Agenda

1. Approval of Minutes
2. Presentation: Transportation Overview
3. Presentation: Transportation and Comprehensive Plans
4. Discussion and Direction: Transportation Actions in Plano Tomorrow
5. Work Plan Updates
Transportation Overview
Polling Question
Who Are The Major Players?

Of these entities, who are the major players in Plano when it comes to transportation?

a) City of Plano, TxDOT and DART
b) NCTCOG, NTTA and DCTA
c) Kansas City Southern Lines, Uber and Lyft
d) All of these
Polling Question
How many cities are in the DART service area?

a) 5 Cities  
b) 9 Cities  
c) 13 Cities  
d) 21 Cities  

![DART Train Image]
DART

• Dallas Area Rapid Transit (DART)

• 13 Cities:
  – Addison, Carrollton, Cockrell Hill, Dallas, Farmers Branch, Garland, Glenn Heights, Highland Park, Irving, Plano, Richardson, Rowlett, and University Park.

• Membership:
  – One-cent local sales tax (8.5% is cap for sales tax in the state. State receives 6.5% and cities can collect up to 2.0%).
Plano Transportation

- Network essentially complete
- Transportation choices present within the city
- Community with limited space to develop
- Community with development entitlements
- Community impacted by regionalism
- An imbalance of job/housing
- CRPC Survey themes:
  - Walkability and Transit
  - Travel Demand and Management of auto-centric city
Existing Thoroughfares
Thoroughfare Stats

Just over 6 new miles of roadways forecast until 2045

<table>
<thead>
<tr>
<th>Roadway Class</th>
<th>2018</th>
<th></th>
<th>2045</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Miles</td>
<td>%</td>
<td>Miles</td>
<td>%</td>
</tr>
<tr>
<td>Arterials</td>
<td>161.14</td>
<td>62</td>
<td>175.68</td>
<td>66</td>
</tr>
<tr>
<td>Collectors</td>
<td>98.27</td>
<td>38</td>
<td>90.13</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>259.41</td>
<td>100</td>
<td>265.81</td>
<td>100</td>
</tr>
</tbody>
</table>
Polling Question
Roadway Classifications

What would Preston Road be classified as?

a) Freeway
b) Major Arterial
c) Minor Arterial
d) Collector
e) Local Road
Land Use/Transportation Nexus

- Creates a balanced environment
  - Economic Viability
  - Quality of Life
  - Sustainable
  - Equitable
- Symbiotic Relationship
  - Work together for mutual benefit
- Challenges
  - Open network
  - Susceptible to external growth influences
  - Jobs/Housing Imbalance
Mobility and Housing Timeline

<table>
<thead>
<tr>
<th>Trip Purpose</th>
<th>Travel Choices</th>
<th>Housing</th>
<th>Age Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child/Youth</td>
<td>Teenager</td>
<td>College</td>
<td>20s-30s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30s-50s</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>60s-Retirement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Retirement - Elderly</td>
</tr>
</tbody>
</table>
Growth in North Texas

Plano in 1984

Plano in 2016
Roadway Performance

2018 Roadway Congestion

2045 Roadway Congestion

AM Peak Period – Max. Directional LOS

Peak Hour Level of Service
- Nominal Congestion
- Moderate Congestion
- Severe Congestion

Source: NCTCOG
Travel Demand Modeling

Processes

<table>
<thead>
<tr>
<th>TRIP GENERATION</th>
<th>TRIP DISTRIBUTION</th>
<th>MODE CHOICE</th>
<th>TRAFFIC ASSIGNMENT</th>
</tr>
</thead>
</table>

Components

- Travel modes and preferences
- Transportation networks, signals, and systems
- Models, measurements, analysis, and processes
- Public involvement, project coordination and communication
- Trip origins and destinations, trip purpose
Forecast Congestion

Congestion 2018

Forecast Congestion 2045

Source: NCTCOG – Mobility 2045
Polling Question
Regional Issues – Worker Flows

On average, more people:

a) Travel to Plano for work
b) Travel out of Plano for work
c) Stay in Plano for work
d) None of the above

Source: US Census
Regional Issues

2017 Worker Flows

Source: US Census
Polling Question
In what direction do most residents of Plano travel to work?

a) North and Northwest
b) East and Southeast
c) South and Southeast
d) South and Southwest

Source: US Census
Regional Issues

2017 Worker Flows

- Over 50,000 workers travel southwest for work.
- Almost 20,000 workers travel west for work.
- Over 50,000 workers travel south for work.
- Few workers travel north or east for work.

Colors relate to worker’s commuting distance as a percentage of all workers by direction.

Source: US Census
Land Use/Transportation and Livability
Transportation Choice

- DART Silver Line
  - Targeted Completion by 2022
- DART Red and Orange Lines
- Established Bike and Bus networks
- UBER / LYFT
TODs and Plano (12th Street Station / Downtown)
Transit-Oriented Development

- Housing Implications
  - Indirect positive benefits to a community without every person changing their transportation habits
  - Housing: providing more of the “missing middle” allow for a variety of use, experience, and flexibility
Plano’s Transportation System

• Existing Roadway Network
  • Essentially complete
  • Well spaced hierarchy of streets
  • Overall network in good condition
  • Presence of choice in areas
  • Access to high quality transit
  • Established bike network
Plano’s Transportation System

• Transit
  • Established Bus route network
  • DART Red / Orange Lines
  • DART Silver Line in 2022
  • GoLink

• Future Technologies (?)
  • Legacy – UBER Elevate
  • Autonomous Vehicles
Plano’s Transportation System

• Local Streets in Developments
  • Auto-Centric Transportation Network
  • Neighborhood Units/Walled Subdivisions
  • Lack of connectivity to outside developments

• Pending Maintenance
  • Shortfall between available financial resources and need
  • City currently spends 9% on budget on street improvements
  • Costs have increased 228% over past 20 years
Traditional Ways to Reduce / Minimize Traffic

• Add Capacity to Facility
  • Not always the most cost-effective solution
  • Becoming antiquated philosophy in urbanized areas
• Reduce trip demand
  • Telecommuting, Shared-Ride, Flexible Work
• Increase multimodal options
  • Transit, Bike/Ped, Micro Mobility, Complete Streets
• Regional Traffic Signal System / Technology Enhancements
  • Increased efficiencies, coordinated network
• Need multi-faceted approach, no one option is best
• Need to consider long-term costs and impacts associated with any solution
Current Issues in Transportation

• Balancing Livability and Mobility
  – Emergence of Strong Cities Movement
  – Micro Mobility (electric carts and bikes, etc.)
  – Generational transportation preferences

• Rise of TNCs (UBER, LYFT)

• Future Technologies
  – Smart Transportation Networks
  – UBER Elevate, Autonomous Vehicles

• Transportation Funding and rethinking of traditional funding mechanisms

• Asset Management

• Impact of COVID-19
Transportation and Comprehensive Plans
Transportation in Comprehensive Plans

• Generally approaches transportation at a high level, but does get more specific

• Components include:
  o Thoroughfare Plan
  o Bike/Pedestrian Plan/Walkability
  o Capital Improvements
  o Transit
  o Regionalism
  o Traffic Management

• Land Use/Transportation Relationship
  o Generally tries to be compatible with housing and land use decisions throughout the plan
Thoroughfare Plan

- Sets forth functional roadway classifications for thoroughfares in the City
- Guidance on roadway alignments and size
- Provides a foundation for decision-making regarding thoroughfares
Thoroughfare Plan Street Sections

Type A
(E8DA)
Freeway - Regional - No Frontage Roads

Type B
(M6DA)
Arterial - Regional

Type B+
(M6DA)
Arterial - Regional
With 12 Access Lanes

Type C
(M6D)
Major Thoroughfare

Type D
(S4D)
Secondary Thoroughfare

Type E
(S4U)
Secondary Thoroughfare

Type F
(S2U)
Collector
Bike/Pedestrian Plans/Walkability

- Mobility in the City is not only about vehicular connectivity
- Bike and pedestrian connectivity are important in a variety of ways
  - Recreation
  - Neighborhood connectivity
  - Health
  - Additional transportation options
- Walkability also connects people and neighborhoods
Capital Improvements

• The CIP is initially based upon recommendations in a thoroughfare plan
• Identifies timing and phasing of program improvements
• Provides a basis for annual expenditures for roadway projects
Transit

• Transit is now a major component of transportation planning in Plano as well as DFW

• Transit provides a regional mobility alternative
  • DART
  • Silver Line

• Includes the bus network and supporting services
Regionalism

- The thoroughfare plan adapts to regional demand
- It also allow regional participants in transportation planning to understand what Plano’s circulation needs are
- Outlines the coordination efforts between local, regional and state agencies
Traffic Management

- Thoroughfare plan also informs high level decisions about management existing system
  - Ingress/egress
  - Signalization
  - Operation and maintenance (O&M)
- Provides guidance on existing traffic and operational issues
- Adaptations to smarter systems
Land Use/Transportation Relationship

- Land use and roadways must work together
  - Works best when both mutually support each other
- Provides a framework for both land use and transportation decisions
- Land use is a factor in determining roadway needs and associated costs
- Impacts land values, tax base and quality of life
Plano Tomorrow: Transportation Policies and Actions
Focusing on the Following Pillars
Plano Tomorrow Policy Structure

POLICY STATEMENT

Policy: Plano will support a system of organized land use to provide greater housing and employment choices, where new and redevelopment areas respect existing neighborhoods and businesses.

Action Statements:
1) Review and evaluate the Zoning Ordinance and make appropriate amendments based on the policies of the Comprehensive Plan.
2) Evaluate the Future Land Use Map and Growth and Change Policy Map every five years, or as necessary, to ensure land use descriptions are consistent with city-wide goals.

ACTION STATEMENTS

Policy: Plano will support a system of organized land use to provide greater housing and employment choices, where new and redevelopment areas respect existing neighborhoods and businesses.

Action Statements:
1) Review and evaluate the Zoning Ordinance and make appropriate amendments based on the policies of the Comprehensive Plan.
2) Evaluate the Future Land Use Map and Growth and Change Policy Map every five years, or as necessary, to ensure land use descriptions are consistent with city-wide goals.
Focusing on Transportation Policies

The Built Environment

<table>
<thead>
<tr>
<th>Policy Category</th>
<th>Action Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land Use</td>
<td>1</td>
</tr>
<tr>
<td>2. Community Design</td>
<td>3</td>
</tr>
<tr>
<td>3. Redevelopment of Regional Transportation Corridors</td>
<td>0</td>
</tr>
<tr>
<td>4. Undeveloped Land</td>
<td>0</td>
</tr>
<tr>
<td>5. Transit Oriented Development</td>
<td>5</td>
</tr>
<tr>
<td>6. Roadway System</td>
<td>8</td>
</tr>
<tr>
<td>7. Bicycle</td>
<td>6</td>
</tr>
<tr>
<td>8. Public Transit</td>
<td>7</td>
</tr>
<tr>
<td>9. Transportation Demand Management</td>
<td>3</td>
</tr>
<tr>
<td>10. Pedestrian Environment</td>
<td>7</td>
</tr>
<tr>
<td>11. Neighborhood Conservation</td>
<td>0</td>
</tr>
<tr>
<td>12. Redevelopment of Neighborhood Centers</td>
<td>0</td>
</tr>
<tr>
<td>13. Special Housing Needs</td>
<td>0</td>
</tr>
</tbody>
</table>

We Will Review 8 Policy Statements and 40 Action Statements.
Focusing on Transportation Policies

We Will Review 2 POLICY STATEMENTS

We Will Review 6 ACTION STATEMENTS

<table>
<thead>
<tr>
<th>Regionalism</th>
<th>1</th>
<th>5</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Population Growth</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Regional Transportation</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Air Quality</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Regional Water Conservation</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Consistency with Neighboring Cities</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Regional Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Identified Themes

Review Transportation Themes Derived from CPRC Input

1. Traffic/Congestion Management
2. Land Use/Transportation Relationship
3. Bikes and Transit
4. Walkability and Urban Design
Traffic/Congestion Management

Examples of Input from CPRC:

- “...is Plano adequately handling the traffic during rush hour?”
- “Reduce traffic congestion, improve air quality…”
- “Traffic, we don’t have the streets to accommodate…”
Land Use/Transportation Relationship

- Derived from CPRC traffic comments (Other side of the “traffic coin”)
- Reminder:
  - Land use and roadways must work together
    - Works best when both mutually support each other
  - Provides a framework for both land use and transportation decisions
  - Land use is a factor in determining roadway needs and associated costs
  - Impacts land values, tax base and quality of life
Bikes and Transit

Examples of Input from CPRC:

• “Question viability and pedestrian and bicycle usage…”
• “Need to accommodate all modes of transportation.”
• “Question bicycle viability usage safety…”
Walkability and Urban Design

Examples of Input from CPRC:

• “It should be important to consider more pedestrian-only crosswalk bridges”
• “TOD specifics of urban design…”
• “I prefer not to rely on my car… however, I'm skeptical as to the potential for increase walkability…”
Discussion: Tell Us Your Thoughts on Transportation-related Items

If possible, please frame your comments into the following four categories or create your own:

- Traffic/Congestion Management
- Land Use/Transportation Relationship
- Bikes and Transit
- Walkability and Urban Design
Committee Transportation Discussion
Discussion: Potential Presenters

Is there anyone we should hear from?

- Transportation Engineering Manager
- CIP Engineering Manager
- Parks Planning Manager
- Public Works Assistant Director
- Other
Discussion: Additional Data

Is there any additional data you would like to see?
Polling Question
Transportation Themes

Do you agree to move forward as discussed?

Note: The four identified themes are:

1. Traffic/Congestion Management,
2. Land Use/Transportation Relationship,
3. Bikes and Transit, and
4. Walkability and Urban Design

a) Yes
b) No
c) More discussion needed
Work Plan Updates
1. Transportation  
   (4 Meetings – 3 Remain)
2. Future Land Use  
   (4 Meetings)
3. Resume Density  
   (4 Meetings)
4. Growth Management  
   (3 Meetings)
Schedule

Transportation (4 Meetings)

1. Tuesday, April 21 – Today
2. Tuesday, May 5
3. Tuesday, May 19
4. Tuesday, June 2
Schedule

1. Tuesday, April 21

2. **Tuesday, May 5** – Review Traffic/Congestion Management and Land Use/Transportation Relationship Policies and Actions

3. Tuesday, May 19

4. Tuesday, June 2 – Discuss Possible Solutions
Schedule

1. Tuesday, April 21

2. Tuesday, May 5

3. Tuesday, May 19 – Bikes & Transit and Walkability & Urban Design Policies and Actions

4. Tuesday, June 2 – Discuss Possible Solutions
Schedule

1. Tuesday, April 21
2. Tuesday, May 5
3. Tuesday, May 19
4. Tuesday, June 2  – Reach Consensus on Transportation Policies and Actions (Plan Revisions)
Moving Forward on the Transportation Discussion

• Thoughts on the proposed schedule?
• Can we bring back potential solutions to identified policies and actions?
Next Steps
Next Meeting

Continue Transportation Topic

- Review Draft Transportation Solutions
  - Traffic/Congestion Management,
  - Land Use/Transportation Relationship
- Provide Feedback and Direction on Revisions, Additions, or Deletions to Transportation Solutions
Next Steps

- Prepare for the next meeting
  - Date: Tuesday, May 5, 2020
  - Time: 6:00 p.m.
  - Location: Virtual Meeting
  - Topic: Transportation
    - Review Transportation Solutions
    - Provide Feedback on Transportation Solutions
Thank you
For more information, please visit
www.PlanoCompPlanReview.org