Overview – Day 1

1. What is Planning? Why Plan?
   • A Brief History of Planning
   • The Importance of Design
   • Planning Lessons from Another City
   • History of Planning in Aurora

2. Community Elements
   • Human Geography
   • Mobility Networks
   • How Elements Relate
   • Break
   • Plan Making

3. Planning Activity
   • Envision the future of Aurora by “placetypes”
History of Planning & Urban Design

Liia Koiv-Haus
What is Planning? What is Urban Design?

The art and science of organizing the physical, social, cultural and economic structure of a city**

The process of shaping a city’s physical form.
- Parks/ Open space
- Streets
- Sidewalks
- Trees
- Lighting
- Signage

** Results vary by culture and community.
** Not everything is planned.
** It doesn’t always go according to plan.
Why Plan?
Organic vs. Planned Development

- Medieval Era emphasis on organic
- Renaissance Era emphasis on planned
Limitations to Planning
Limitations to Organic Development
Form vs. Function

• Modernism
Limitations to both Form-based & Function-based Design
The Solution?

- Flexible/adaptive planning
- Balancing aesthetics and functionality
- Creating citizen demand

Placemaking - Capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and well-being.

“We are good at putting up buildings but we are bad at making places”
Bernard Hunt, Architect
From Austin to Aurora:
Perspectives from Another City
George Adams
Perspectives from Austin, Texas

Downtown Austin
Circa 1997.

Population of city: 
~567,000.
Perspectives from Austin, Texas

Downtown Austin 2017.

Population of city: ~963,000.
Perspectives from Austin, Texas

A lot can change in 20 (or 30) years.

Understand, and build on your civic assets.
Perspectives from Austin, Texas

Invest in a better city.

It takes focus, support, time, and money.
Perspectives from Austin, Texas

What is “possible” changes over time.
Perspectives from Austin, Texas

Design for people.
Perspectives from Austin, Texas

Partnership is key.

It’s not just the “government”. Public involvement and advocacy is required.
History of Aurora: A Tale of 3 Cities
Heather Lamboy
Three Generations of Aurora

Pre-1960
Smaller blocks, Alleys, Grid streets “Original Aurora”

1960-2000
Larger lots, Fewer alleys, Curved Streets “Mid-Town”

Post 2000
Lots of Raw Land E-470 and Airport Opportunities “Aurora East”
Denver Water “Blue Line” - 1954
Growth by Decade

Town of Fletcher

1906 Original Aurora
Growth by Decade
Growth by Decade

1960-1969
Growth by Decade

1970-1979
Growth by Decade

1980-1989
Growth by Decade
Growth by Decade
Simplified Land Use

- Commercial
- Industrial
- Residential: Multifamily
- Residential: Single Family
- Open
- Other
Original Aurora’s Rich History

Begins in 1860s
Urban Centers and Transit Oriented Development
Campus Stations

- Light Rail Stations
- University Campus Master Plan
- Colfax & Fitzsimons Station Area Plan
Redevelopment Opportunities in “Midtown”
... such as a Marketplace
Master Planned Development in "Aurora East"
NOISE CONTOURS – Aerotropolis Vision
GAYLORD – a new place
Painted Prairie Master Plan
Southeast Neighborhoods Framework Development Plans
Master Plans
Infrastructure and Land Use Planning
Far East - Conceptual Plan
Questions?
COMMUNITY ELEMENTS
Planning and Development Services
City of Aurora
Land Uses, Buildings & Public Spaces
Heather Lamboy
Separating Incompatible Uses/Features

- Residential and other uses with impacts separated
  - Emissions and/or environmental impacts
  - Noise
  - Truck Traffic
Master Planning

- Mutually supportive:
  - Economic
  - Social
- Active much of the day
- Multi-modal
Buildings

Green Corridors
Places to Work
Places to Learn
Places to Eat
Places to Gather
Places to Sleep
Community Fabric: Why is it special?
How do you get there?
Building Placement

- access and visitors
- style and amount of landscaping
- signage style, size, and location
- street character
Architectural Design

- massing
- articulation
- materials and quality appearance
- windows and doors = transparency
- branding
WHAT MAKES A GREAT PLACE?
Elements of a Streetscape/Public Space

FRONTAGE ZONE

The frontage zone describes the section of the sidewalk that functions as an extension of the building, whether through entryways and doors or sidewalk cafes and sandwich boards. The frontage zone consists of both the structure and the facade of the building fronting the street, as well as the space immediately adjacent to the building.
Programming and Use of Space

- Activities and attractions
- Loose Space vs. Managed Space
- Societal Functions:
  - Daily use and contact
  - Events
  - Celebrations
  - Memorials
  - Protest
- Pride & Identity
Mobility Networks
Mac Callison
• Regional Plans
  • Denver Regional Council of Governments (DRCOG) Metro Vision and Regional Transportation Plan

• City Wide Plans
  • Comprehensive Plan
  • Bike-Ped Master Plan

• Sub Area and Corridor Studies
  • NEATS and SEATS
  • Fitzsimons Area Multi-modal Study
  • Station Area Plans – Rail Stations
  • Havana Corridor Transit Study
  • Colfax Corridor Transit Improvements
  • City-wide Signal Timing Study
  • Northwest Aurora Mobility Study

• Standards and Guidelines
  • Urban Street Standards
  • Zoning

• Project Specific Studies and Plans
  • Parker/Quincy/Smoky Hill Intersection Study
  • Nine Mile Station Bike/Ped Connections
Aurora’s Transportation System

• Transportation System
  • Roadway System
    • I-225, I-70 and E-470 Toll Way
    • Arterial, Collectors & local streets
  • Transit System
    • R, H and A Line – Rail Lines
    • Bus Services
  • Bike & Pedestrian
    • Off street trails and on-street bike lanes
    • Sidewalks and multi-use paths
  • Shared Mobility
    • Bike sharing: Lime Bike, Ofo
    • Car sharing: Car2Go, Zipcar
    • Mobility Services – Uber, Lyft, Networked Products
Future High Development Potential
Roadway Network Concepts to Accommodate Development
Interchange and Grade Separations with E-470 and I-70
Transit Components and Trail System Interface
1. Project Initiation and Project Management
2. Stakeholder Coordination / Involvement
3. Aurora Highlands Early Action Evaluation
4. Inventory of Current Conditions
5. Travel Demand Forecasting
6. Phased Transportation System Analysis
7. Street Alignment / Intersections-Interchanges
8. Recommended Plan, Phasing and Funding
2040 NEATS Daily Traffic Forecasts
- 1 to 2 mile route spacing
- Most routes are along arterials
- All connect to a Park-n-Ride
- Most routes are Suburban Local classification
- All have peak hour services
- Ridership range from 170 to 2,400 per day
- 20 riders per hour average boardings
- $600K to $5.6M annual operations cost (longer routes more cost)
### North-South Routes

<table>
<thead>
<tr>
<th>Road</th>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picadilly</td>
<td>Waterstone, Eastgate Industrial Park, Majestic Commerce Center, Green Valley East, Aurora Highlands, Painted Prairie</td>
</tr>
<tr>
<td>Powhaton</td>
<td>Waterstone, Adonea, Aurora Highlands and Porteos</td>
</tr>
<tr>
<td>Watkins</td>
<td>Prosper Farms, Acre</td>
</tr>
</tbody>
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### Seven East-West Routes

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<tr>
<th>Road</th>
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<tbody>
<tr>
<td>64th Ave</td>
<td>Poteros, Fulenwider, Highpointe at DIA, Painted Prairie</td>
</tr>
<tr>
<td>56th Ave</td>
<td>Aurora Highlands, Windler Homestead</td>
</tr>
<tr>
<td>38th Ave</td>
<td>Aurora Highlands, Green Valley Ranch East</td>
</tr>
<tr>
<td>26th Ave</td>
<td>Aurora Command, Majestic Commerce Center, Acre</td>
</tr>
<tr>
<td>Colfax</td>
<td>Eastgate Industrial Park, Prologis Park 70, Transport</td>
</tr>
<tr>
<td>6th Ave</td>
<td>Adonea, Sky Ranch, Prosper Farm</td>
</tr>
<tr>
<td>Jewell</td>
<td>Waterstone</td>
</tr>
<tr>
<td>Route</td>
<td>Ridership</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Picadilly Road</td>
<td>1,000 to 1,200 (average per day)</td>
</tr>
<tr>
<td>Powhaton Road</td>
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</tr>
<tr>
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<td>250 to 400 (average per day)</td>
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**Seven East-West Routes**

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**Ridership Potential**  
7,000 to 8,800 (average per day)
Ingredients of a successful mobility hub

Multi-modal transportation
- A range of higher-order transportation options

Urban density and use intensity
- Critical mass of people to work, live, shop and enjoy themselves

Embeddeds Technology
- Access to real time information, internet use and seamless transfer

Strong sense of place
- A vibrant and vital place to support the transportation experience

Economic vitality and competitiveness
- Significant development potential and strong economic anchors

High levels of pedestrian priority
- Spaces and connections designed with pedestrian priority
Mobility Hub Components

Traveler Needs
Safe, reliable, affordable, easy to navigate, enjoyable
- Uber/Lyft connections
- Bike sharing
- Short and long term parking
- Safe intersection crossings
- Secure Bike storage
- Small format retail
- EV charging
- Shared ride waiting areas
Mobility Hub Concept

1. Bike parking
2. Real-time transit info
3. Informational kiosk
4. On-demand rideshare
5. Shared mobility services
6. Smart intersection
7. Electric vehicle charger
8. Smart parking
9. Package delivery
10. Pedestrian facilities
11. Protected bikeway
12. Universal transportation account
13. Mixed-use development

SANDAG
1. Enhanced bus stops with real-time information
2. Designated bus lanes and priority signals
3. Secure bike parking
4. Bike parking
5. Car sharing
6. Off-street bike path
7. Public art
8. Transit and community information kiosk
Regional/Subregional Funding Allocation

DRCOG Federal Funds
(FY 2020-2023)
$280 Million Total (Estimate)

Set-Asides
$49.4 Million
- Community Mobility Planning & Implementation
- TDM Services
- Regional Transportation Operations & Technology
- Air Quality Improvement
- Human Service Transportation

Regional Share
$46.1 Million
- One Call for Regional Projects/Programs
  - Similar to structure used for current TIP.
  - CDOT Central 70 project: $25 mil.

Subregional Share
$184.5 Million
- Individual Subregion Forum Calls for Projects
  - Proportionately targeted for planning purposes to predefined sub-geographic units for project identification and recommendation by eligible stakeholders within each subregion.

Subregion Shares*:
(4-year total in millions$)
- Adams 15.20% $ 28.0
- Arapahoe 19.25% $ 35.5
- Boulder 9.96% $ 18.4
- Broomfield 2.34% $ 4.3
- Denver 24.15% $ 44.6
- Douglas 9.97% $ 18.4
- Jefferson 16.81% $ 31.0
- SW Weld 2.31% $ 4.3

100% $184.5

* based on population, VMT and employment.
Large Scale Transportation Infrastructure Projects
Combination of Federal, State and Local Resources

- I-225 Widening
- Peoria Crossing
- A Line and R Line
- Steven D. Hogan Parkway
- Quincy/Gun Club Intersection
- I-70 Managed Lanes
The RTD FasTracks Plan/Program

- 122 miles of new light rail and commuter rail
- 18 miles of Bus Rapid Transit (BRT) service
- 31 new Park-n-Rides; more than 21,000 new parking spaces
- Enhanced Bus Network & Transit Hubs (FastConnects)
- Redevelopment of Denver Union Station
- 57 new rail and/or BRT stations
- Opportunities for Transit Oriented Communities
DRCOG Transportation Improvement Program (TIP)

New TIP projects for station access - $23M

- Metro Center Station
- Fitzsimons Station
- Tollgate Creek Trail
- Westerly & Tollgate Creek Connectors to Florida Rail Station
CONCEPTUAL

Legend

1. Aurora City Municipal Court
2. Existing City Center Park
3. Proposed City Center Park renovations
4. Proposed pedestrian promenade
5. Proposed pedestrian underpass
6. Proposed Metro Center landscape and regional trail connection

Notes:
- Trail routes subject to change
- Trees and landscaping are shown for concept only and are not part of this contract.
Challenges and Opportunities

Funding shortfall for new infrastructure
Funding shortfall for infrastructure maintenance/operations
Rail transit and first/last mile connections
Mobility Services
Autonomous and connected vehicles
Changing land use patterns influence travel patterns and infrastructure needs
- Eastern Area vs infill
- TOD and densification of city
Element Relationships, Site Analysis & Constraints

Nate Owens
Businesses and Residences

- Goods, Services, Entertainment, Employment Opportunities close to or mixed with homes
- 1\textsuperscript{st}, 2\textsuperscript{nd}, 3\textsuperscript{rd} Places
- Planning Concerns
  - Site Access
  - Vehicle/Bike Parking
  - Traffic Congestion
  - Solar Access and Shadows
  - Aesthetic Character
  - Sense of Place
Businesses and Residences

- Quality homes can mean quality businesses and jobs nearby
- Environmental Justice
  - Equitable distribution of environmental burdens and assets
  - Unwanted Businesses or land uses
  - Lacking opportunity or services
- Civic Buildings/Churches
Parks, Trails, and Greenery

• Recreation and escape from “concrete jungle”
• Vegetation itself is good for our physical and mental health
• Trails can link to recreation, shopping, or employment destinations
Parks, Trails, and Greenery

• Programming in Parks and Public Spaces
• Stormwater and Flooding
• Economic Impact
• Help us stay cool in hot weather
Natural Area Use and Protection

- Waterfronts or other scenic views
  - Gathering Places
  - Economic opportunity
  - Community identity

- Personal attachment to a particular place
  - Topophilia and Solistalgia
Roles, Tools, and Processes Pt. 1: Plans

Brandon Cammarata
It’s not just the law, it’s a good idea.

**Colorado State Law**
- Municipalities are authorized to appoint a planning commission.
- The planning commission is required to prepare and adopt a master plan for the physical development of their jurisdiction.

**City Charter**
- Establishes Planning & Zoning Commission to:
  - “Prepare and submit to Council for its approval a master plan for the physical development of the city…
  - It shall hold hearings relative to zoning and changes in the zoning ordinance and shall make recommendations thereon to Council and…
  - It shall assist Council in considering and recommending a plan for capital improvements”
Who’s involved with planning?

• City Council

• Planning & Zoning Commission

• City Staff

• Community “Stakeholders”
Planning in a nutshell

1. Where are you now?
2. Where do you want to be?
3. How do you get there?
Public Engagement

- The community knows the community the best
- Different approaches and levels of participation
Existing Community Conditions

- Analyze the existing physical, economic, environmental, legal and policy conditions
- Identify significant trends that will affect realization of the vision
Types of Plans

- Comprehensive Plans
- Area or Neighborhood Plans or Studies
- Strategic Plans
The Comprehensive Plan

• Very broad and long term
• Address the entire city
• Required by law
• Foundation for decision making
• Describes the community vision and values
• Plans physical development
• Not regulatory, but supports zoning
Area Plans or Studies

- Smaller area and narrower focus for vision
  - Economic development or redevelopment
  - Transportation planning
  - Parks and public spaces