voluntary Services Commission),
- Nick Hathaway (OU Vice President for Administration and Finance),
- Harold Heiple (Norman Developer's Council),
- Marion Hutchison (ONTRAC Board),
- Doug Myers (Director--CART),
- Chris Nanny (Chair--CART Disability Advisory Committee),
- Janice Oak (Progressive Independence),
- Renee O'Leary (United Way--Senior Council/Positive Aging Influence),
- Helen Robertson (Representative--Bicycle Advisory Committee),
- Tom Sherman (Chair--Chamber Transportation Committee),
- Joe Sparks (Chair--Norman Convention and Visitor's Bureau),
- Walt Strong (Administrator--Westheimer Airport),
- Chuck Thompson (Chair--Central OK Regional Advocacy Alliance),
- Larry Walker (Chair--Public Art Board),
- Brad Worster (Commercial Realtor/Norman Next).

During the visioning stage of the preparations for development of the CTP, the City and the CVC also received some technical assistance and guidance from Lochner, an engineering firm that develops plans and designs for transportation infrastructure. Lochner helped to frame up the plan's goals and objectives and develop a scope of work for the retention of an experienced consulting firm to be retained to work with the city to develop the CTP.

## Citizens Visioning Committee Subcommittees

After the formation of the guiding principles, draft goals and strategies, the CVC membership was enhanced with additional members to provide input and feedback to the Plan development team. The CVC membership was divided into groups to focus on four modal elements for direct involvement and input into the development of the Plan. The four CVC subcommittees were:

Note: (CVC) beside the person's name indicates original membership in the CVC that contributed to the formation of the initial project guiding principles, goals and strategies and helped to formulate the scope of the plan development effort. From that initial set of CVC members, additional members were added to assist with input and feedback to the project development team of city staff and consultants, and were grouped into subcommittees.

### CVC Subcommittee: Automobile Capacity, Quality of Service and Parking

Joe Sparks (CVC), Co-Chair	Robin Allen	Chuck Thompson
Bill Nations	Bill Nations	Suzanne Mcauley
Rainey Powell	Stephen Koranda	
Jim Adair	Charlie Nicholson	

### CVC Subcommittee: Pedestrian and Bicycle Mobility, Safety and Streetscape

Chris Applegate (CVC), Co-Chair	Gary Miller	Mark Nanny
Brad Worster (CVC), Co-Chair	David Huddleston	Larry Walker (CVC)
Evan Dunn	John High	Roger Brown (CVC)
Jennifer Newell	Marguerite Larson	Renee O'Leary (CVC)

### CVC Subcommittee: Transit Capacity and Quality of Service

Doug Myers (CVC), Chair	Cody Ponder	Mary Albert
Tom Sherman (CVC), Co-Chair	Karleen Smith	Teresa Capps (CVC)
Rachel Butler	Linda Shannon	Marion Hutchison (CVC)
Chris Nanny (CVC)	Richard McKown	Evan Stair

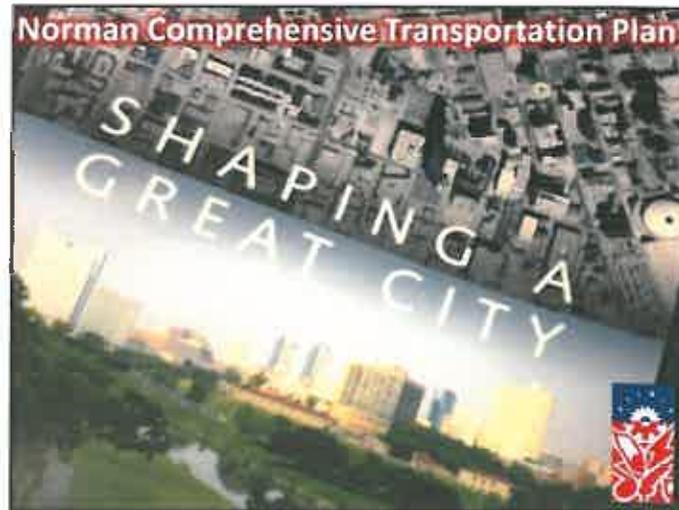
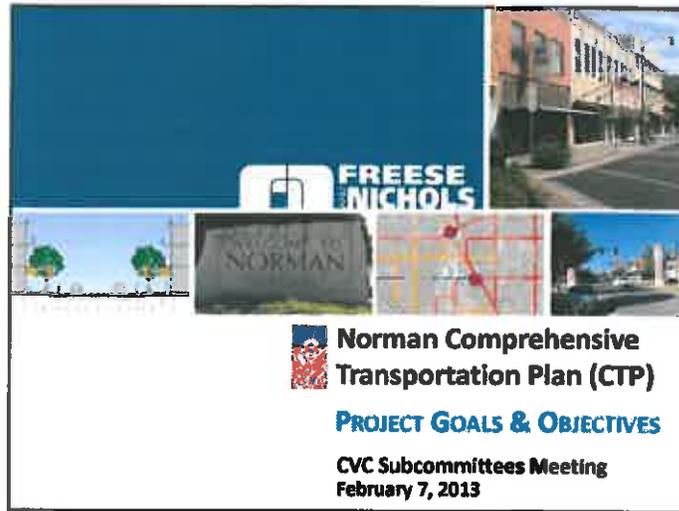
### CVC Subcommittee: Freight Movement, Airports and Emergency Response

Walt Strong (CVC), Co-Chair	Dr. John Dyer	Joe Lester
Nick Hathaway (CVC), Co-Chair	Harold Heiple (CVC)	Eddie Simms
Jim Bailey	Joe Sober	Harold Brooks
	Rick Nagel	

The CVC Subcommittees met with the plan development team five times throughout the process, helping to refine the goals and develop a set of objectives for the Plan, affirm the identification of the existing transportation conditions, discuss and prioritize the transportation system and policy needs for Norman, provide feedback on potential system improvements.

## Sub-Committee Meeting #1: February 7, 2013

Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013



Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

Agenda

- 6:00PM** • Review of Previous Efforts
  - CTP Sub-Committees & Operations
  - Project Overview
- 6:30PM** • Sub-Committee Work Session
  - Discuss Plan Goals and Objectives
  - Discuss Existing Conditions
  - Homework Assignment
- 7:05PM** • Goals & Objectives Work Groups
  - Refine the 5 Goals and Enhance Objectives
  - Presentations to the Group
- 7:50PM** • Summary and Next Steps

Benefits of Transportation Planning

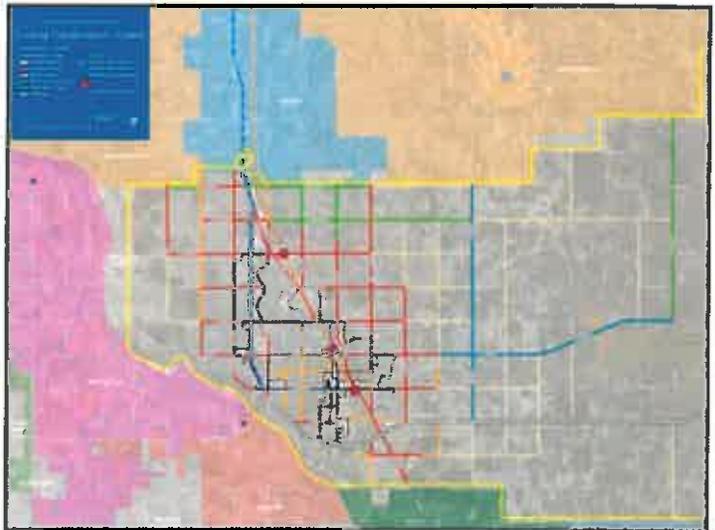
- Framework for growth
- Land Use/transportation interface
- Multi-modal considerations
- System Alignments/ROW Preservation/Design Standards
- Coordination with other agency/city plans
- Infrastructure and utilities coordination
- Capital Improvements Programming
- Funding of Improvements
- Economic benefit
- Statement of Community Policy



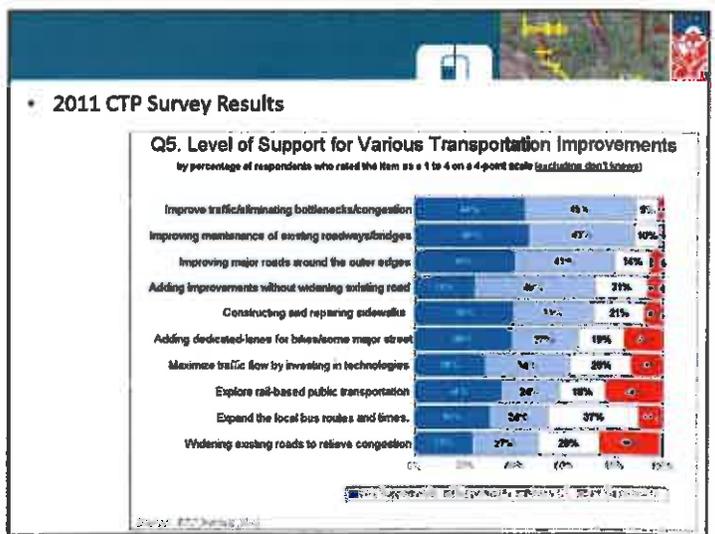
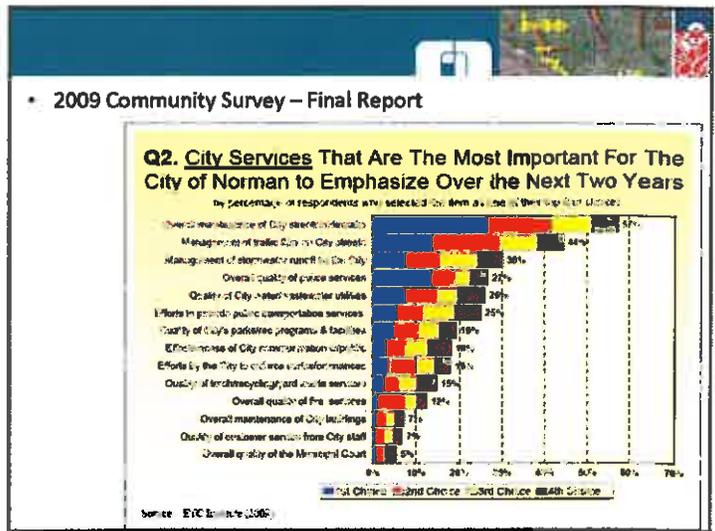
Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

Benefits of Transportation Planning

- Informed Public
- Increased Mobility, Options and Safety
- Facilitate Growth and Development
- Community Connectivity
- Sensitivity to Land Planning



Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols, Inc.  
 February 7, 2013



Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols, Inc.  
 February 7, 2013

Previous Work Efforts

**“MOVING FORWARD” Deliverables**

- Scoping and Listening Phase conducted in 2011 and completed in early 2012
- Included numerous meetings, formation of a Citizens Vision Committee, and a Public Survey
- The deliverables at completion of the scoping phase were:
  - A scope of work which was inserted directly into the Request for Proposal for the full CTP
  - Guiding Principles which were adopted by Council at its meeting on February 14, 2012

**CTP Guiding Principles and Goals**

**Special Place to Live**

- Vibrant human communities in 1055
- Transportation and infrastructure focus on both people and places
- Enhance pedestrian, bicycle, and accessibility
- Create a unique place with lasting value
- Blend seamlessly with the character of Norman's neighborhoods, employment centers and activity centers

**Mobility**

- Seamless system of transportation options and solutions
- Norman Moving Forward's emphasis on system management and operations, contact services and complete street designs
- Range of accessible and convenient, multi-modal transportation choices that provide connections between neighborhoods and destinations

**Maintainability and Environmental Impact**

- Priority on maintenance, rehabilitation, safety and reconstruction
- Neighborhood stability through maintaining streets, sidewalks, utilities, storm water systems and other infrastructure facilities
- Investments balance transportation needs of the community and local neighborhoods

**Local Sustainability**

- Provide a detailed roadmap of actions for transportation and infrastructure improvements
- Investments maximize the benefits for multiple user groups in a way that is fiscally and environmentally responsible
- Input from the community on large and ongoing dialogue with stakeholders

**Have a Economic Vitality**

- Promotes economic growth while using resources in an efficient and effective manner
- Supports a diverse, vibrant local economy with a strong tax base
- Reduces the fiscal burden on residents to provide city services

Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

CTP Subcommittees & Operations

Subcommittees

- **Modal Systems Based**
  - Autos and Parking
  - Transit
  - Pedestrian, Bike and Streetscape
  - Freight, Airport, Emergency Response
- **Meeting Structure**
  - Same place, concurrent
  - Opening collaborative session
  - Independent group work
  - Combined wrap-up session
- **Social Media**



CTP Subcommittees & Operations

Subcommittees

- **Meeting Dates**
  - SC#1 Feb. 7<sup>th</sup>: Goals/Objectives
  - SC#2 Feb 18<sup>th</sup>: Existing Conditions & Needs
  - SC#3 Mar. 25<sup>th</sup>: Improvement Concepts
  - SC#4 Apr. 25<sup>th</sup>: Assess Potential Projects
  - SC#5 May 23<sup>rd</sup>: Policies and Programs
- **Time and Location**
- **Subcommittee Charter**
  - Meetings, attendance and participation
  - Homework, Preparation for meetings
- **Ambassadors to the Plan**



**Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013**

### The Planning Team

**Freese and Nichols**

- General Project Coordinator
- System Planning for Roadway, Mass & Ped
- Management of Smart Growth and Open Space
- Transportation Policies and Programs
- Implementation Plan
- Plan Dissemination
- Consult Committee and Public Meetings



**Garver**

- Sub-Committee Team Leader
- Assessment of Existing Systems
- Needs Assessment for Roadways
- Evaluation of Transportation System Improvements



**Alliance Transportation Group**

- Sub-Committee Team Leader
- Travel Forecast Modeling and Alternatives Testing
- Transit System Planning



### Team Leaders



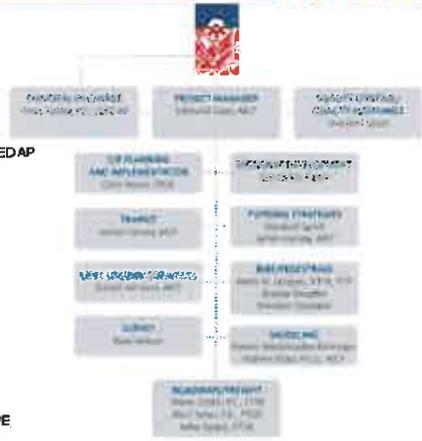
**Principle-in-Charge**  
Teresa Hiteley, PE, LEEDAP



**Project Manager**  
Ester Hsiao, AUCP



**Owner/Representative**  
Kevin St. Jacques, PE  
PTOE, PTP





**Existing Conditions**  
Stacy Smith, PE, CFM

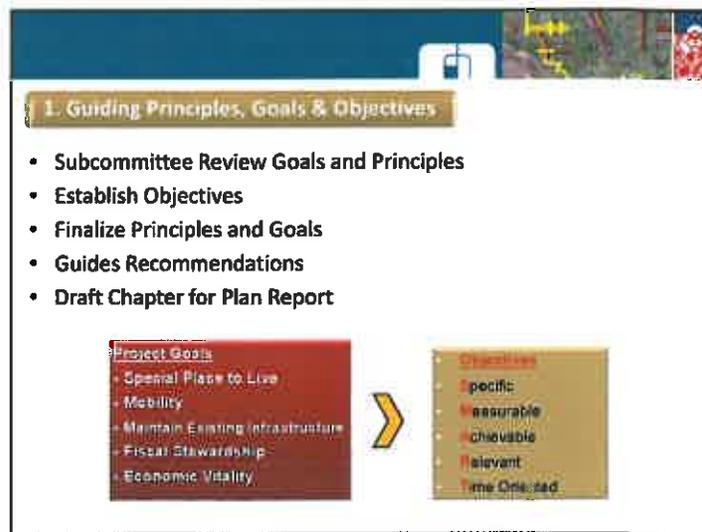
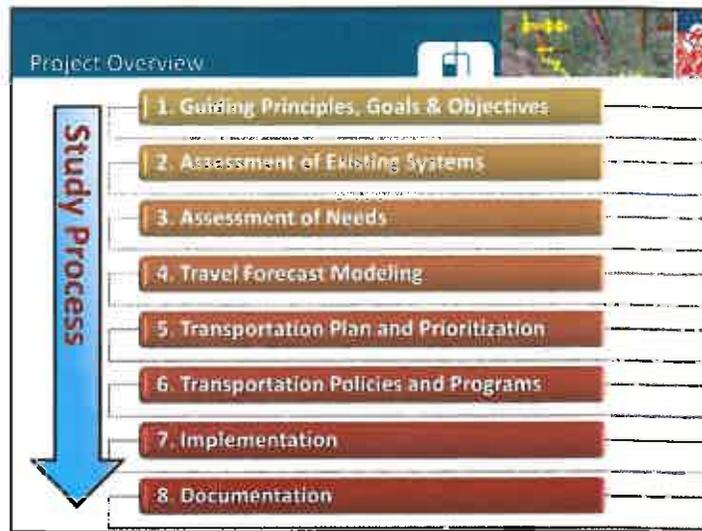


**Roadway/Freight**  
Robbway Freight  
Nico Traw, PE, PTOE



**TDM Modeling**  
Andrea Weckmuetter  
Behringer, CTA

Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols, Inc.  
 February 7, 2013



Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols, Inc.  
 February 7, 2013

2. Assessment of Existing Systems

- Summarize Existing Plans
- Data Collection & Compilation
- Review Trends, Committed Improvements, Programs and Initiatives
- Analysis of Existing Conditions
- Assessment of Deficiencies
- Key Deliverable
  - Draft Chapter on Existing Conditions

**Systems Evaluation**

- Auto
- Truck
- Bus Transit
- Passenger Rail
- Aviation
- Pedestrian
- Bicycle
- Parking
- Major Street/Highway
- Traffic Signal System
- Crash Locations
- Maintenance

3. Assessment of Transportation Needs

- Initial System Needs Assessment
- Develop Initial Strategies
- Subcommittee: Formulate Concepts
- Refine Needs and Concepts
- Review Needs & Concepts with Commissions, Committees and Council
- Open House: Plan Process, Existing Conditions and Needs Assessment
- Key Deliverable
  - Draft Chapter on Transportation Needs Assessment

**Systems Needs**

- Auto
- Truck
- Bus Transit
- Passenger Rail
- Aviation
- Pedestrian
- Bicycle
- Parking
- Major Street/Highway
- Traffic Signal System
- Crash Locations
- Maintenance

Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

**4. Travel Forecast Modeling**

- Review/Update ACOG Regional TDM for Land Use and Network
- Validate Base Year Model for Norman Traffic Volumes
- Assess "No-Build" 2035 Operations
- 2035 Model for New Roadway and Congestion Mitigation Needs
- Collaborate with City Staff on 2035 FLUP
- Transit System Analysis
- Key Deliverable
  - Base and 2035 Subarea Model



**5. Transportation Plan and Prioritization**

- Transportation Plan and Improvements
  - Subcommittee Collaboration
- Street Classifications and Configuration
- Modal System Plans
- Short and Long-Range Improvements
  - Subcommittee Collaboration
- CIP Methodology, Scoring & Ranking of Short and Long-Range Projects
  - Subcommittee Collaboration
  - Review w/Commissions, Committees & Council
  - Social Media Outreach
- Key Deliverable
  - System Plans, Short/Long-Range CIP, Chapter Materials



**Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013**

**6. Transportation Policies and Programs**

- Review Existing Policies & Programs
- Peer City Review
- Develop Action Plans to Address Programs
  - City Staff and Subcommittee Collaboration
- Implementation Strategies, Roles and Responsibilities
- Subcommittee Concurrence
- Draft Policies
  - Review with Commissions, Committees and Council
  - Social Media Outreach
- Key Deliverable
  - Draft Chapter on Policies, Programs & Procedures

**Policies and Programs**

- Multimodal Integration
- Metropolitan Finance
- Traffic Impacts
- Livability
- Traffic Calming
- Lane Management
- Parking

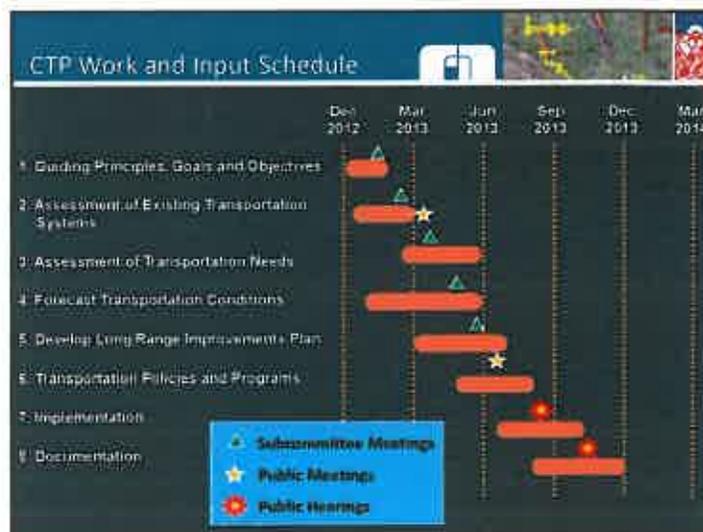
**7. Implementation**

- Review Transportation Revenues & Constraints
- Correlate Revenues and Prioritized Improvements
- Finance Plan for Short/Long-Range CIP
- Assess Potential New Funding Strategies
  - Collaborate with City Staff and CVC
  - Social Media on Implementation Plan
- Committee/Council Meeting on Improvements and Funding Strategies
- Develop 5-Year TIP
  - Review with Committees and Commissions
  - Public Hearing on Draft TIP
- Key Deliverable
  - Implementation Strategies, Funding, Draft TIP

**Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013**

**8. Documentation**

- Draft Report
- Public Review Period
- Draft Final Document
  - Review with Committees and Commissions
  - Public Hearing on Plan Document
- Final Report

**Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013**

**Goals Expansion with Objectives**

**1. Guiding Principle: A Special Place to Live**  
*A vibrant Norman community in 2035 will be achieved by ensuring transportation and infrastructure investments focus on both people and places. These investments should enhance transportation choices and accessibility, and also create a unique place with lasting value that blends seamlessly with the character and vision of Norman's neighborhoods, employment centers and activity centers.*

Original	Refined
<p><b>Goal #1.1:</b> Provide a transportation system with a variety and balance of transportation choices that are designed compatible with their surroundings.</p> <p><b>Goal #1.2:</b> Invest in street improvements for section line roads and arterial streets in core Norman where compatible with the character of the area.</p> <p><b>Goal #1.3:</b> Provide transportation investments that help preserve the character of the central core of Norman including Downtown, OU, and surrounding neighborhood.</p> <p><b>Goal #1.4:</b> Invest in a transportation network that supports quality of life amenities attractive to talented employees and visitors in today's highly mobile, knowledge driven economy.</p>	<p><b>Goal #1 (Special Place to Live):</b> Provide a transportation system with a variety and balance of transportation choices that are designed to be compatible with their surroundings.</p> <p><b>Objective S1:</b> Invest in street improvements for section line roads and arterial streets in core Norman where compatible with the character of the area.</p> <p><b>Objective S2:</b> Provide transportation investments that help preserve the character of the central core of Norman including Downtown, OU, and surrounding neighborhoods.</p> <p><b>Objective S3:</b> Invest in a transportation network that supports quality of life amenities attractive to talented employees and visitors in today's highly mobile, knowledge driven economy.</p>

**Goals & Objectives Refinement**

**1. Guiding Principle: A Special Place to Live**  
*A vibrant Norman community in 2035 will be achieved by ensuring transportation and infrastructure investments focus on both people and places. These investments should enhance transportation choices and accessibility, and also create a unique place with lasting value that blends seamlessly with the character and vision of Norman's neighborhoods, employment centers and activity centers.*

**Goal #1 (A Special Place to Live):** Provide a transportation system planned and designed with people and places in mind, and provided with characteristics to support activities compatible with their surroundings.

**Objective S1:** Adopt policies, programs, practices and standards that provide sufficient and context sensitive coordination into the planning, project funding, design and operations of transportation facilities in Norman.

**Objective S2:** Institute departmental purchase and procedures to generate transportation and land use planning in an effort to encourage appropriate land use patterns, determine needed future design and roadway improvements in Norman, and/or from future mobility M3.

**Objective S4:** Provide transportation investments that help preserve the character, and enhance the quality of life and amenities of the central core of Norman including Downtown, OU, and surrounding neighborhoods.

**Objective S5:** Invest in transportation investments to maintain the benefits of railroad corridors and more through Norman. (BROADEN OUR ROAD STRATEGIES)

**Objective S6:** Invest in a transportation infrastructure to support quality of life amenities attractive to talented employees and visitors in today's highly mobile, knowledge driven economy. (IMPLE, ALL FROM THE LOCAL AND CORPORATE SERVICE)

Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols, Inc.  
 February 7, 2013

**Sub-Committee Work Session**

**6:30-7:00 PM**

- Team building for Subcommittees
- Discuss the developed goals/objectives
- Review Collaboration Procedures
- Discuss conditions issues & concerns
- Assign Homework

**Guiding Principles and Goals**

- Special Place to Live
- Quality
- Maintain and Preserve Existing Infrastructure
- Local Stewardship
- Enhance Economic Vitality

**Work Groups for Refinement of Goals and Objectives**

**7:05-7:50 PM**

- Team building for larger CVC
- Five work groups, one for each Goal
- Review & understand Goals
- Refine and enhance Objectives
- Record work product
- Report back to Main Group

**Guiding Principles and Goals**

- Special Place to Live
- Quality
- Maintain and Preserve Existing Infrastructure
- Local Stewardship
- Enhance Economic Vitality

Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

Wrap Up

**7:50-8:00PM**

- Final Comments
- Homework
- Next Steps



Next Steps:

- Compilation of tonight's input into Goals and Objectives
- Draft Goals & Objectives Chapter post on e-Builder
- Subcommittee members review and comment
- After Subcommittee review, post on website, Facebook
- Next Meeting: February 18 @ 6:00 PM, here
- Prepare for next meeting:
  - Review Existing Conditions Chapter on e-Builder
  - Bring information on issues to be considered



Norman CTP Sub-Committee Meeting #1  
Freese and Nichols, Inc.  
February 7, 2013

Homework

- E-Builder Collaboration site
- E-mail from: Morgan McIlwain Subject: Norman CTP (Page 3 of Guide)
- Below Signature, click "HERE"
- User form/Contact Info/Password
- Link to file in "Workflow in Your Court"
- After completion: "Action Completed"; ability to add Comment
- Vote for Assignment Done

 **Builder**

- e-Builder Guide
- Save e-builder homepage to "Favorites"

Thank You!  
For your Time and  
Commitment!



## Sub-Committee Meeting #1 Flip Chart Notes: February 7, 2013

Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols  
 Flip Chart Notes from February 7, 2013

MAINTAIN AND PRESERVE EXISTING INFRASTRUCTURE COY

Maintain / lack of maintenance to existing pedestrian  
 more frequent evaluation of existing facilities  
 effective citizen reporting system/management  
     ↳ city action line  
     ↳ phone app.  
 multi-modal ~~through~~ detours during construction

Separate Objectives for:

- Core Norman
  - = walkability
  - = crossable streets
  - = bikeable
- Rural Norman
  - = safety for bicyclists blind corners @ intersections
  - = trails
  - = approach corridors (Alameda, Hwy 9)
- Suburban (beyond core)
- Downtown?



Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols  
 Flip Chart Notes from February 7, 2013



*Enhance  
improve*

**3. Guiding Principle: Maintain and Preserve Existing Infrastructure**

*pedestrians, bicyclists, transit, etc.*

*To Comprehensive*  
**Objective 3.1.** Design, operate and manage the transportation system to maintain the quality of mobility and enhance transportation safety for those traveling in and living within Norman.

**Objective 3.2.** Implement transportation performance measures to forecast, evaluate, and monitor the degree to which the transportation system investments accomplish community goals and mobility objectives.

**Objective 3.3.** Strive to limit impacts of project implementation upon the health of businesses and neighborhoods during construction.

**Objective 3.4/3.5.** Manage, reduce and avoid roadway congestion through operational improvements, targeted capacity enhancements, and promotion of making trips by transit.

*Did we get what we wanted?  
Did we meet goals?*

*to further describe the goal and better define than*  
*add the detail to the overall goal*

*Accessibility*  
*arterials east + west key to traversing city*

*P1 - involve law enforcement in Design + Operation*  
*P1 - system defined by individual modes and entities*  
*marked bike lanes, debris control, deteriorating pavement*



**2. Guiding Principle: Mobility**

**Objective M.1.** Invest in timely street improvements for a network of section line roads in the area beyond the core of Norman that support the effective movement of vehicles around rather than through the central core of Norman, while accommodating bicyclists and pedestrians as appropriate.

**Objective M.2.** Invest in improvements to arterial and collector street network and parking provisions in the core of Norman that support the balanced mobility of pedestrians, bicyclists and vehicles.

**Objective M.3.** Invest in proactive transit improvements that serve the central core of Norman at a high level of service while serving targeted areas of the city of Norman and providing connectivity to regional transit services with the intent to provide viable options to the personal vehicle.

**Objective M.4/M.5.** Manage, reduce and avoid roadway congestion through operational improvements, targeted capacity enhancements, and promotion of making trips by transit.

**Objective M.6.** Serve as leaders in regional transit discussions.

*Consider complete streets policy for all roadway project*  
*Create a*  
*wide bicycle and pedestrian links network*  
*not necessarily connected to roadways.*

Norman CTP Sub-Committee Meeting #1  
 Freese and Nichols  
 Flip Chart Notes from February 7, 2013



**5. Guiding Principle: Enhance Economic Vitality**

Goal #5: Optimize the use of local, state, and federal funds for transportation and increase the economic public return on investment in transportation infrastructure and operations.

*Handwritten notes:* Goal #5: Optimize the use of local, state, and federal funds for transportation and increase the economic public return on investment in transportation infrastructure and operations.

**Objective E1.** Provide mobility for people who are economically, socially or physically disadvantaged in order to support their full participation in society and contributions to Norman's economic productivity.

**Objective E2.** Establish local and regional public-private partnerships, including state and federal financial resources, to enhance the economic well-being of Norman citizens.

**Objective E3.** Initiate a managed parking system(s) and/or district(s) to support and encourage increased activity within the core of Norman and specifically to address the needs of Downtown, Old Town and the adjacent neighborhoods.

**Objective E4.** Provide for effective trucking, railroad and air freight movement to, from and through Norman while minimizing their impact on the quality of life, specifically in the core of Norman.

**OES.** Support regional & local efforts to develop transit related opportunities to enhance economic vitality.



**4. Guiding Principle: Fiscal Stewardship**

*Handwritten notes:* Multi-Modal, ALL FUNDS Include FEDERAL, STATE, Private, Regional

Goal #4: Optimize the use of local, state, and federal funds for transportation and increase the economic public return on investment in transportation infrastructure and operations.

**Objective F1.** On an ongoing basis, identify and pursue adequate, long term and stable local and regional revenue sources for funding transportation improvement in Norman.

**Objective F2.** On an ongoing basis, integrate state and federal long-range transportation planning factors with local and regional transportation planning to maximize future funding opportunities for surface transportation projects in Norman. *(including maintenance)*

**Objective F3.** On a monthly basis as needed, provide transparency and meaningful public awareness, ongoing citizen input, and participation opportunities to prepare the Norman CTP and its long-term implementation process.

**Objective F4.** On an ongoing basis, plan for and preserve rights-of-way for future transportation investments in advance of economic development.

*Handwritten notes:* Multi-Modal, SAFE, \* Including buses, Pedestrians - bicycles, ADA - SIDE-WALKS - BUS - COMMUTER RAIL - CART ACCESS, FS. Improve grass routes funding projects MAY INCLUDE city matching funds for aesthetics, bike-pa MULTI-MODAL, F6. Consider private/public partnerships, F7. Penny sales for transportation.

## Sub-Committee Meeting #2: February 18, 2013

Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013



**Norman Comprehensive  
Transportation Plan**  
**TRANSPORTATION CONDITIONS**  
**Sub-Committee Meeting**  
February 18, 2013

Agenda:

<b>6:00-6:30</b>	<b>Goals &amp; Objectives Review and Existing Conditions</b>
<b>6:30-6:35</b>	<b>5 Minute Break</b>
<b>6:35-7:30</b>	<b>1 Hour Breakout Sessions</b>
<b>7:30-7:35</b>	<b>5 Minute Break</b>
<b>7:35-7:55</b>	<b>Modal Group Summaries</b>
<b>7:55-8:00</b>	<b>Next Steps</b>

**Meeting Goal:** *Obtain Sub-committee input to transportation system existing conditions.*

Norman CTP  
 Sub-Committee Meeting #2 – Existing Conditions  
 February 18, 2013

Goals & Objectives Review

- Great Meeting Input
- Comments on e-Builder



**1. Guiding Principle: A Special Place to Live**

**Objective 1.1:** Create a sense of place and community through the design and construction of high-quality, walkable, and transit-oriented neighborhoods.

**Objective 1.2:** Encourage the development of a mix of housing types and densities that support a variety of lifestyles and income levels.

**Objective 1.3:** Promote the use of public transit and other modes of transportation that reduce dependence on private automobiles.

**Objective 1.4:** Support the development of vibrant, pedestrian-friendly public spaces and parks that enhance the quality of life and provide opportunities for recreation and social interaction.

Goals & Objectives Review

**2. Guiding Principle: Mobility**

**Objective 2.1:** Create a comprehensive, multi-modal transportation system that provides safe and efficient options for all users.

**Objective 2.2:** Encourage the development of transit-oriented development (TOD) and other transit-supportive land uses that increase transit ridership and reduce automobile dependence.

**Objective 2.3:** Promote the use of public transit and other modes of transportation that reduce dependence on private automobiles.

**Objective 2.4:** Support the development of vibrant, pedestrian-friendly public spaces and parks that enhance the quality of life and provide opportunities for recreation and social interaction.

**3. Guiding Principle: Mobility and Public Space**

**Objective 3.1:** Create a comprehensive, multi-modal transportation system that provides safe and efficient options for all users.

**Objective 3.2:** Encourage the development of transit-oriented development (TOD) and other transit-supportive land uses that increase transit ridership and reduce automobile dependence.

**Objective 3.3:** Promote the use of public transit and other modes of transportation that reduce dependence on private automobiles.

**Objective 3.4:** Support the development of vibrant, pedestrian-friendly public spaces and parks that enhance the quality of life and provide opportunities for recreation and social interaction.

**Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013**

### Goals & Objectives Review

#### 4. Guiding Principle: Fiscal Soundness

**Objective 1:** The City will maintain a balanced budget and ensure that the City's financial health is sound and that the City's financial position is strong.

**Objective 2:** The City will ensure that the City's financial health is sound and that the City's financial position is strong.

**Objective 3:** The City will ensure that the City's financial health is sound and that the City's financial position is strong.

**Objective 4:** The City will ensure that the City's financial health is sound and that the City's financial position is strong.

#### 3. Guiding Principle: Enhance Economic Health

**Objective 1:** The City will ensure that the City's economic health is sound and that the City's economic position is strong.

**Objective 2:** The City will ensure that the City's economic health is sound and that the City's economic position is strong.

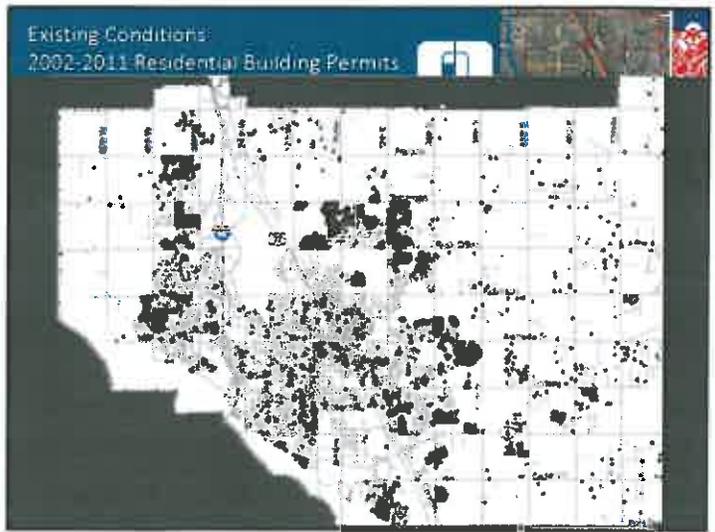
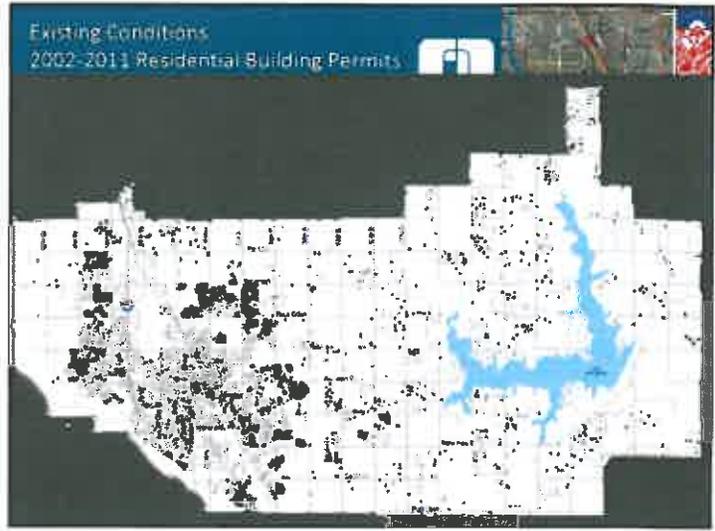
**Objective 3:** The City will ensure that the City's economic health is sound and that the City's economic position is strong.

**Objective 4:** The City will ensure that the City's economic health is sound and that the City's economic position is strong.

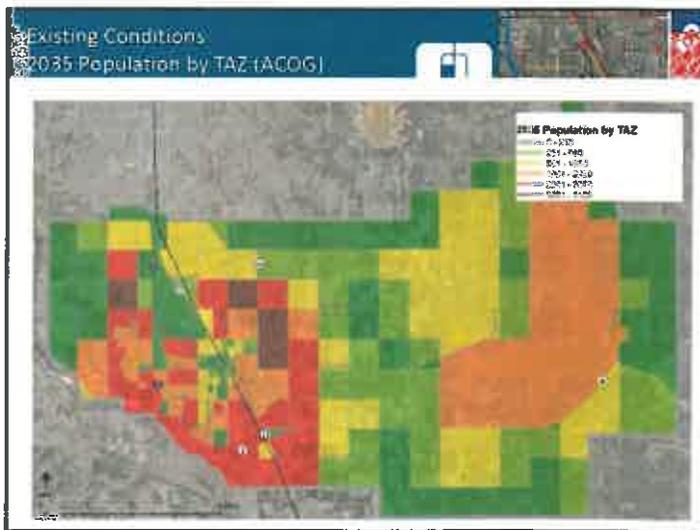
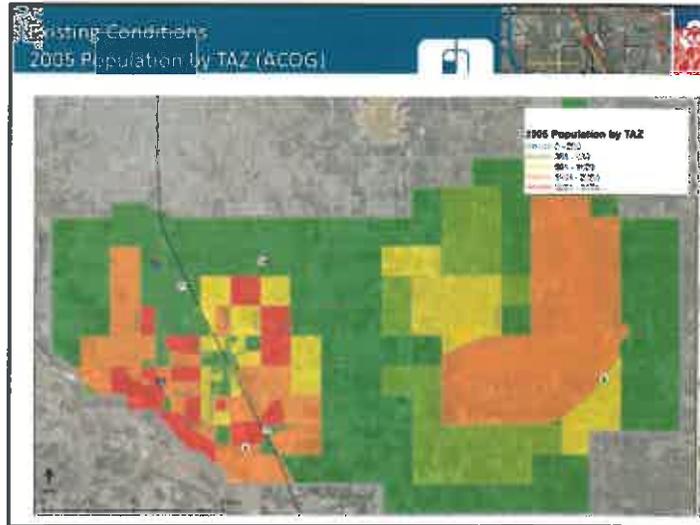
### Existing Conditions Population and Employment

Year	Population	Numeric Change	Percent Change	Year	Employment	Population	Ratio
1950	27,006			1959	56,002		
1960	34,931	7,925	29.0%	1969	76,872		1.88%
1970	57,137	22,206	53.9%	1979	95,730		
1980	68,101	10,964	19.0%	1989	102,298		
1990	80,071	11,970	17.3%	Population Projections			
2000	104,686	24,615	28.9%	Year	2015	2025	ACOG
2010	110,475	5,789	5.6%	2015	118,427	130,132	121,120
				2020	128,626	146,124	137,940
				2025	137,944	156,248	146,174

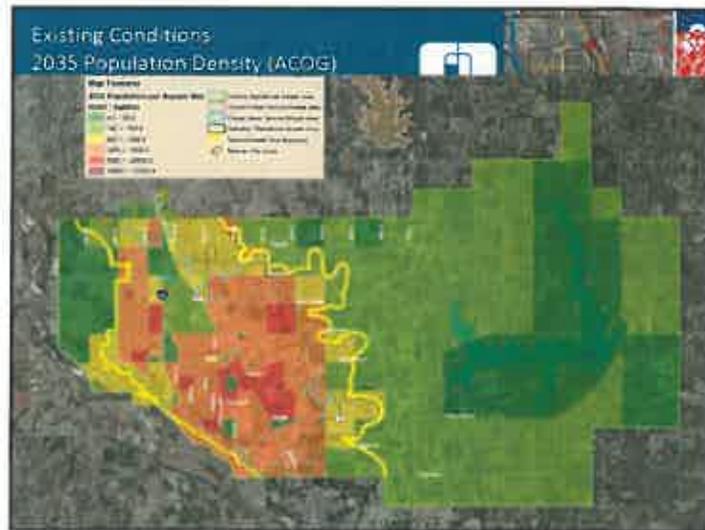
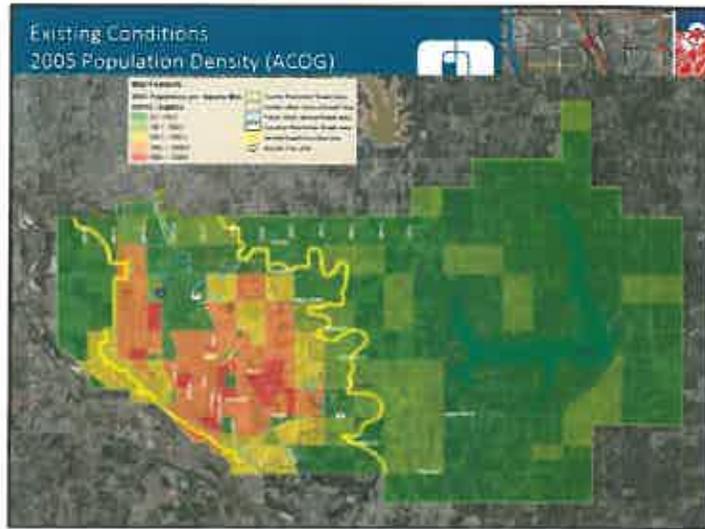
Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013



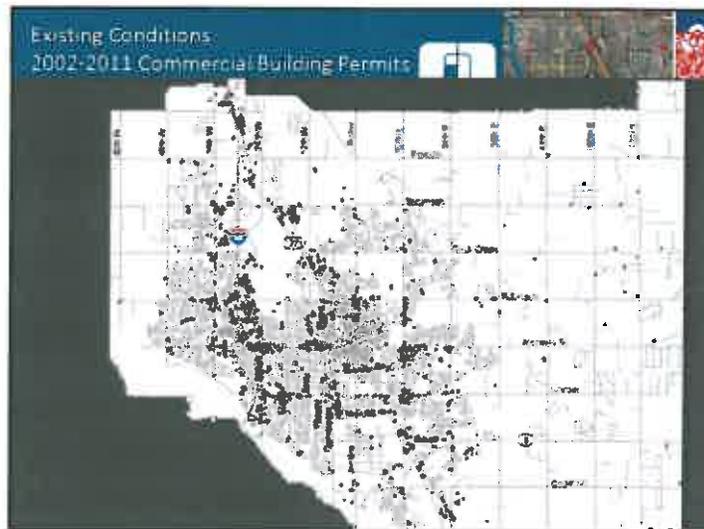
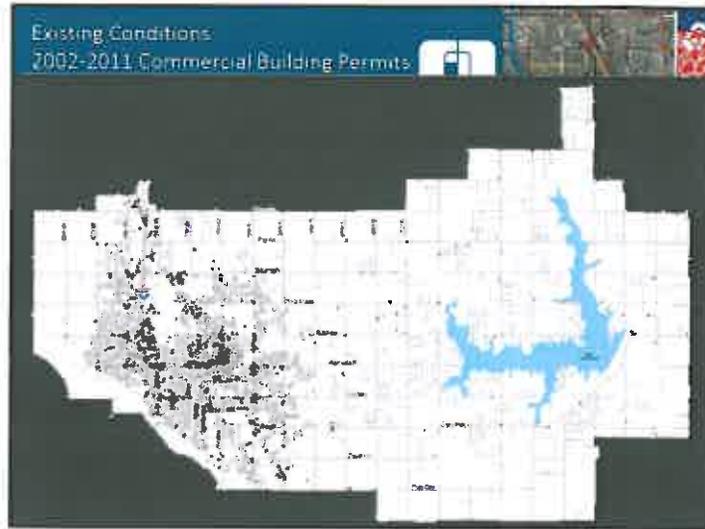
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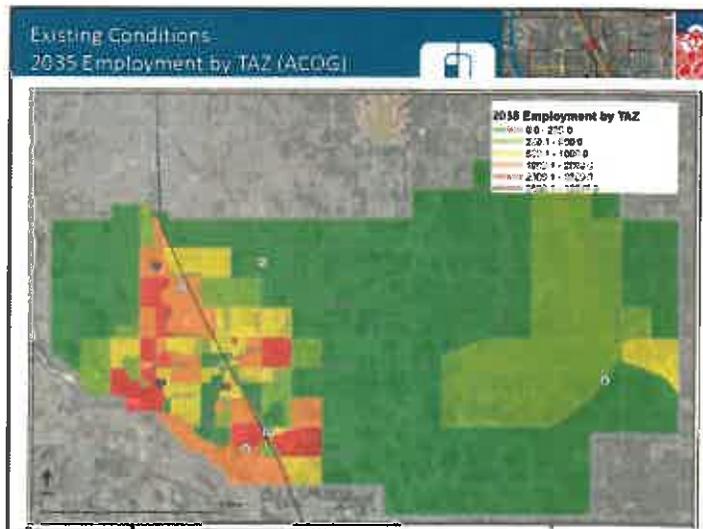
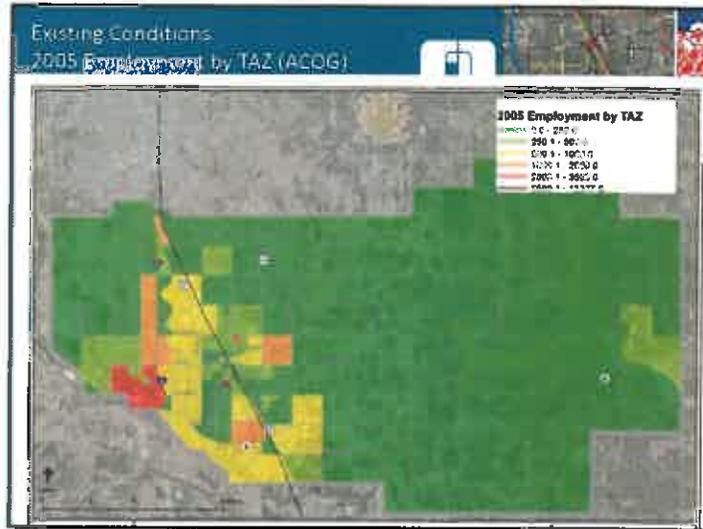
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February 18, 2013



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Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013



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Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013

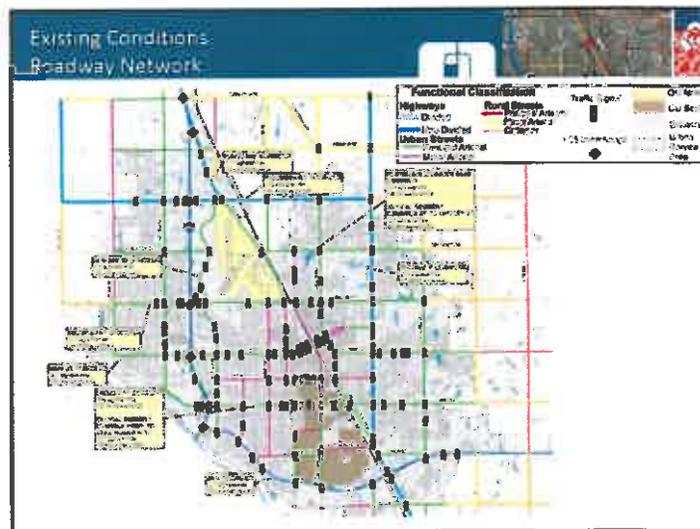




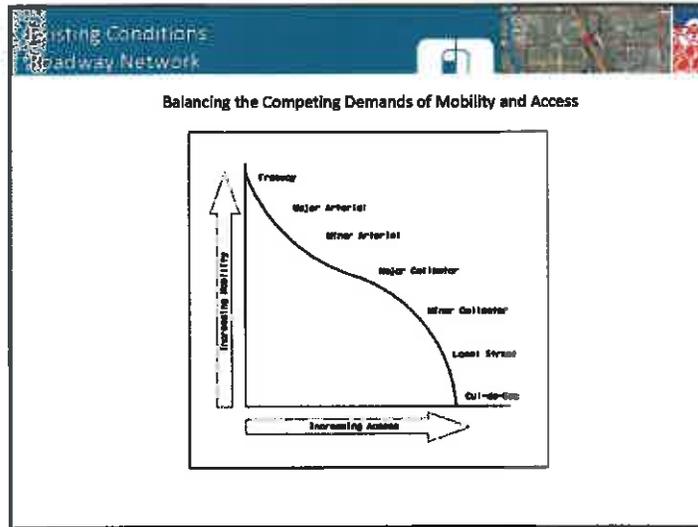
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Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013

Existing Conditions  
Major Topic Areas

- Roadway Network
- Access Management
- Traffic Volumes
- Congestion-Major Corridors
- Roadway Safety
- Parking Inventory
- Freight
- Aviation
- Roadway Inventory & Maintenance
- System Improvements
- Bike & Pedestrian Accommodations
- Transit Service



Norman CTP  
 Sub-Committee Meeting #2 – Existing Conditions  
 February 18, 2013



Existing Conditions  
Access Management

**Existing Impediments**

- Number and spacing of traffic signals
- Inefficient signal timings
- High number of access points
- Lack of turn lanes
- Lack of median presence
- Poor geometrics

Location	Signal	Access	Access	Access	Access	Access
West	2015 - 2016	24	0	24	24	48
	2017 - 2018	22	2	24	26	50
	Total	46	2	48	50	98
Center	2015 - 2016	11	0	11	11	22
	2017 - 2018	10	2	12	14	28
	Total	21	2	23	25	50
East	2015 - 2016	14	0	14	14	28
	2017 - 2018	13	0	13	13	26
	Total	27	0	27	27	54
North	2015 - 2016	13	0	13	13	26
	2017 - 2018	12	0	12	12	24
	Total	25	0	25	25	50
South	2015 - 2016	13	0	13	13	26
	2017 - 2018	12	0	12	12	24
	Total	25	0	25	25	50
Total	2015 - 2016	103	0	103	103	206
	2017 - 2018	99	2	101	105	206
	Total	202	2	204	208	412

Norman CTP  
 Sub-Committee Meeting #2 – Existing Conditions  
 February 18, 2013

Existing Conditions  
 Access Management

Effects of Signals on Traffic

Signals Per Mile	Increase in Travel Time (%)	Crashes Per Million Vehicle Miles Traveled
2	—	8.5
3	9	8.29
4	16	7.48
5	22	6.81
6	29	6.21
7	34	5.66
8	39	5.16

Source: FHWA, Traffic Management Handbook, 1998, Table 4-10, p. 4-17



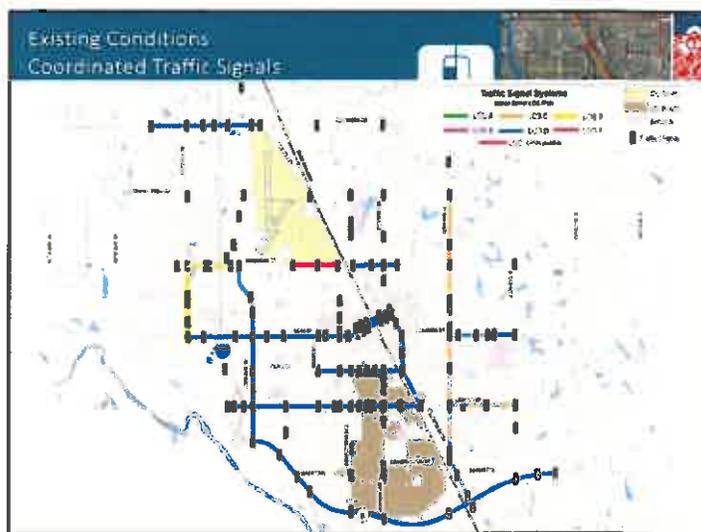
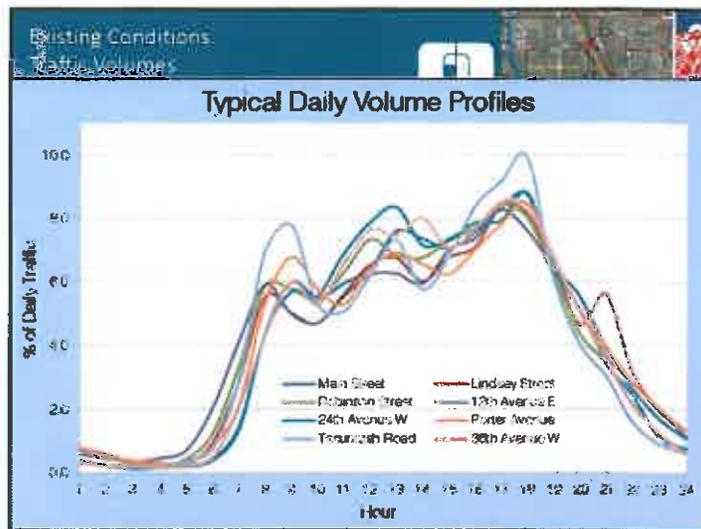
Effects of Access Points on Traffic

Access Points per Mile (Bi-Directional)	Reduction in Free-Flow Speed (mph)	Crash Rate Index
0	0	1.0
20	7.5	1.4
40	5	2.7
60	7.5	3
80 or more	10	3.5

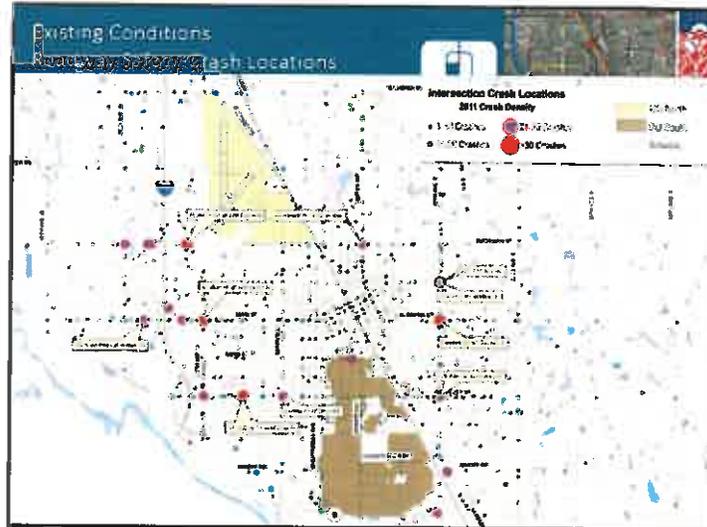
Source: Highway Capacity Manual, 2000, Table 17-10, p. 17-11




Norman CTP  
 Sub-Committee Meeting #2 – Existing Conditions  
 February 18, 2013



**Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013**



Existing Conditions  
Roadway Safety Crash Locations

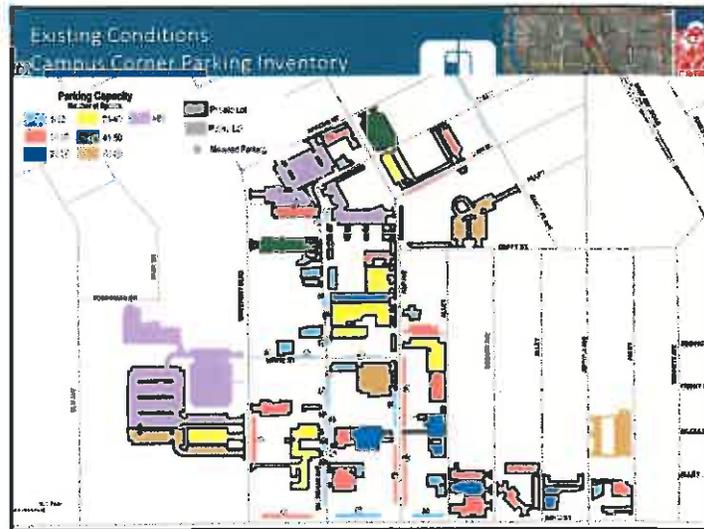
**Most Common Intersection Crash Locations for 2011**

Intersection	Number of Crashes	% Injures	% Rear End	% Angle	% Right Angle	% Other
24th Avenue W at Main Street	57	29%	58%	12%	2%	0%
12th Avenue E at Alameda Street	47	24%	52%	28%	4%	10%
24th Avenue W at Robinson Street	23	18%	43%	33%	10%	14%
Lindsay Street at McGee Street	37	42%	83%	0%	0%	0%
12th Avenue E at Main Street	31	27%	45%	55%	0%	0%

**Corridor Crash Rates (2009-2011)**

Route	Segment	Distance (miles)	Average Segment Volume (vpd)	Average Number of Crashes* (2009-2011)	Average Crash Rate (2009-2011)	State Crash Rate	Ratio
Lindsay Street	West of 24th Ave W to East of Ave Ave	1.8	18,319	260	142	178	8.0
Main Street	Thompson Drive to Midway Blvd.	1.3	28,627	151	82	379	2.1
Robinson Street	Southwest Blvd to 24th Ave W	1.0	50,601	97	151	376	3.3
Tacoma Road	24th Ave W to Pleasant Ave	1.1	14,544	43	78	379	1.8
24th Avenue W	Back Creek Road to 24th St	3.88	18,291	209	85	379	2.8
Rocky Avenue / Cleveland Boulevard	Robinson St to 12th Ave E	2.85	17,329	187	100	378	2.6
12th Avenue E	Back Creek Rd to 24th St	4.85	28,138	372	76	379	2.0
May Road	Midway Blvd to Inhoff Rd	3.0	8,226	104	118	178	6.4

Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013



**Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013**

**Existing Conditions  
Parking Inventory Breakdown**



**Campus Corner**

- Just under 2,000 spaces
- 87% surface
- 13% on-street
- 25% public
- Insufficient parking in the southern portion of the district



**Central Business District**

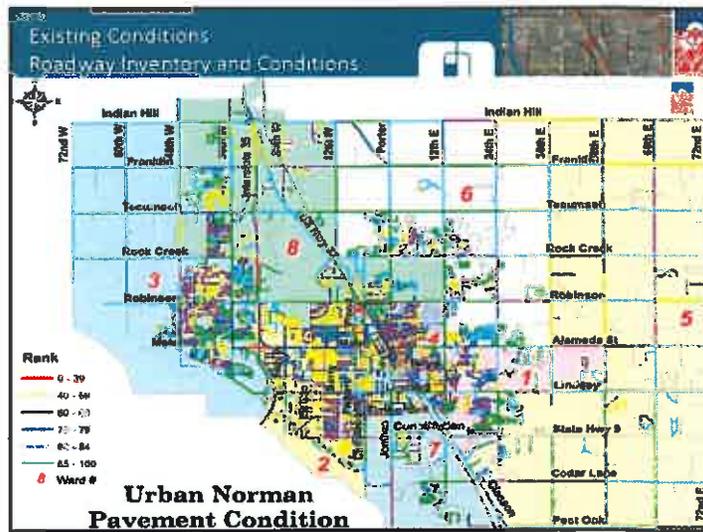
- 4,900 spaces
- 77% surface
- 23% on-street
- 25% public
- Insufficient parking in the eastern portion of the district especially along Main Street

**Existing Conditions  
Freight Operations**

- Rail
  - BNSF “Mid-Con” corridor
  - 50 million tons of freight per year
- Passenger Rail
  - Amtrak’s “Heartland Flyer”
  - Along BNSF Line
  - Service Between Oklahoma City and Fort Worth
  - 84,000 annual ridership
  - On Average 10% originate/destined for Norman. Numbers differ by year (In 2011, 12% originating/destined for Norman)
- Truck Operations
  - Interstate 35 (15% Truck Traffic)
  - SH 9 (6% Truck Traffic)




Norman CTP  
 Sub-Committee Meeting #2 – Existing Conditions  
 February 18, 2013



**Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013**







Norman CTP  
Sub-Committee Meeting #2 – Existing Conditions  
February 18, 2013



**Breakout Session  
(6:35-7:30)**

- Review Existing Conditions
- Discuss Issues
- Discuss Needs
- Input to Needs Assessment



Group Summaries and Next Steps

- **Group Summaries**
  - Automobile Capacity and Parking
  - Pedestrian and Bicycle Mobility, Safety and Streetscape
  - Transit
  - Freight, Airports and Emergency Response
- **Next Steps**
  - Transportation System Needs
  - Homework
  - Q&A

## Sub-Committee Meeting #2 Flip Chart Notes : February 15, 2013

- Honor + Protect zoning around airport <sup>and industrial</sup> to serve freight, rail, + air.
  - Football + Event congestion impedes <sup>emergency</sup> response
    - significant issues at PORTER. Solution - add <sup>long</sup> transit
  - @ Grade rail crossings are an issue for EMS/Resp
    - needed/requested at Tecumseh and Lindsey would give access through town every 2 mile
  - More Infrastructure and wider corridors
  - zoning modifications ~~that~~ allows conflicts with traffic types (passenger/freight)
- VIDEN Berry @ N of 9 b/w Main + Lindsey  
↳ extend Berry to Hwy 9

### PARKING

- CAMPUS CORNER & DOWNTOWN GARAGE
- MONITOR COUNTY GARAGE TALKS <sub>(court)</sub>
- HIGH DENSITY POSSIBLE SOLUTION
- PARKING TRANSPORTATION AUTHORITY
- UPDATE "CARTER BURGESS STUDY"
- CAMPUS CORNER METERS
- - - - -

BUS PARKING IN DT / CC?

- BETWEEN BERRY & FLOOD & PORTER  
 NOT ENOUGH NORTH-SOUTH  
 CAPACITY!  
 SOLUTION? - NEW ROAD  
 OR - WIDEN / REDEVELOP
- PROBLEMS BEING FIXED (LINDSEY, HWY 9,  
 FLOOD, BERRY & PORTER 1-35, MAIN)  
 NEED FIXED
- CONNECTIVITY BETWEEN DOWNTOWN  
 & CAMPUS CORNER
- "TECUMSEH BRIDGE" TO/FROM  
 NEWCASTLE

\* ROBINSON  
 MAIN & BOND  
 STILL ORANGE

Sales tax  
 \* time-limit

Property Tax

Development Fees

Raise farebox

Make it FREE!

Commuter Rail

Limited service hours

Limited frequency

Create a grid system

Local funding source

Regional Transportation Authority

High density → transit options

TIF Value Capture

Fixed Guideway

### NEEDS

- Sidewalk "Bank" - apply funds to immediate needs (install complete later)
- Safety / No bitty during constr.
- Who is responsible for fixing "your" sidewalk?
- No indications where sidewalks end.
- Priorities:
  - schools (SRTS) (w/ within 1/2 mile of school)
  - parks access from neighborhood
  - greenbelt committee has prioritization scheme
- Encouragement
  - no parking need? - make loops for bicycling
  - no traffic issues?
  - enjoyable
- Funding ideas
  - sales tax
  - money for 50/50 match of sidewalks by request

## Sub-Committee Meeting #3: March 25, 2013

Norman CTP  
 Subcommittee Meeting #3 - Needs and Projects  
 March 25, 2013

**Norman Comprehensive  
 Transportation Plan**  
**TRANSPORTATION NEEDS**  
**Sub-Committee Meeting**  
**March 25, 2013**

Agenda	
<b>6:00-6:30</b>	<b>Review Transportation Needs</b>
<b>6:30-6:35</b>	<b>5 Minute Break</b>
<b>6:35-7:30</b>	<b>1 Hour Breakout Sessions</b>
<b>7:30-7:35</b>	<b>5 Minute Break</b>
<b>7:35-7:55</b>	<b>Modal Group Summaries</b>
<b>7:55-8:00</b>	<b>Next Steps</b>
<b>Meeting Goal:</b> <i>Obtain Sub-committee input to transportation system needs and potential projects &amp; programs.</i>	

Norman CTP  
Subcommittee Meeting #3 - Needs and Projects  
March 25, 2013



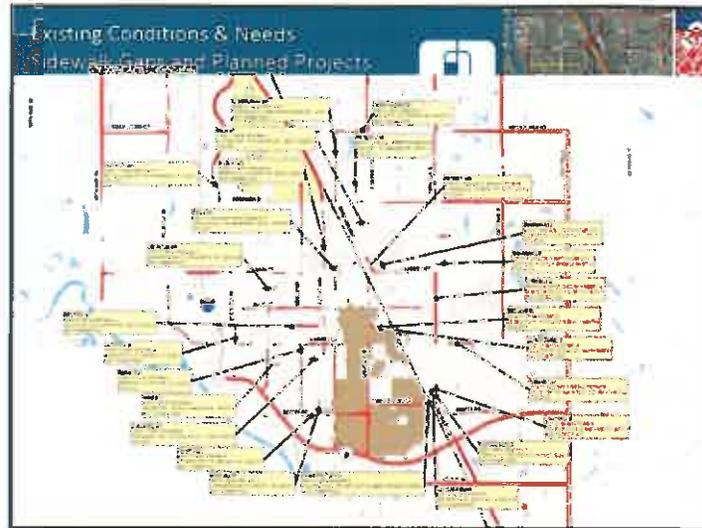
**Norman Comprehensive  
Transportation Plan**  
**TRANSPORTATION NEEDS**  
**Sub-Committee Meeting**  
**March 25, 2013**

Agenda:

<b>6:00-6:30</b>	<b>Review Transportation Needs</b>
<b>6:30-6:35</b>	<b>5 Minute Break</b>
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<b>7:30-7:35</b>	<b>5 Minute Break</b>
<b>7:35-7:55</b>	<b>Modal Group Summaries</b>
<b>7:55-8:00</b>	<b>Next Steps</b>

**Meeting Goal:** *Obtain Sub-committee input to transportation system needs and potential projects & programs.*

**Norman CTP  
Subcommittee Meeting #3 - Needs and Projects  
March 25, 2013**



- Transportation Needs:  
Motor Vehicles & Parking**
- REGIONAL
    - Potential E-W connection: "Tecumseh Bridge" to/from Newcastle
    - In Berry/Flood and Porter corridor, not enough North-South roadway capacity.  
Potential Solutions: New road or widen existing roads
    - Robinson, Main and Boyd not good LOS in ACOG future projection
  - LOCAL
    - Enhanced connectivity and synergy between Downtown and Campus Corner
    - Parking needs: Campus Corner & Downtown off-street (garages)
      - Monitor County garage talks
      - High density development as possible solution
      - update the previous Parking Study
    - Potential need for Parking Transportation Authority
    - Campus Corner parking meters to manage preferred parking spots
    - Bus parking/layover in/near Downtown and Campus Corner

Norman CTP  
Subcommittee Meeting #3 - Needs and Projects  
March 25, 2013

Transportation Needs:  
Bicyclists, Pedestrians, Streetscape

- Lots of gaps in sidewalks - Need mechanism to close gaps in higher use areas.
- Subdivisions occur in scattered remote areas and get waivers from having to put in the sidewalks along the collectors/arterials. Potential solution: Sidewalk Bank.
- Better safety/mobility/warnings for pedestrians at gaps & during construction.
- Public information/clarification about responsibilities for fixing "your" sidewalk
- Have done lots of planning for bicycles and pedestrians, need to establish priorities to implement (Safe Routes to Schools/Transit, Access to Parks, etc)
- Need to provide encouragement for walking and bicycling:
  - Promotion of health benefits of walking and bicycling
  - Enhanced aesthetics of streets. Sidewalks away from back of curb.
  - More and better parking for bicyclists
  - Increase cost of parking for cars
  - Enhance bicycle provisions on street, such as bike boulevards, bike lanes, etc.
  - Create area interest "loops" for bicycling.
- Funding ideas: dedicated budget item, 50/50 cost sharing, sidewalk bank

Transportation Needs:  
Transit

- Enhance currently limited service hours
- Increase currently limited service frequency of individual routes
- Expand to more of a grid system
- Support a Regional Transportation Authority
- Promote development of the regional commuter rail system
- Support higher density development, increasing transit efficiency and options
- Consider Value Capture (TIF) for potential commuter rail stations to enhance and advance funding for transit supportive station area development
- Funding will be a severe limitation. Need to dedicate a local funding source
- Potential funding strategies:
  - Sales tax (time limited), Property tax, Development fees, Student fees, Farebox fees
- Make service free (temporary or permanent) to promote usage

Norman CTP  
 Subcommittee Meeting #3 - Needs and Projects  
 March 25, 2013

**Transportation Needs:  
 Freight, Airports & Emergency**

- Honor and protect zoning around airport and industrial districts to serve freight, rail and air transportation needs
- Football and special event congestion impedes emergency response. Significant issues at Porter. Potential solution – additional or designated lane infrastructure
- At-grade railroad crossings are an issue for EMS/first responders. Undercrossings at Tecumseh and Lindsey would give grade separated east-west access through town every 2 miles
- Overall, need more infrastructure and wider corridors
- Zoning modifications allow conflicts with traffic types (passenger/freight)
- Widen Berry @ between Main and Lindsey; extend Berry to Hwy 9

**Transportation Needs  
 Draft Chapter**

- Highlights elements from Current Conditions and Trends appendix
- References the materials in the appendix
- Incorporates the Needs input from Subcommittee meeting #2
- Sets the stage for identification of projects and programs



Norman CTP  
Subcommittee Meeting #3 - Needs and Projects  
March 25, 2013



**Breakout Session  
(6:35-7:30)**

- Review Identified Needs
- Discuss and Refine Needs
- Discuss Potential Actions
- Discuss Priorities



Group Summaries and Next Steps

- **Group Summaries**
  - Project Concepts
  - Program Concepts
  - Prioritization Criteria
  - Short Range Plan Outline
- **Next Steps**
  - Modal System Plans
  - Homework
  - Q&A

## LINDSEY

### BERRY TO ELM

- THREE LANE ENTIRE PORTION
- THE CURRENT BOND PROJECT GOES THRU THE BRIDGE EAST OF BERRY
- EAST BOUND AT INTERSECTION OF LINDSEY AND BERRY - RIGHT LANE SHOULD BE RIGHT TURN ONLY.
- LEAVE BIKE LANES IN THE STA T

### Internal/External Connections

Tecumseh to I44 - bridge expensive

36<sup>th</sup> E to I240 - coord. w/ neighbors to preserve ROW

Sooner - dto. ↗

60<sup>th</sup> W to I240 - already on neighbor's plan

Sooner - as I35 reliever route

36<sup>th</sup> E - can guide traffic from E to I240 w/o having to grow through Norman

## Internal connections

Strategies to manage access and facilitate E to downtown 'back door access'

- \* avoid similar issues now constricting exist. streets; i.e Lindsey
- \* need better coord. w/ Land Use

\* no interest in paying for bridge to Newcastle

- \* Commuter Rail over HOV but needs supportive infrastructure i.e. parking

S 60<sup>th</sup> W - why spend \$ in flood zone

\* Desired station locations:

near SH 9 - capture traffic from E + S; new development: Apartments, Section 8 H

Lindsey - stop on OU property; OU funding special event station

Downtown - connection to Amtrak & Buses

near Teaneseh - for University North Park development

∴ Preference to not put more \$ into street improvements (such as under/overpasses) but instead invest into other modes

### ELM TO JENKINS

- ▶ PEOPLE WOULD NOT BE ABLE TO VIEW THE CAMPUS WHILE IN A TUNNEL.
- ▶ COST TOO HIGH!
- ▶ MORE BENEFIT TO THE UNIVERSITY THAN CITY
- ▶ PEDESTRIAN BRIDGE WOULD BE MORE APPROPRIATE - WOULD HAVE TO DETOUR PED. TRAFFIC BY CROSSING THE STREET AT GROUND LEVEL.

## RR UNDERPASS

- STORM WATER COULD BE AN ISSUE. - LOW POINT LARGE BASIN FLOWS TO THIS AREA.
- COST WILL BE HIGH
- BENEFITS THE UNIVERSITY MORE THAN CITY.
- IS THERE ENOUGH OF A CONFLICT TO JUSTIFY IT.

## University to Main St

- BL's on University Blvd
- Crossover on Apache (Sharrows)
- BL's on Webster Ave.
- 10 foot travel lanes
- 4 to 5 foot bike lanes
- 8 foot wide sidewalks both sides on University and Webster to Main St
- Confer with BUS operations for operating in 10' lanes on Webster
- Delivery truck mobility on Webster/Asp

## Main / Gray Couplet

- Reduce to 2 lanes each
- Options for using the 12' width
  - wider sidewalk (one or both sides)
  - buffer between lanes and parking
  - bike lanes
- Option to change to Back-in angled parking along right-hand side
- Need to accommodate Re-wheeler trucks, turn
- Need to get Downtown business buy-in
- Assure ample capacity for future

Project	Estimate	Phase		
		2017	2018	2019
1 Embury St	2.4			
2				
3				
4 Main St	4.5			
5 Gray St	4.5			
6				
7				
8 James Corner	1.5			
9				
10				
11				
12				
13				
14				
15				
16				

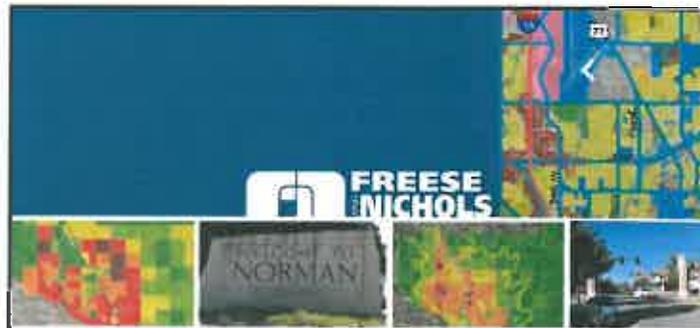
*Notes:*  
 1. Do not include 12'  
 2. Do not include 12'  
 3. Do not include 12'

City of Norman  
 Transportation Planning

City of Norman  
 Engineering

## Sub-Committee Meeting #4: April 25, 2013

Norman CTP  
 Subcommittee Meeting #4 – Transportation Concepts  
 April 25, 2013



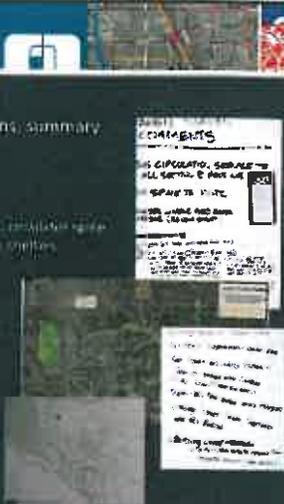
**Norman Comprehensive Transportation Plan**  
**TRANSPORTATION CONCEPTS**  
**Sub-Committee Meeting**  
 April 25, 2013

Agenda	
<b>6:00-6:15</b>	<b>Review Transportation Needs/Group Assignment</b>
<b>6:15-6:20</b>	<b>5 Minute Break</b>
<b>6:20-7:20</b>	<b>Mixed Modal Work Session</b>
<b>7:20-7:25</b>	<b>5 Minute Break</b>
<b>7:25-7:55</b>	<b>Work Group Summaries</b>
<b>7:55-8:00</b>	<b>Next Steps and Wrap-Up</b>
<b>Meeting Goal:</b> <i>Refinement of transportation concepts and Sub-committee input of concept planning prioritization.</i>	

**Norman CTP  
Subcommittee Meeting #4 – Transportation Concepts  
April 25, 2013**

**Public Input**

- Public Input Meeting – April 15<sup>th</sup>
  - Small turnout, Presentation, modal stations, summary of input
  - Public Input
    - Transit station
      - Back to back on Section 8 (between I-40 & I-240) (regional light rail, transit, ramps, connections with transfers, bus shelters)
      - Commuter car
      - Bicycles – Bikes, 25<sup>th</sup>, Bikes, 4<sup>th</sup> & 5<sup>th</sup>
      - Shared street parking
      - Main Street as 2 way
    - Auto/Parking
      - 27<sup>th</sup> & 28<sup>th</sup> connection, sidewalk improvement
      - 27<sup>th</sup> grade separation on sidewalk
      - Parking for 45 – 50 (good corner)
    - Bike/Pedestrian
      - Bike lanes on side streets
      - Sidewalk bikeway



**Public Input**

- QU Student Input Meeting – April 25<sup>th</sup>
  - Rawls Engineering Building
  - Overview presentation, modal stations, student input
  - Summary of Input



**Norman CTP  
Subcommittee Meeting #4 – Transportation Concepts  
April 25, 2013**

### Roadway Needs

- North/South Capacity to downtown and areas to south
- Improvements for East/West capacity
- Connectivity between downtown and campus corner
- Parking:
  - Garage
  - Metering
  - Bus



Modeling Existing + Committed Analysis

### Transit Needs

- Bus
  - Enhance current service operations
  - System reconfiguration/expansion
- Commuter Rail
  - Potential station locations
  - Funding
  - Land use considerations
  - Regional Transportation Authority

Norman CTP  
Subcommittee Meeting #4 – Transportation Concepts  
April 25, 2013

**Airport, Freight and Emergency Response Needs**



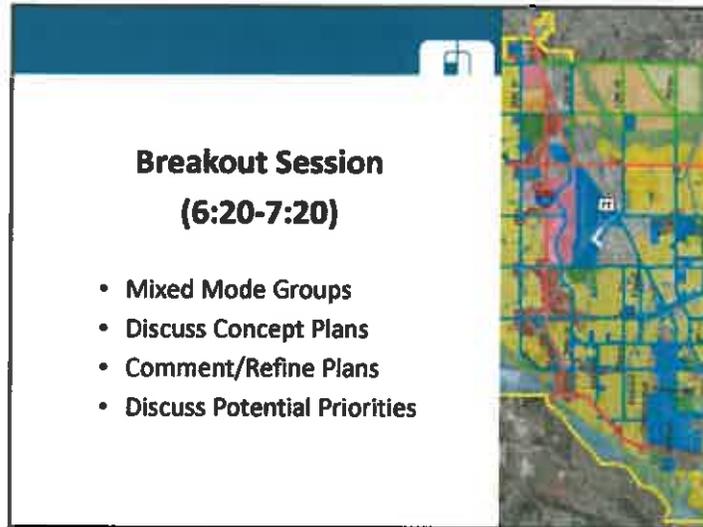
- Protect zoning around airport and industrial districts to serve freight, rail and air transportation needs
- Additional lane capacity for special events
- Additional grade separated crossing with RR
- Corridor enhancements:
- Land use coordination

**Bike/Pedestrian Needs**



- Sidewalk system and gap improvements
- Pedestrian safety/mobility during construction
- Way-finding toward completed sidewalks
- Implementation/prioritization of:
  - Safe Routes to Schools
  - Safe Routes to Transit
  - Access from neighborhoods to parks
- Promote Bike & Walking
- Funding

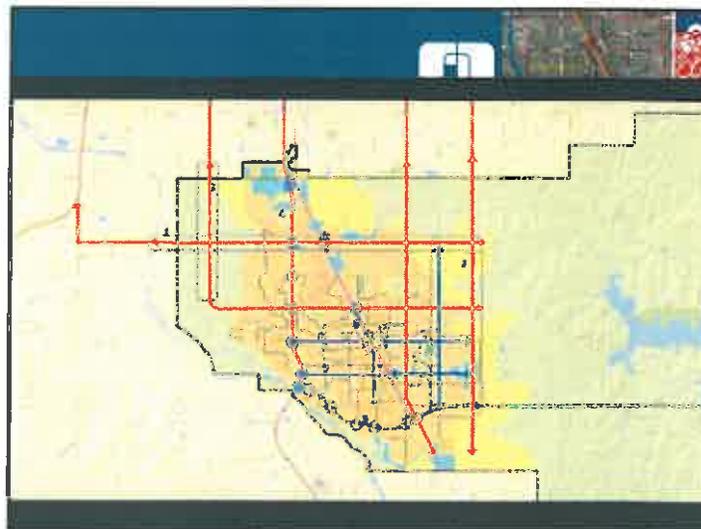
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Subcommittee Meeting #4 – Transportation Concepts  
April 25, 2013



**Breakout Session**  
**(6:20-7:20)**

- Mixed Mode Groups
- Discuss Concept Plans
- Comment/Refine Plans
- Discuss Potential Priorities

The slide features a white background with a blue header bar. On the right side, there is a small inset map showing a city grid with various colored overlays (red, blue, green) indicating different transportation concepts or zones.



Norman CTP  
Subcommittee Meeting #4 – Transportation Concepts  
April 25, 2013

Group Summaries and Next Steps

- Group Summaries
- Concept Planning Prioritization
- Next Steps
  - Modal System Plan Development
  - Next Meeting: May 23<sup>rd</sup>



**Norman Comprehensive  
Transportation Plan**  
**TRANSPORTATION CONCEPTS**  
**Sub-Committee Meeting**  
April 25, 2013

Sub-Committee Meeting #4 Flip Chart Notes: April 25, 2013

Internal/External Connections

Tecumseh to i44 - bridge expensive

36<sup>th</sup> E to i240 - coord. w/ neighbors to preserve ROW

Sooner - dto. ↗

60<sup>th</sup> W to i240 - already on neighbor's plan

Sooner - as i35 reliever route

36<sup>th</sup> E - can guide traffic from E to i240 w/o having to grow through Normal

Internal connections

Strategies to manage access and facilitate E to downtown 'back door access'

- ∴ avoid similar issues now constricting exist. streets; i.e. Lindsey
- ← need better coord. w/ Land Use

\* no interest in paying for bridge to Newcastle

\* Commuter Rail over HOV but needs supportive infrastructure i.e. parking

S 60<sup>th</sup> W - why spend \$ in floodzone

← Desired station locations

near SH 9 - capture traffic from  
E + S; new development:  
Apartments, Section 8 H

Lindsey - stop on OU property; OU funding  
Special event station

Downtown - connection to Amtrak &  
Buses

near Teamseh - for University North  
Park development

± Preference to not put more  
\$ into street improvements  
(such as under/overpasses)  
but instead invest into other  
modes

ELM TO JENKINS

- PEOPLE WOULD NOT BE ABLE TO VIEW THE CAMPUS WHILE IN A TUNNEL.
- COST TOO HIGH!
- MORE BENEFIT TO THE UNIVERSITY THAN CITY
- PEDESTRIAN BRIDGE WOULD BE MORE APPROPRIATE - WOULD HAVE TO DETOUR PED. TRAFFIC OR CROSSING THE STREET AT GROUND LEVEL.

RR UNDERPASS

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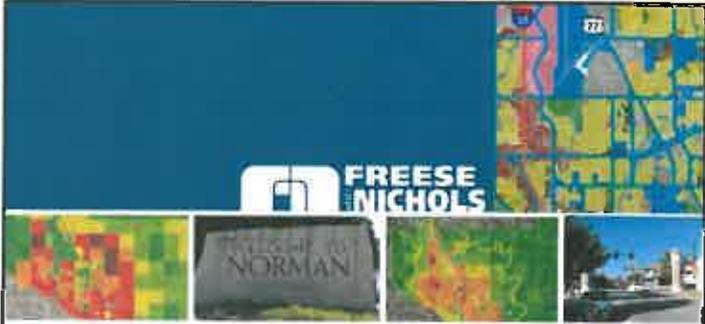
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## Sub-Committee Meeting #5 : May 23, 2013

Norman CTP  
 Subcommittee Meeting #5 – Transportation Concepts  
 May 23, 2013



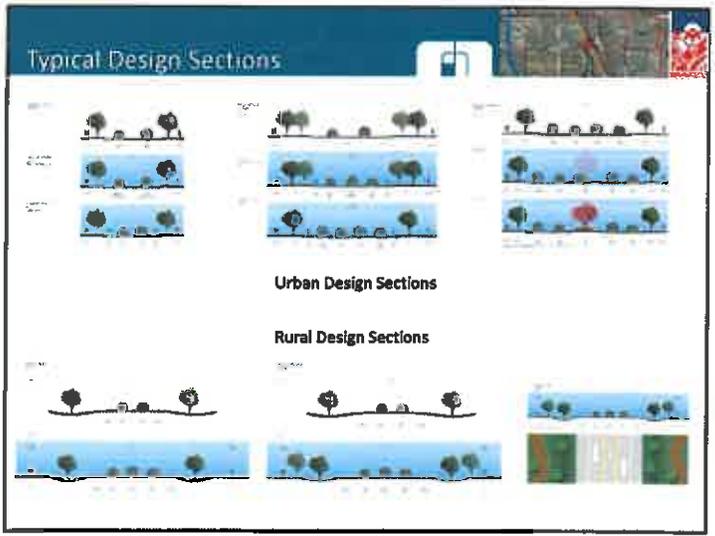
**Norman Comprehensive  
 Transportation Plan**  
**TRANSPORTATION MODAL PLANS**  
**Sub-Committee Meeting**  
**May 23, 2013**

Agenda

<b>6:00-6:15</b>	<b>Overview Modal Plans and Work Group Efforts</b>
<b>6:15-6:20</b>	<b>5 Minute Break</b>
<b>6:20-7:20</b>	<b>Four Modal Groups Work Session</b>
<b>7:20-7:25</b>	<b>5 Minute Break</b>
<b>7:25-7:55</b>	<b>Work Group Summaries</b>
<b>7:55-8:00</b>	<b>Next Steps and Wrap-Up</b>

**Meeting Goal:** *Refinement of transportation modal plans and input on programs, project prioritization.*

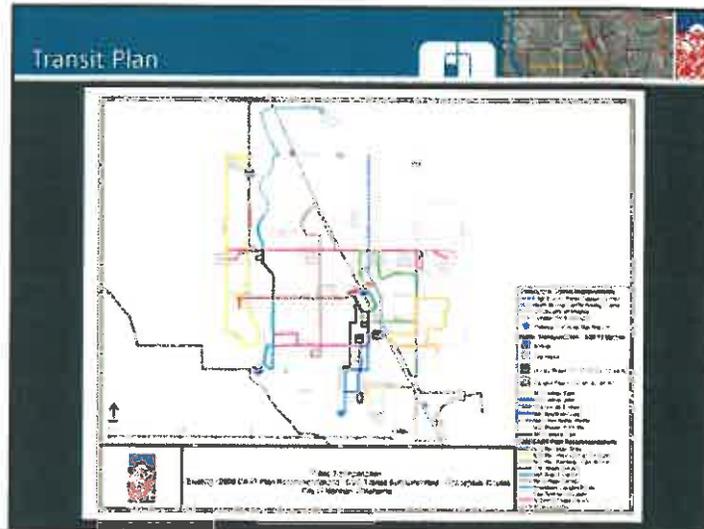
Norman CTP  
Subcommittee Meeting #5 – Transportation Concepts  
May 23, 2013



Norman CTP  
Subcommittee Meeting #5 – Transportation Concepts  
May 23, 2013



Norman CTP  
Subcommittee Meeting #5 – Transportation Concepts  
May 23, 2013



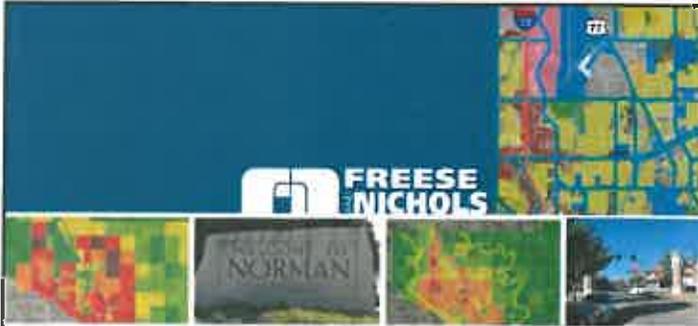
**Breakout Session  
(6:20-7:20)**

- Discuss Modal Plans
- Comment/Refine Plans
- Discuss Potential Priorities
- Discuss Potential Programs

Norman CTP  
Subcommittee Meeting #5 – Transportation Concepts  
May 23, 2013

Group Summaries and Next Steps

- **Group Summaries**
  - Plan Refinements
  - Project Prioritization
  - Programs and Policies
- **Next Steps**
  - CTP Report Development
  - SC Review and Feedback through e-Builder



**Norman Comprehensive  
Transportation Plan**  
**TRANSPORTATION MODAL PLANS**  
**Sub-Committee Meeting**  
May 23, 2013

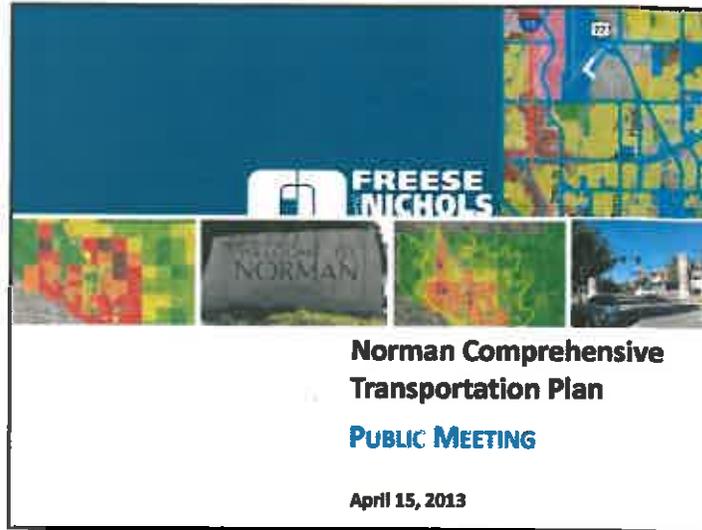
## Public Meetings

Two public meetings and several interim presentations were made of the project existing conditions and needs, modal plans, policies and programs and implementation strategies for the CPT. These meetings included:

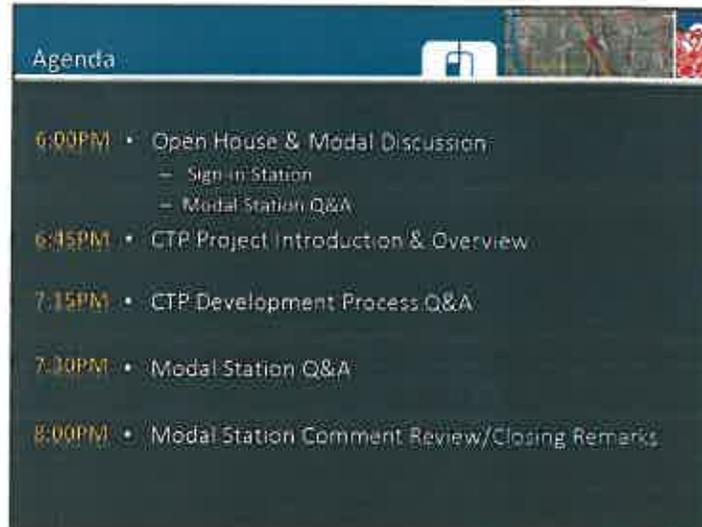
- City Council Briefing on Goals & Objectives, Existing Conditions and Needs
- Public Open House #1: Goals & Objectives, Existing Conditions and Needs
- OU Student Open House - Goals & Objectives, Existing Conditions and Needs
- Presentation to Chamber of Commerce Airport & Transportation Committee
- Presentation to City Bicycle Advisory Committee
- City Council Briefing on Modal Plans, Policies and Programs
- Public Open House #2: Modal Plans, Policies and Programs
- Public Hearing #1: Modal Plans, Policies and Programs, Implementation
- Public Hearing #2: Modal Plans, Policies and Programs, Implementation

## Public Meeting #1: April 15, 2013

Norman CTP  
Public Meeting No. 1  
April 15, 2013



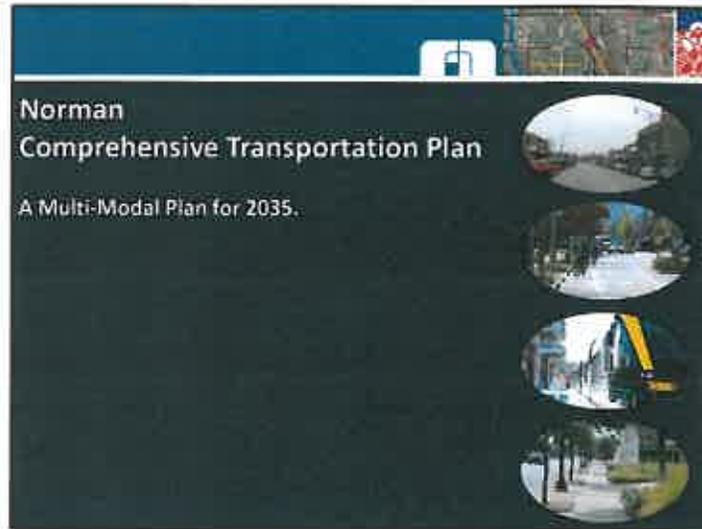
The poster features a blue header with the text 'FREESE NICHOLS' and a white car icon. Below this is a collage of images including a map of Norman, Oklahoma, a street view, and a sign that says 'NORMAN'. The main text on the poster reads: 'Norman Comprehensive Transportation Plan PUBLIC MEETING April 15, 2013'.



The slide has a dark background with a blue header containing the word 'Agenda' and a white car icon. The agenda items are listed in yellow text:

- 6:00PM • Open House & Modal Discussion
  - Sign-in Station
  - Modal Station Q&A
- 6:45PM • CTP Project Introduction & Overview
- 7:15PM • CTP Development Process Q&A
- 7:30PM • Modal Station Q&A
- 8:00PM • Modal Station Comment Review/Closing Remarks

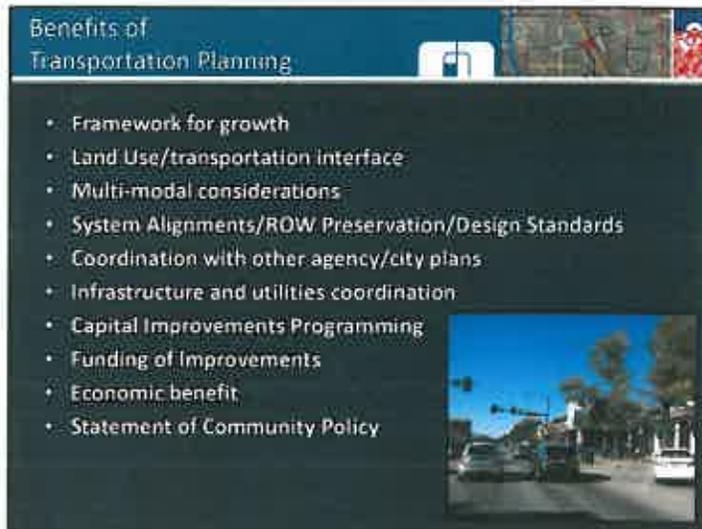
Norman CTP  
Public Meeting No. 1  
April 15, 2013



Norman  
Comprehensive Transportation Plan

A Multi-Modal Plan for 2035.

This slide features a dark background with a blue header. The title 'Norman Comprehensive Transportation Plan' is in white, with 'A Multi-Modal Plan for 2035.' below it. On the right side, there are four circular images: a road view, a snowy winter scene, a modern transit vehicle, and a park-like area with a path.



Benefits of  
Transportation Planning

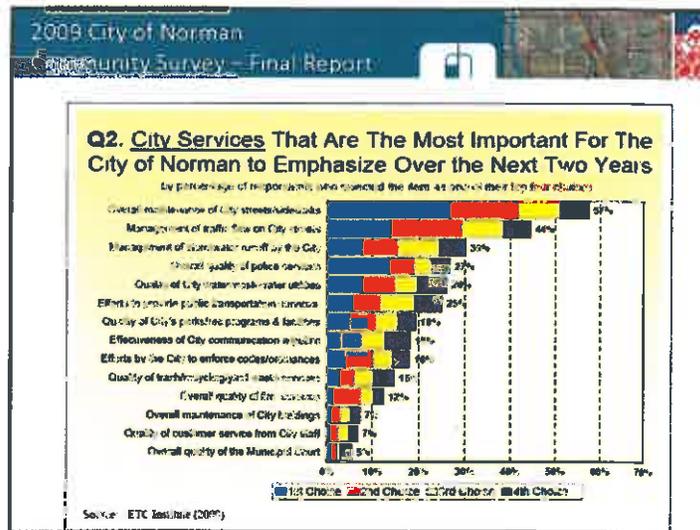
- Framework for growth
- Land Use/transportation interface
- Multi-modal considerations
- System Alignments/ROW Preservation/Design Standards
- Coordination with other agency/city plans
- Infrastructure and utilities coordination
- Capital Improvements Programming
- Funding of Improvements
- Economic benefit
- Statement of Community Policy

This slide has a dark background with a blue header. The title 'Benefits of Transportation Planning' is in white. A bulleted list of ten items is on the left. On the right, there is a rectangular image showing a street intersection with cars and trees under a blue sky.

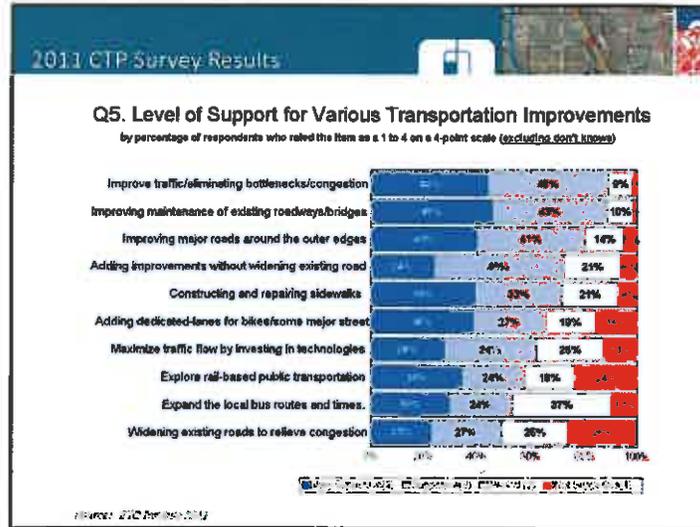
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### Benefits of Transportation Planning

- Informed Public
- Increased Mobility, Options and Safety
- Facilitate Growth and Development
- Community Connectivity
- Sensitivity to Land Planning



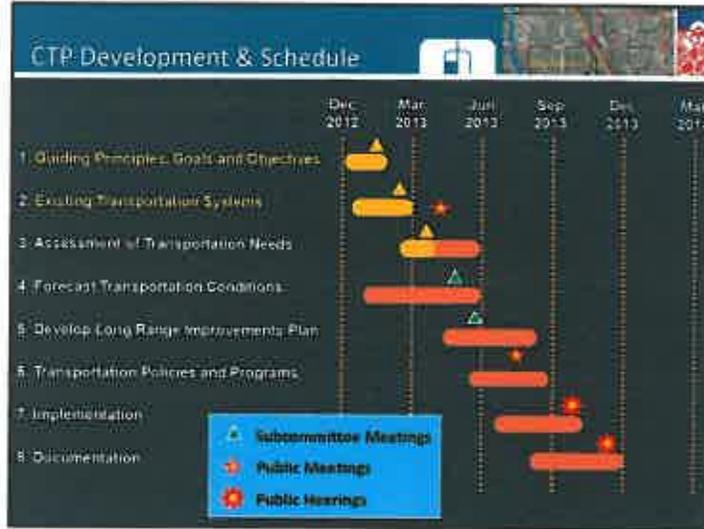
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April 15, 2013



### CTP Guiding Principles

- Integral Place to Live**
  - Vibrant Norman Community in 2035
  - Transportation and infrastructure focus on both people and places
  - Enhanced transportation choices and accessibility
  - Create a unique place with lasting value
  - Blend seamlessly with the character of Norman's neighborhoods, employment centers and activity centers
- Move It**
  - Seamless system of transportation options and solutions
  - Norman Moving Forward's emphasis on system management and operations, costed schedules and complete street design
  - Range of accessible and convenient, multi-modal transportation choices that provide connections between neighborhoods and destinations
- Maintain and Preserve Existing Infrastructure**
  - Priority on maintenance, rehabilitation, safety and reconstruction
  - Neighborhood viability through maintaining streets, sidewalks, utilities, storm water systems and other infrastructure facilities
  - Investments balance transportation needs of the community and local neighborhoods
- Fiscal Stewardship**
  - Provide a detailed roadmap of actions for transportation and infrastructure improvements
  - Investments maximize the benefits for multiple user groups in a way that is fiscally and environmentally responsible
  - Input from the community—large and ongoing dialogue with stakeholders
- Support a Vibrant Community**
  - Promotes economic growth while using resources in an efficient and effective manner
  - Supports a diverse, vibrant local economy with a strong tax base
  - Reduces the fiscal burden on residents to provide city services

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April 15, 2013



**CTP Sub-Committees**

- CTP Input and Guidance
- Subcommittee Composition
  - 45 members
  - 4 modal subcommittees
  - Co-Chair leadership
- Input to Plan Development
- SC Meeting Structure
  - Opening collaborative session
  - Independent group work
  - Combined wrap-up session

**Meeting Dates**

- SC1: Feb. 27: Guiding Objectives
- SC2: Feb. 27: Existing Conditions & Needs
- SC3: Mar. 27: Assessment Criteria
- SC4: Apr. 23: Assess Potential Projects
- SC5: May 27: Policies and Programs

**Four Subcommittees**

- Walkways and Parking
- Transit Service
- Pedestrian, Bike and Streetscape
- Freight, Airport, Emergency Response

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April 15, 2013

CTP Coordination

- Sub-Committee Meetings
- Council Study Sessions
- CVC Updates
- Staff Coordination Meetings



Project Tasks

1. Guiding Principles, Goals & Objectives
2. Assessment of Existing Systems
3. Assessment of Needs
4. Travel Forecast Modeling
5. Transportation Plan and Prioritization
6. Transportation Policies and Programs
7. Implementation
8. Documentation

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**1. Guiding Principles, Goals & Objectives**

- Project Initiation with City Staff
- CVC Subcommittees and Framework
- Framework for Social Media Outreach
- Subcommittee Meeting
  - Review Goals and Principles
  - CTP Objectives
- Finalize Principles and Goals
- Key Deliverable:
  - Draft Chapter on Principles, Goals and Objectives for the Plan

**Guiding Principles**

- Special Places to Live
- Mobility
- Maintain and Preserve Existing Infrastructure
- Fiscal Stewardship
- Enhance Economic Vitality

**2. Assessment of Existing Systems**

- Summarize Existing Plans
- Data Collection & Compilation
- Review Trends, Committed Improvements, Programs and Initiatives
- Analysis of Existing Conditions
- Assessment of Deficiencies
- Key Deliverable:
  - Draft Chapter on Existing Conditions

**Systems Evaluation**

- Auto
- Truck
- Bus Transit
- Passenger Rail
- Water
- Pedestrian
- Bicycle
- Parking
- Major Street/Highway
- Traffic Signal Systems
- Rush Locations
- Maintenance

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### 3. Assessment of Transportation Needs

- Initial System Needs Assessment
- Develop Initial Strategies
- Subcommittee: Formulate Concepts
- Refine Needs and Concepts
- Review Needs & Concepts with Commissions, Committees and Council
- Key Deliverable
  - Draft Chapter on Transportation Needs Assessment



### 4. Travel Forecast Modeling

- Review/Update ACOG Regional TDM for Sub-Area Land Use and Network
- Validate Base Year Model for Norman Traffic Volumes
- Assess “No-Build” 2035 Operations
- 2035 Model for New Roadway and Congestion Mitigation Needs
- Transit System Analysis
- Key Deliverable
  - Base and 2035 Subarea Model



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**5. Transportation Plan and Prioritization**

- Transportation Plan and Improvements
  - Subcommittee Collaboration
- Street Classifications and Configuration
- Modal System Plans
- Short and Long-Range Improvements
  - Subcommittee Collaboration
- CIP Methodology, Scoring & Ranking of Short and Long-Range Projects
- Key Deliverable
  - System Plans, Short/Long-Range CIP

**Modal System Plans**

- Thoroughfare Plan
- Pedestrian System
- Bicycle System
- Transit System



**6. Transportation Policies and Programs**

- Review Existing Policies & Programs
- Peer City Review
- Develop Action Plans to Address Programs
  - City Staff and Subcommittee Collaboration
- Implementation Strategies, Roles and Responsibilities
- Subcommittee Concurrence
- Draft Policies
  - Review with Commissions, Committees and Council
  - Social Media Outreach
- Key Deliverable
  - Draft Chapter on Policies, Programs & Procedures

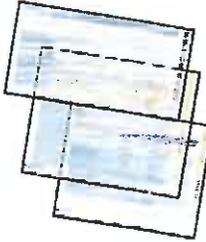
**Policies and Programs**

- Multimodal Integration
- Transportation
- Finance
- Traffic Impacts
- Maintenance
- Traffic Calming
- Access Management
- Parking

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April 15, 2013

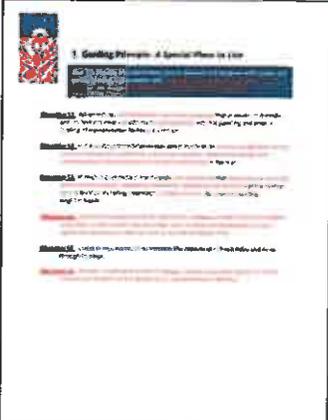
### 7. Implementation

- Review Transportation Revenues & Constraints
- Correlate Revenues and Prioritized Improvements
- Finance Plan for Short/Long-Range CIP
- Assess Potential New Funding Strategies
  - Collaborate with City Staff and CVC
  - Social Media on Implementation Plan
- Committee/Council Meeting on Improvements and Funding Strategies
- Develop 5-Year TIP
  - Review with Committees and Commissions
  - Public Hearing on Draft TIP
- Key Deliverable
  - Implementation Strategies, Funding, Draft TIP



### CTP Goals & Objectives Review

- Five guiding principles
- Refined Goals
- Development of Objectives
- Mixed group collaboration

**5 Guiding Principles of Special Plans in CTP**

- Principle 1: [Text]
- Principle 2: [Text]
- Principle 3: [Text]
- Principle 4: [Text]
- Principle 5: [Text]

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### Goals & Objectives Review

### Existing Conditions Community Growth Trends

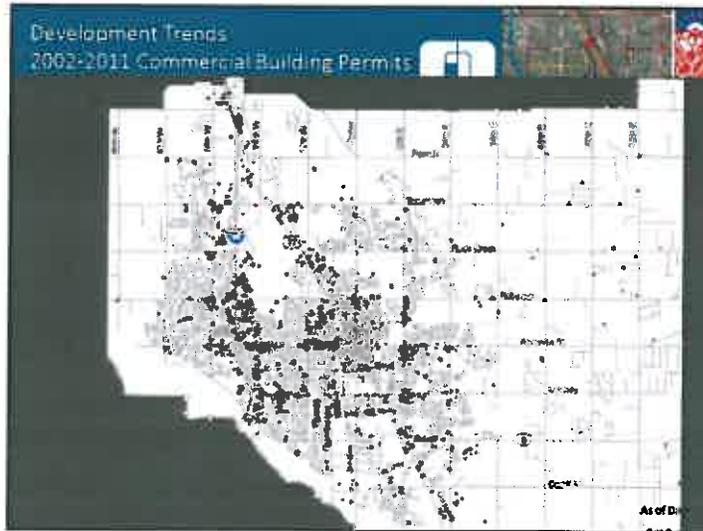
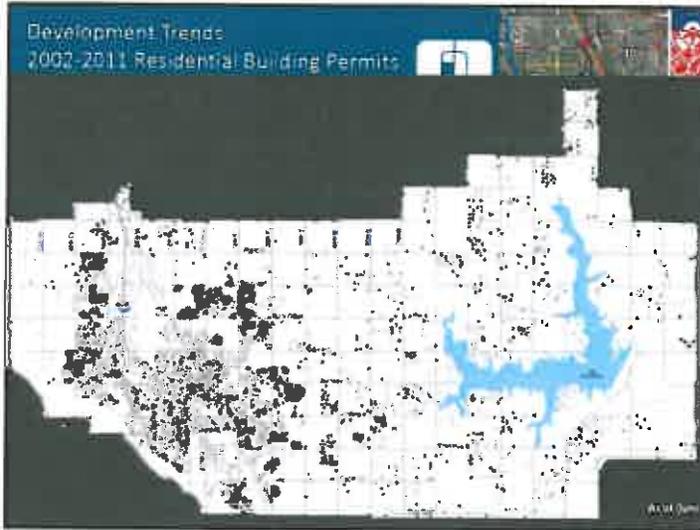
- **Population Growth**
  - Steady growth
  - 20-year CAGR: 1.64%
  - Since 2000: 1.49%
  - 20-year Projection:
    - Norman 2025: 1.33%
- **Comparison of Comprehensive Plan with ACOG Model for 2035**
  - Population density
  - Roadway linkages
  - Capital improvements

Year	1.50%	Norman 2013	ACOG
2010	128,487	120,181	123,329
2015	136,681	131,141	131,368
2020	146,340	143,518	140,578

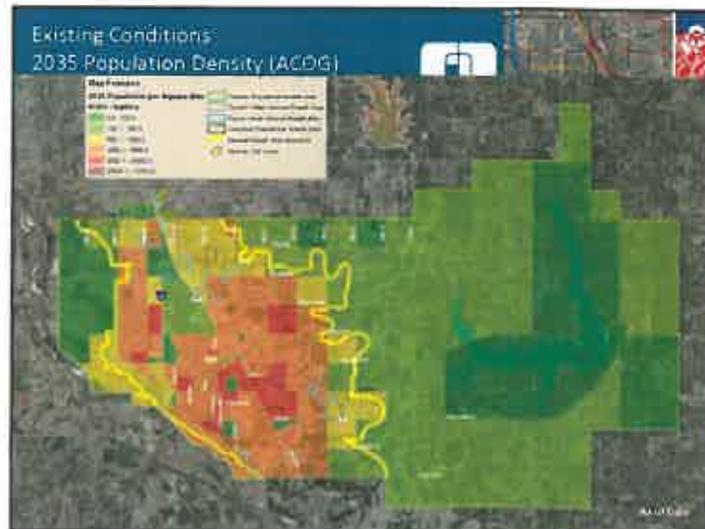
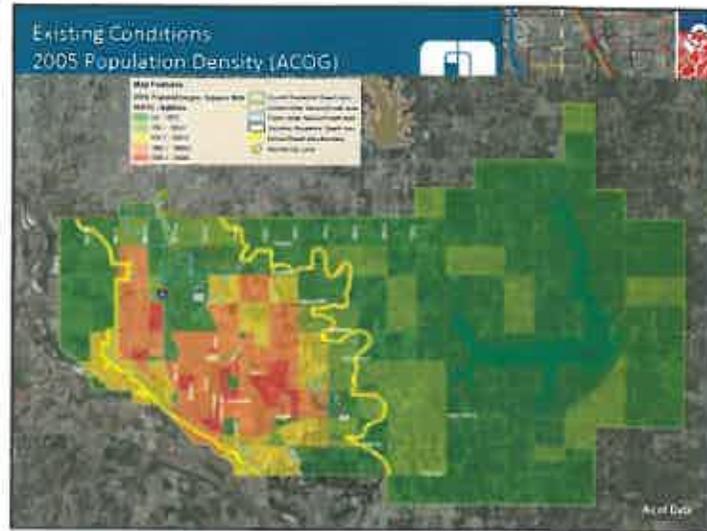
Year	Employment	CAGR
2015	29,302	1.35%
2020	30,874	
2025	32,130	
2030	33,258	

Historical Population Growth

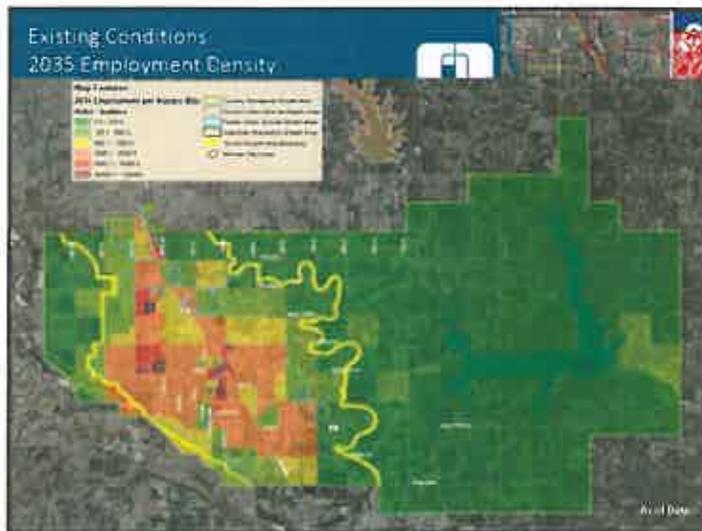
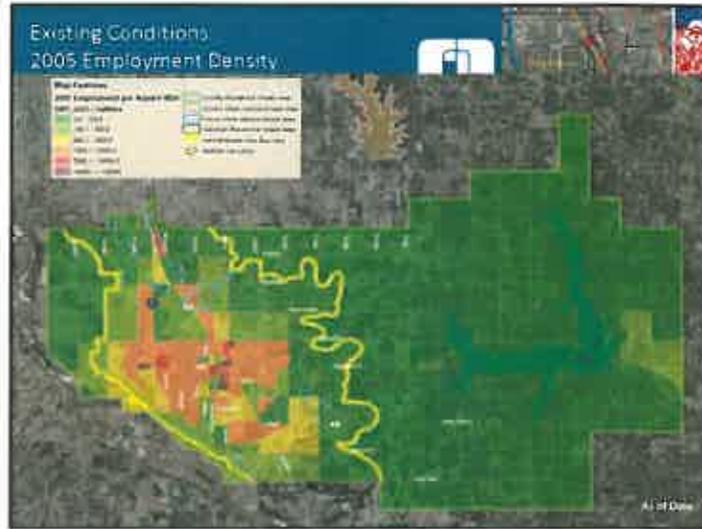
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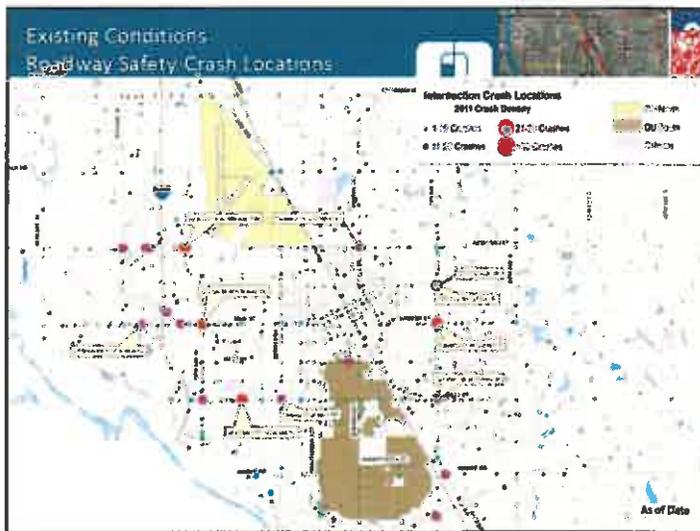
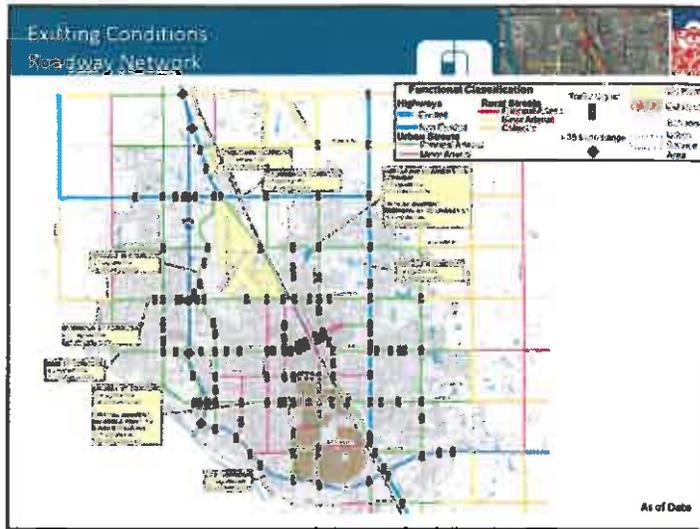
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Existing Transportation Conditions

- Roadway Network
- Access Management
- Traffic Volumes
- Congestion-Major Corridors
- Roadway Safety
- Parking Inventory
- Freight Movements, Impacts
- Aviation Land Use & Access
- Roadway Inventory & Maintenance
- System Improvements
- Bike & Pedestrian Accommodations
- Transit Service

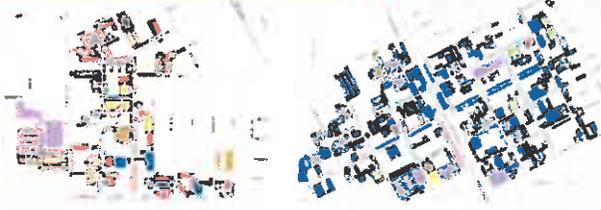


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April 15, 2013



Norman CTP  
 Public Meeting No. 1  
 April 15, 2013

Existing Conditions  
 Parking Inventory Breakdown



**Campus Corner Area**

- Just under 2,000 spaces
- 87% surface
- 13% on-street
- 25% public
- Insufficient parking in the southern portion of the district

**Central Business District**

- 4,900 spaces
- 77% surface
- 23% on-street
- 25% public
- Insufficient parking in the eastern portion of the district especially along Main Street

As of Date

Existing Conditions  
 Freight Operations

- Rail
  - BNSF “Mid-Con” corridor
  - 50 million tons of freight per year
- Passenger Rail
  - Amtrack’s “Heartland Flyer”
  - Along BNSF Line
  - Service: Oklahoma City/Fort Worth
  - 84,000 annual ridership
  - On Average 10% originate/destined for Norman. Numbers differ by year (In 2011, 12% originating/destined for Norman)
- Truck Operations
  - Interstate 35 (15% Truck Traffic)
  - SH 9 (6% Truck Traffic)



As of Date

Norman CTP  
Public Meeting No. 1  
April 15, 2013

Max Westheimer Airport

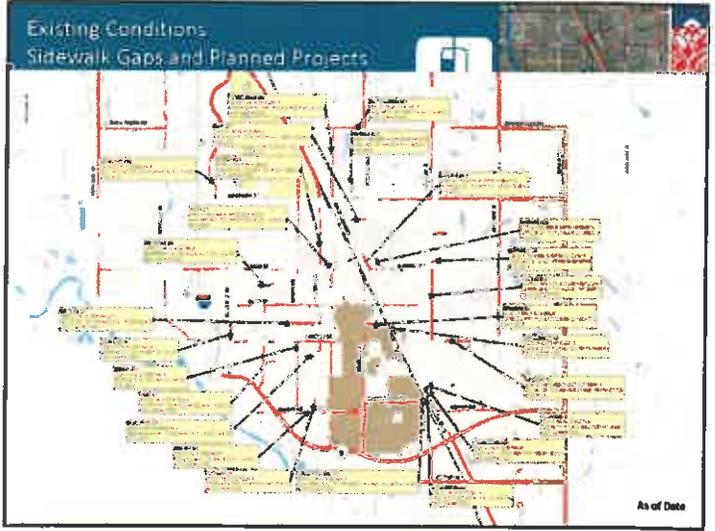
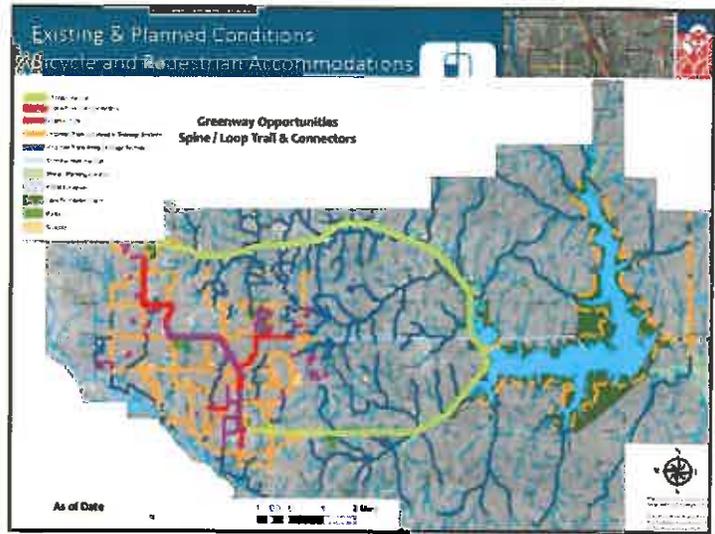
- **Airport Stats:**
  - Reliever Airport
  - Manned ATCT
  - 2 Active Runways; 17/35 ILS
  - 66,000 aircraft ops/year
  - 69 hangers on site
- OU Aviation Program
- 1995 Master Plan; 2004 Action Plan
- 2008 North Development Plan
- Grant Money since 1970: \$21M
- Research Campus North-1,120 ac.
- Univ. North Park – 580ac mixed use
- Height Hazard Zoning in place



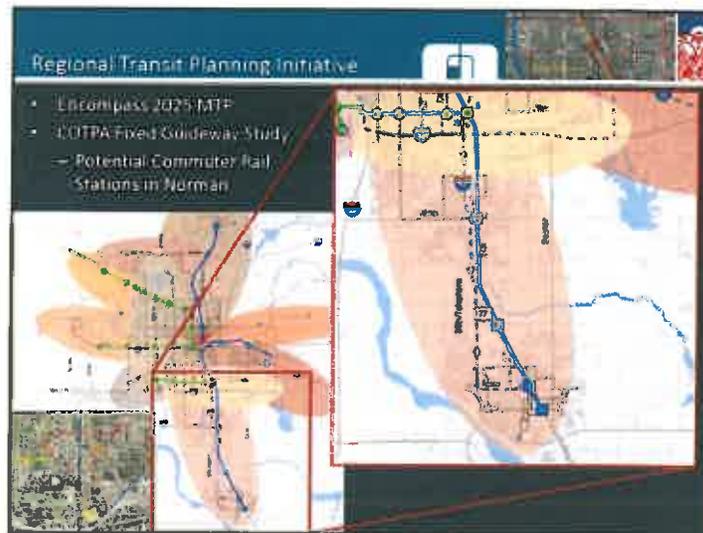
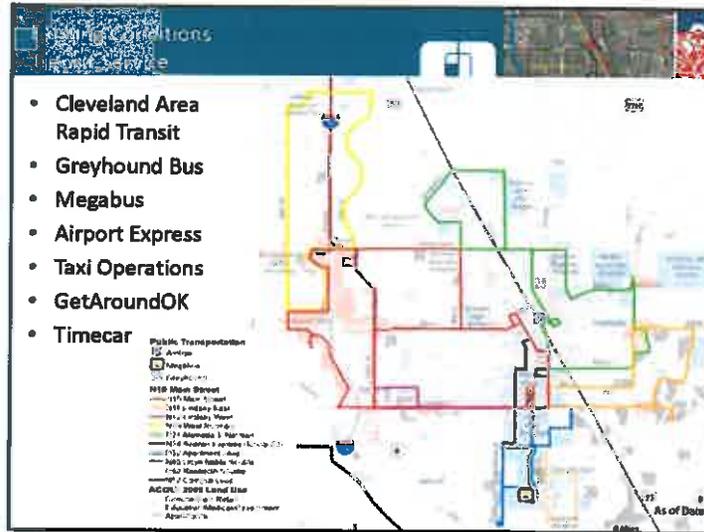

Norman CTP  
Public Meeting No. 1  
April 15, 2013



Norman CTP  
Public Meeting No. 1  
April 15, 2013



Norman CTP  
Public Meeting No. 1  
April 15, 2013



Norman CTP  
Public Meeting No. 1  
April 15, 2013

### Roadway Needs

- North/South Capacity to downtown and areas to south
- Improvements for East/West capacity
- Connectivity between downtown and campus corner
- Parking:
  - Garage
  - Metering
  - Bus



Modeling Existing + Committed Analysis

### Transit Needs

- Bus:
  - Enhance current service operations
  - System reconfiguration/expansion
- Commuter Rail:
  - Potential station locations
  - Funding
  - Land Use considerations
  - Regional Transportation Authority

Norman CTP  
Public Meeting No. 1  
April 15, 2013

Airport, Freight and Emergency  
Response Needs

- Protect zoning around airport and industrial districts to serve freight, rail and air transportation needs
- Additional lane capacity for special events
- Additional grade-separated crossing with RR
- Corridor enhancements
- Land use coordination

Bike/Pedestrian Needs

- Sidewalk system and gap improvements
- Pedestrian safety/mobility during construction
- Wayfinding toward completed sidewalks
- Implementation/prioritization of:
  - Safe Routes to Schools
  - Safe Routes to Transit
  - Access from neighborhoods to parks
- Promote Bike & Walking
- Funding

Norman CTP  
Public Meeting No. 1  
April 15, 2013

**Social Media**

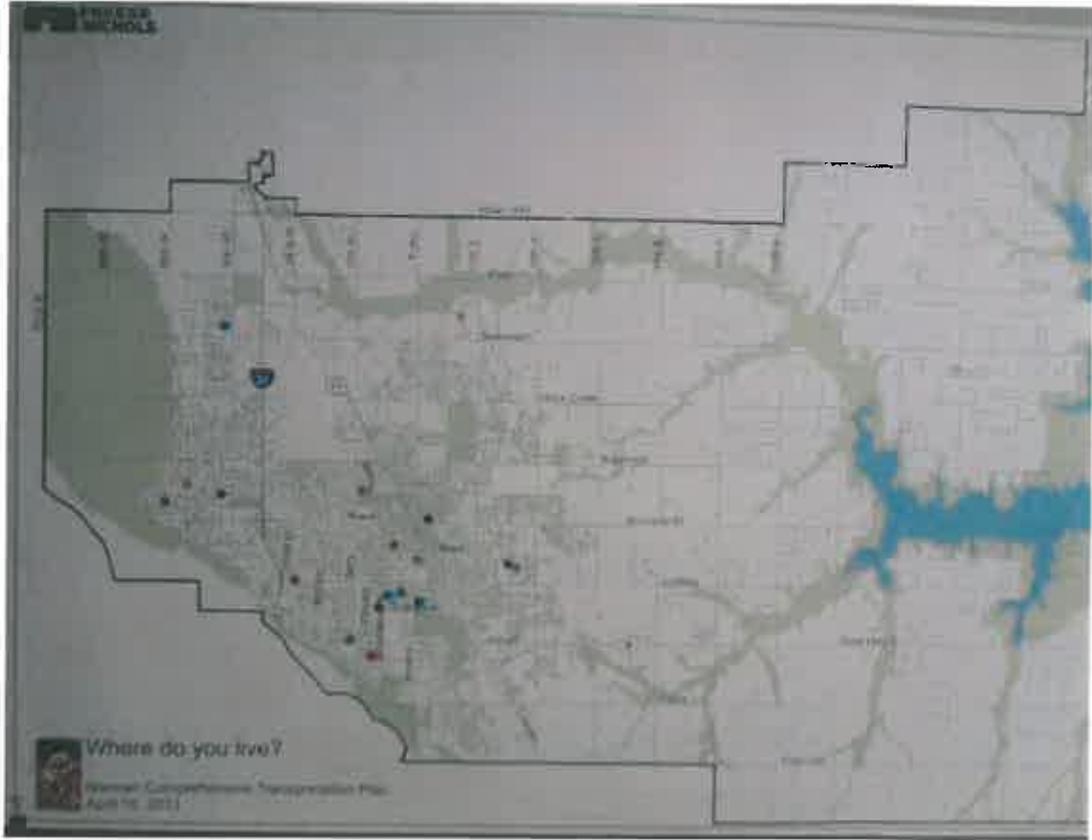
- SC work via e-Builder
- Posting of CTP interim products on City website
- Moving Forward website page
- Announcing availability of CTP interim products on Facebook
- Pushing out messages about CTP interim products using Twitter
- Recent product posts:
  - Subcommittee Meeting Materials
  - Chapter work
  - Presentation materials



The slide includes two screenshots. The top one shows a software interface with various fields and buttons. The bottom one shows a Facebook post from the City of Norman with a blue header and text. Below the screenshots are the Facebook and Twitter social media icons.

**Agenda**

- 6:00PM • Open House & Modal Discussion
  - Sign-in Station
  - Modal Station Q&A
- 6:45PM • CTP Project Introduction & Overview
- 7:15PM • CTP Development Process Q&A
- 7:30PM • Modal Station Q&A
- 8:00PM • Modal Station Comment Review/Closing Remarks



## Public Meeting #1 Flip Chart Notes: April 15, 2013

- Parking needs in Campus Corner
- Aesthetic Improvements needed along Main Street and Lintrey Street -  
These are gateways into Norman
- 72nd Street Connection needed
- Multi-Use Path needed around Airport
- Lindsey Street Grade Separation over the Railroad.
- Parking Garage - ~~needed~~  
↳ Use funding from garage to implement other transportation improvements (Non-CARBASE)

Shared bike/car lanes should be implemented on through side streets, not just main corridors (i.e. Pickard St.)

I would like more scenic pathways for running and biking. They don't need concrete just a nice natural pathway.

## COMMENTS

Bus Rt. on Boyd Loop Porter-Main  
Bary

Bus Rt (2008) 24th St should go another mi south to  
Zinkoff & back to west on Zinkoff (Abandon on 24th / 18th  
Rt. 100)

Voice activated pedestrian crossing on <sup>Major</sup> 12th  
crossing 12. Bus stop at CSB1 (12th & Main)  
Riders walking across 12th need a longer  
cycle time

Need bus system to take riders  
to major destinations without transfers  
between routes.

DOUBLE TRACK RR FOR COUNTER RAIL TO O  
CREATE SIMPLER SPINE

Incliment weather scaling of bus rts. (MORE when it rains)

CONNECTED CLOSED LOOP SYSTEM ON BROOKS STREET  
MAIN STREET (SUMNER HALL TO 24th STREET) - TWO WAY

Parking needs in Campus Corner

- Aesthetic Improvements needed along  
Main Street and Lindsey Street -  
These are gateways into Norman
- 72nd Street Connection needed
- Multi-Use Path needed around Airports
- Lindsey Street Grade Separation  
over the Railroad.
- Parking Garages - ~~needed~~  
↳ Use funding from garages to implement other  
transportation improvements (NON-CARBES)

Shared bike/car racks should be implemented  
on through side streets, not busy main  
corridors

would like more scenic pathways for running and  
biking they don't need concrete just a nice natural  
pathway

## TRANSIT STATION COMMENTS

BUS CIRCULATION SERVICE TO  
ALL SECTION 8 HOUSING

BUS SERVICE TO MNUC

CONSIDER LINEAR FIXED ROUTE  
CORRIDORS (ROBINSON STREET)



Grid system bus routes would reduce travel time

- TRANSIT NEEDS PLAN INVESTING \$ ON CARS
- SHELTER AT ALL STOPS IT'S HOT. IT'S COLD WE NEED SHELTER!
  - MORE THAN 3 BICYCLES PER BUS - IT'S A CHASSIS IF THE BUS WILL HAVE ROOM FOR YOU AND YOURS
  - NEED CHAIRS TO GO BOTH WAYS - NOT JUST ONE WAY - IT TAKES ABOUT 1 HR TO GO FROM LIBRARY TO MALL BACK TO LIBRARY. THAT'S A LONG DAY.
  - BUSES NEED TO RUN TIL 11 PM - PEOPLE WOULD RATHER RIDE HOME INSTEAD OF WALKING THAT'S 7 DAYS A WEEK.

# TRANSIT STATION COMMENTS

BUS CIRCULATION SERVICE TO ALL SECTION 8 HOUSING

BUS SERVICE TO MULTIPLE

CONSIDER LINEAR FIXED ROUTE 'PRE-DAYS' (ROBINSON STREET)



grid system bus routes would reduce travel time  
 TRANSIT NEEDS PLAN INVESTING \$ ON CASES  
 - SHELTERS AT ALL STOPS IT'S HOT! IT'S COLD! IT'S WINDY!  
 - MORE THAN 3 BICYCLES PER BUS - IT'S A CRAP SHUTTER  
 - NEED BUSES TO GO BOTH WAYS - NOT JUST ONE WAY - IT TAKES ABOUT 1 HR TO GO FROM LIBRARY TO MALL BACK TO LIBRARY. THAT'S A LONG DAY.  
 - BUSES NEED TO RUN TIL 11 PM - PEOPLE NEED A SHORT LINE TO TAKE THEM HOME.  
 - PEOPLE NEED A SHORT LINE TO RIDE THEM (INSTEAD OF WALKING)

# COMMENTS

Bus Rt. on Boyd Loop Porter-Main Barry

Bus Rt (2008) 247A SF should go another mi south to Indhoff & back to west on Inhoff (shelter on 247A/1126/1140)

Voice activated pedestrian crossing on 12th crossing 12. Bus stop at CSBI (12th & main) Riders walking across 12th need a longer cycle time

Need bus system to take riders to major destinations without transferring between routes.

DOUBLE TRACK RR FOR COUNTER RAIL TO

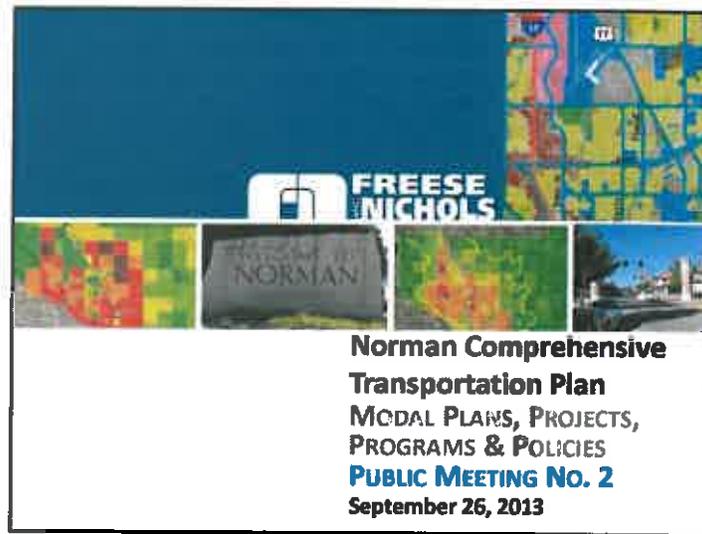
CREATE SIMPLER SPINE

Incliment weather scaling of bus rts (more when it rains)

CONNECTED CLOSED LOOP SYSTEM ON BARBERS STREET MARK STREET (SUNNYVALE HALL TO 24th STREET) - TIDWAY

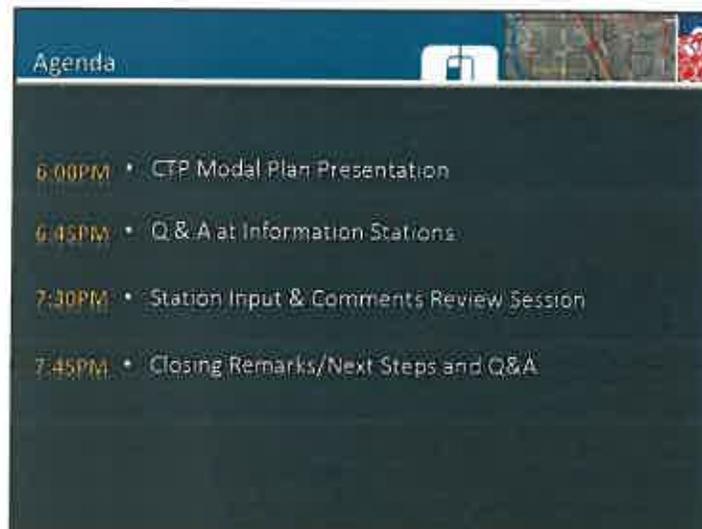
## Public Meeting #2: September 26, 2013

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013



A presentation slide for the Norman Comprehensive Transportation Plan. The top half features a collage of images: a blue background with the 'FREESE NICHOLS' logo, a map of Norman, Oklahoma, a road sign for 'NORMAN', and a street scene. The bottom half contains the following text:

**Norman Comprehensive  
Transportation Plan  
MODAL PLANS, PROJECTS,  
PROGRAMS & POLICIES  
PUBLIC MEETING NO. 2  
September 26, 2013**



An agenda slide with a dark background and a blue header. The header contains the word 'Agenda' and a small logo. The agenda items are listed below:

- 6:00PM • CTP Modal Plan Presentation
- 6:45PM • Q & A at Information Stations
- 7:30PM • Station Input & Comments Review Session
- 7:45PM • Closing Remarks/Next Steps and Q&A

Norman CTP Modal Plan  
 Public Meeting #2  
 September 26, 2013

Transportation Planning  
 for Moving Forward

- Framework for growth
- Land Use/transportation interface
- Multi-modal considerations
- System Alignments/ROW Preservation/Design Standards
- Coordination with other agency/city plans
- Infrastructure and utilities coordination
- Capital Improvements Programming
- Funding of Improvements
- Economic benefit
- Statement of Community Policy



Guiding Principles, Goals,  
 Objectives

**Special Place Identity**

- Vibrant Norman Community in 2035
- Transportation and infrastructure focus on both people and places
- Enhanced transportation choices and accessibility
- Create a unique place with lasting value
- Blend seamlessly with the character of Norman's neighborhood, employment centers and activity centers

**Mobility**

- Seamless system of transportation options and solutions
- Norman Moving Forward's emphasis on system management and operations, context sensitive and complete streets design
- Range of accessible and convenient, multi-modal transportation choices that provide connections between neighborhoods and destinations

**Maintain and Preserve Existing Infrastructure**

- Priority on maintenance, rehabilitation, safety and reconstruction
- Neighborhood viability through maintaining streets, sidewalks, utilities, storm water systems and other infrastructure facilities
- Investment balance transportation needs of the community and local neighborhoods

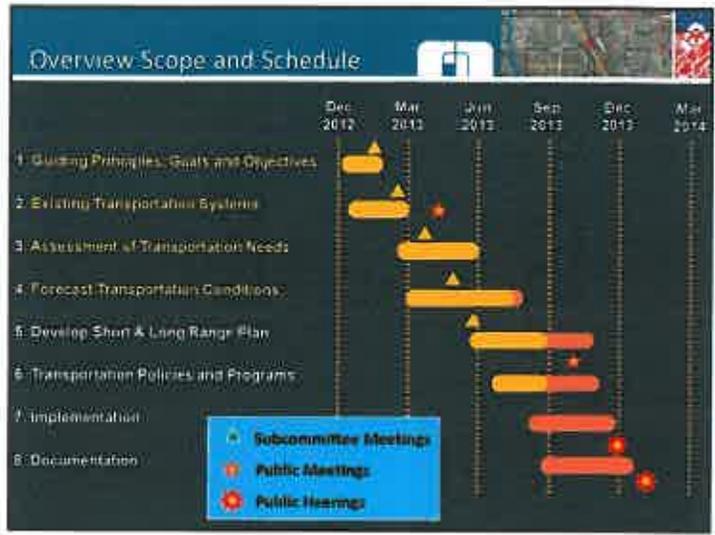
**Local Stewardship**

- Provide a diverse mix of actions for transportation and infrastructure improvements
- Investments maximize the benefits for multiple user groups in a way that is fiscally and environmentally responsible
- Input from the community and ongoing dialogue with stakeholders

**Enhance Economic Viability**

- Promotes economic growth while using resources in an efficient and effective manner
- Supports a diverse, vibrant local economy with a strong tax base
- Reduces the fiscal burden on residents to provide city services

**Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013**



**Subcommittee Meetings**

- Subcommittee Work:
  - Modal focus groups
  - Advance review of materials
  - Group discussions on needs
  - Group brainstorming on actions
  - Review of CTP modal plans
  - Review of CTP report chapters
  - Participate in public meetings

**Meeting Dates**

- Jan 2013 - Subcommittee Meeting
- Feb 2013 - Subcommittee Meeting
- Mar 2013 - Subcommittee Meeting
- Jun 2013 - Subcommittee Meeting
- Sep 2013 - Subcommittee Meeting
- Dec 2013 - Subcommittee Meeting
- Mar 2014 - Subcommittee Meeting

**Subcommittees**

- Access and Parking
- Transit Service
- Pedestrian, Bicycles and Scooters
- Freight, Airport, Emergency Response

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

Transportation Needs

- Existing Conditions Assessment
- Initial work with Sub-Committee
- Assessment of needs
- Public Input
- Modeling & Analyses
  - Existing + Committed
  - Scenarios



The slide contains three maps illustrating traffic analysis. The top map is titled 'Existing + Committed Analysis' and shows a network of roads with red and green lines. Below it are two smaller maps: 'AM Peak Hour' and 'PM Peak Hour', both showing similar road networks with color-coded lines representing traffic flow or volume.

CTP Elements:

Modal Plans:

- Thoroughfare Plan and Typical Sections
- Bicycle and Pedestrian Plan, Sidewalk Completion Plan
- Transit Service Plan
- Airport, Freight and Emergency Response

**Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013**

### Roadway Needs

- Regional connections
- Norman core accessibility
- North/South Capacity to downtown and campus area
- East/West capacity needs
- Connectivity between downtown and campus corner

The 'Roadway Needs' slide features four maps. The top-left map shows regional connections with red lines radiating from a central point. The top-right map shows Norman core accessibility with yellow arrows pointing towards the center. The bottom-left map is labeled 'Population Growth' and shows a heatmap of growth areas. The bottom-right map is labeled 'Employment Growth' and shows another heatmap of growth areas.

### CTP Travel Forecasting

- ACOG Regional Model
  - Encompass 2015
  - Travel Survey Household and transit
  - Model Calibration
  - Commute Patterns
  - Norman 2025 Land Uses, Updated
- Norman Sub-Area Model
  - Added network definition
  - Refined TAZ loading onto network
  - University North Park Development
  - Socio-Demographics by TAZ
    - Population confirmed
    - Employment confirmed

The 'CTP Travel Forecasting' slide includes two maps. The top map, 'ACOG Regional Model', shows a network of roads with blue and red lines. The bottom map, 'Norman Sub-Area Model', shows a detailed street grid with colored overlays (red, green, blue) representing different travel forecasts or land uses.

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013



Highlights of the Thoroughfare Plan

- Added definition to functional classification and network
- Design options for roadway sections
- Formalization of internal loop for regional connection
- Identification of Collector network supporting section grid
- Creation of Special Corridors
- Railroad grade separations at Tecumseh and Lindsey



Norman CTP Modal Plan  
 Public Meeting #2  
 September 26, 2013

**Hierarchy of Design Sections**

**Minor Urban Arterial**

**Applications:**  
 Berry, Lindsey to Robinson  
 36<sup>th</sup> W. thru Norman  
 Main, east of Porter

**Design Section Options:**

- Landscaped Median (three lane section) – where turns not needed
- Turn Lanes at Intersection (four lane section) - using portion of landscaping buffer
- Parking provisions, using portion of landscaping buffer
- Two-lane roadway with roundabouts at Intersections
- One-way couplet, with one lane in each direction

**Hierarchy of Design Sections**

**Urban Collector**

**Applications:**  
 Webster  
 Acres  
 Boyd, Berry to 24<sup>th</sup> W

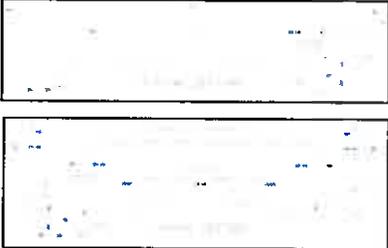
**Design Section Options:**

- Turn Lanes at Intersection – narrow lanes to 11' or additional ROW
- Parking provisions plus bike lanes – trade-off landscaping or additional ROW

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

### Hierarchy of Design Sections

Rural Collector  
(existing standard)



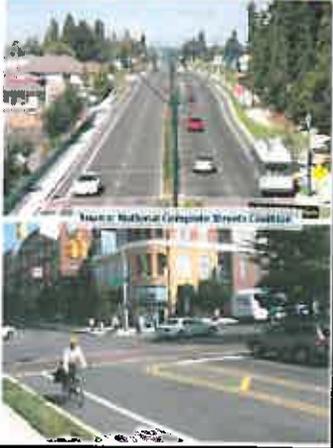
**Design Section Options:**

- Add 5-foot sidewalks or path along roadway
- Curb and gutter edges on roadway
- Medians, landscaping, wider pavement

**Applications**  
Sparse section line roads  
Rural interior roadways

### Complete Streets

- A network for all users
  - walking, bike, transit, auto
- Right-sizing of streets
- Improved safety
- Mobility choices
- Economic benefit
- Guidelines for:
  - Project selection
  - Design standards
  - Special considerations



Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

**Bike & Pedestrian Needs**

- Sidewalk system and gap improvements
- Pedestrian safety/mobility during construction
- Wayfinding toward completed sidewalks
- Implementation/prioritization of
  - Safe Routes to Schools
  - Safe Routes to Transit
  - Access from neighborhoods to parks
- Promote Bike & Walking
- Funding

**Bike & Pedestrian Plan**

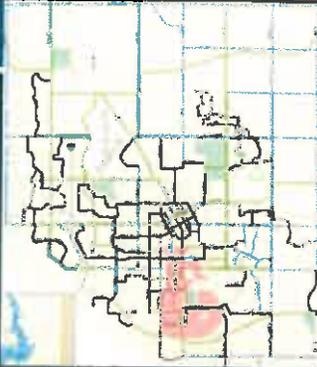
Map Legend:

- Major
- Minor
- Other

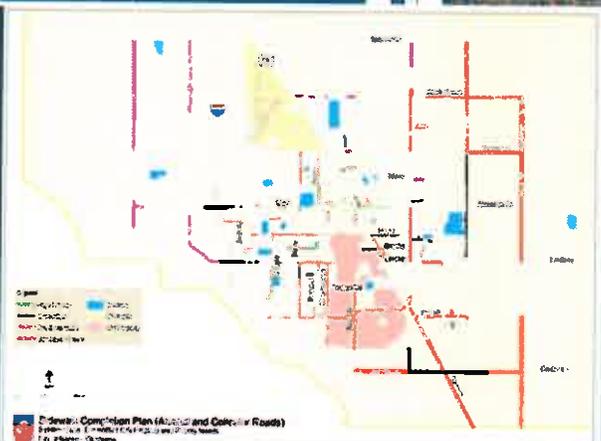
**Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013**

**Highlights of the Bike & Pedestrian Plan**

- Extension of Historic Trail around Max Westheimer Airport;
- Bike lanes along:
  - Lindsey (Lin to 24<sup>th</sup> Ave. W)
  - Ed Noble Parkway (Lindsey to Main)
  - Main (Westview to 48<sup>th</sup> W) and 48<sup>th</sup> W (Main to Indian Hills)
  - Rock Creek Road
  - University (Byrd to Apache)
  - Webster (Duffy to Gray)
  - Acres (Berry to Porter)
- Shoulder bike lanes on all principal and minor rural arterials
- Side paths
  - 12<sup>th</sup> Ave. E (Tecumseh to Lindsey)
  - Lindsey (12<sup>th</sup> Ave. E to Classen)
- Multi-purpose trails
  - Main (17<sup>th</sup> E to 24<sup>th</sup> E)
  - Robinson (24<sup>th</sup> E to lake)



**Sidewalk Completion Plan**



**Sidewalk Completion Plan (Arterial and Collector Roads)**  
 Prepared by: E. M. HARRIS & ASSOCIATES, INC.  
 1100 W. Main Street, Oklahoma City, Oklahoma

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

### Transit Needs

- Bus
  - Enhance current service operations
  - System reconfiguration/expansion
- Commuter Rail
  - Potential station locations
  - Funding
  - Land Use considerations
  - Regional Transportation Authority

### Transit Plan

Public Meeting #2 - 9/26/13

Norman CTP Modal Plan

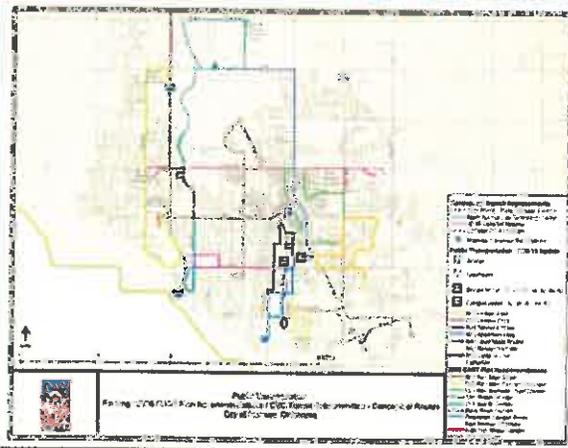
**Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013**

**Highlights of the Transit Plan**

- 2008 CARTS Plan, enhanced for:
  - Porter-Classen corridor
  - Moore-Norman Technology Center
  - University North Park
  - SH9/Cedar Lane area
- Increased service frequency and hours of operation
- Better accommodation of patrons with wheelchairs
- ADA compliance at stops
- Regional Commuter Rail Stations
  - Tecumseh, Downtown, SH9 Inhoff
  - Platform for special events
- IH35 – Reversible HOV lane



**Transit Plan**



**Legend**

- Public Transportation: 2013-14 Routes
- 1.1.1. Area
- 1.1.2. Station
- 1.1.3. Commuter Rail Station
- 1.1.4. Commuter Rail Station
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Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

Airport, Freight and Emergency  
Response Needs

- Protect zoning around airport and industrial districts to serve freight, rail and air transportation needs
- Additional lane capacity for special events
- Additional grade separated crossing with RR
- Corridor enhancements
- Land use coordination

Break to Information Stations

- 6:45PM • Q & A at Information Stations
- 7:30PM • Station Input & Comments Review Session
- 7:45PM • Closing Remarks/Next Steps and Q&A

Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013

**Upcoming Work**

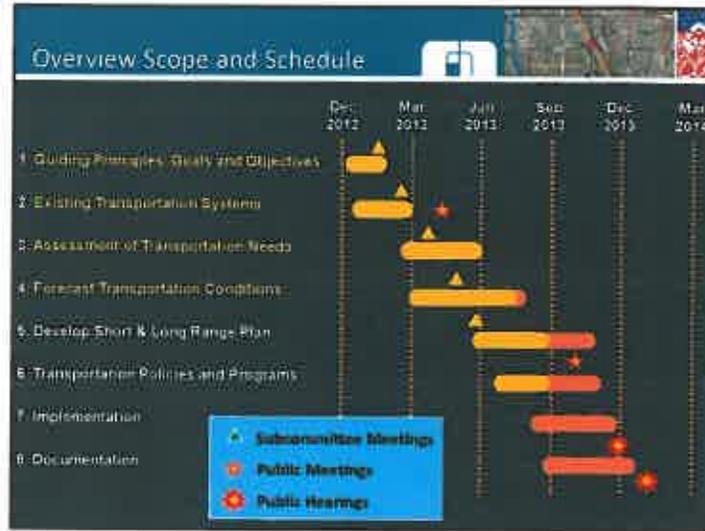
- **Programs & Polices**
  - Complete Streets
    - Project Selection Criteria
    - Design Considerations
  - Operations & Maintenance
    - Critical Intersections/Design Standards
    - Access/Corridor Management
    - CIP Identification
  - Airport Preservation and Support
  - Growth and Development
    - Traffic Impact Assessment, Infrastructure Funding
  - Parking Program
- **Short and Long Range Improvements**
  - Short Range program for developing CIP
  - Long Range program for coordination with agencies
  - ROW preservation

**Social Media**

- SC continued review via e-Builder
- Posting of CTP interim products on City Moving Forward website
  - Subcommittee Meetings #1-5
  - Chamber of Commerce Committee
  - Public Open House #1 materials
  - Council Briefings
- Announcing availability of CTP interim products on Facebook
- Pushing out messages about CTP interim products using Twitter



Norman CTP Modal Plan  
Public Meeting #2  
September 26, 2013



**FREESE NICHOLS**

**CTP Q&A SESSION**

**THANK YOU FOR YOUR INPUT!**

**CITY OF NORMAN**

Public Meeting #2 Flip Chart Notes: September 26, 2013

# BIKE/PED COMMENTS

- Army street w/out a bike lan is an "advanced route"
- Connect Elm to Berry on Lindsey with a bike/ped lane & curbs
- sidewalk Pickard to Chautauque on Parson and other campus area. <sup>34th</sup>
- Sidewalk Tecumseh in front of OGE sub just W. of 36<sup>th</sup>W - creates complete path
- Sidewalk from Cleveland Elm to Main dot Marble? would connect school to other sidewalks.
- Connect a multi-use path all the way around Westheimer - N on Flood, see 24<sup>th</sup> to connect w/ Legacy trail
- \* COMPLETE SIDEWALK WEST OF W 36<sup>th</sup> ON ROCKY

## Improve and Extend

- Same as CANEC from Robinson to Main

## REMOVE GRADE SEPARATED CROSSINGS AT LINDSEY/CLASSEN

CONSIDER CONSTRUCTION AS GRADE SEPARATED CROSSING AT CLASSEN. FIRE STATION IS AT CONSTITUTION + CLASSEN

- Principal Urban Arterial: has bike lanes 11' travel lanes, 12' median
- On-street bike lanes
- Specify buffer between berry-bank
- remain 2 lanes - ~~3~~
- Extend curbs 1-02<sup>nd</sup>

### THOROUGHFARE COMMENTS

- Keep Tevornsch speeds down
- Add bike lanes on Tevornsch
- Reduce Tevornsch spd. limit east of 12th Ave E.

Complete James Gorman (front) N. to Robinson

Commit Tevornsch from 45th East to 12th

SPECIAL CORRIDOR FROM 11th ST TO 12th ST  
ON LINSEY  
CONNECT E LINSEY BETWEEN 8th & 9th - FARE PD

### TRANSIT COMMENTS

- Brooks Station full-time station
- Update the transit routes to the latest version, please

## 2011 Norman Community Transportation Survey