Agenda

• Welcome and Introductions
• What is the Transit System Plan?
• Phased Approach
• Phase 1 - Comprehensive Operations Analysis (COA)
  – Overview of Draft Bus Recommendations
• Phase 2 - 2040 Plan Development
  – Status of 2030 Plan
  – Existing and Future Conditions
  – Alternatives to Consider
• How you can stay involved
• Discussion
Welcome & Introductions

• 2040 Team Members

• Key objectives for this meeting:
  – Obtain your feedback on Phase 1 COA draft bus recommendations
  – Present existing/future conditions information
  – Discuss needs and opportunities
  – Get your input on ideas/issues/alternatives
    • What should we consider in the 2040 plan?
    • What is most important to you?
DART Background

- Formed in 1983
- 13 cities today contribute one-cent sales tax
  - Mesquite & Arlington contract service
- Service Area 700 Sq-mi
- Population
  - Service Area 2.3 Million
  - Region 6.6 Million
- Annual operating budget $495 million
What is the Transit System Plan?

• Long-range element of DART Service Plan

• Guide for future capital and operating programs

• Programming tool that feeds into 20-Year Financial Plan

• Policy guidance

• Vision for future – our message to the region
DART Transit System Plan

• Why plan 25 years into the future?
  – To establish a vision based on future needs
  – To identify and position DART for opportunities
  – To determine phasing and budget needs
  – To guide policy development

• Why update the plan periodically?
  – Changes in travel, land use, and development patterns
  – Changes in financial conditions and assumptions
    • DART sales tax projections
    • Other local, regional or federal funds
System Plan Relationships

DART Service Plan

Location Specific

Project Definition

Long Range Element

DART Transit System Plan

Transit Element

Financial Constraints

DART Financial Plan

NCTCOG Metropolitan Transportation Plan

DART Financial Plan

Project Studies

2030 Transit System Plan

Bus, rail, pedestrian, and sail, sustainability, mobility

FINAL SERVICE PLAN AND SUPPORTING DOCUMENTATION
Adopted April 14, 1983
FY16 Financial Plan Affordability

End of FY16 Financial Plan →

State of Good Repair/Fleet Replacements

Cotton Belt Rail Project

Financial Capacity opens up considerably after 2035

Core Capacity Projects
- D2
- Platform Extensions
- Central Streetcar

State of Good Repair/Fleet Replacements

Operating Exp. Capital P&D,SU,Non-Op System Expansion Other Capital Debt Service Total Available
Phased Approach

Phase 1  FY15

- Key Issues / Guiding Principles
- Data Collection
- Transit Competitive Index (TCI) Tool
- Comp. Operations Analysis (COA)
- Future Conditions
- 10-Year Bus Transit Plan

Phase 2  FY16

- Needs/ Evaluation Criteria
- Alternatives Development
- Regional Service Opportunity
- Evaluation / Financial Analysis
- Draft 2040 Plan
- Adopt 2040 Plan
Phase 1
Comprehensive Operations Analysis (COA)
What is a COA?

- Evaluates overall transit service efficiency and effectiveness, system route structure and delivery methods
- Results in a comprehensive review of all transit service as a system
- Culminates in a set of service recommendations, usually over a 5-10 year period

**COA GOALS**
- Increase route and system efficiency
- Better serve existing and emerging transit markets
- Improve ridership and productivity
- Ensure services are equitable
- Develop support through public and stakeholder input
Why do a COA as Phase 1?

- Current rail build-out is nearly complete
- Bus routes have been reorganized around phased rail openings
- At the same time, levels of bus service have been reduced significantly
- Current emphasis is on coverage throughout the Service Area
- Use 2014 on-board survey data
- Solid foundation for 2040 Transit System Plan
Common Themes Heard during COA

- Bus Network Design (simplify routes)
- Increase Frequency
- Late Night / Weekend Service
- Express Service (Bus and Rail)
- Crosstown Service (Bus, Cotton Belt)
- Specific Bus Route Ideas
- Service Area Expansion
Draft Service Plan Key Elements

• Core Frequent Route network
  – To strengthen local and crosstown routes
• High-frequency Rapid Ride network
• Crosstown / Airport Express network
• Other bus service improvements:
  – More consistent service headways (bus-rail connections)
  – Improved weekend service
  – More direct routing
  – Improved Uptown service
Core Frequent Route Network

Weekday Peak Service (15 minute or less)

Existing Service
High Frequency Routes
Weekday Peak Periods

Full Service Plan
High Frequency Routes
Weekday Peak Periods

LEGEND

- Service Area
- Rail Stations
- Rail Alignment
- Major Roads

Weekday Peak Bus Service
- 15 Minute (or less) Frequency
- Other Routes
Core Frequent Route Network
Weekday Midday Service (20 minute or less)

Existing Service
High Frequency Routes
Weekday Midday Period

Full Service Plan
High Frequency Routes
Weekday Midday Period

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
- Weekday Midday Bus Service
  - 20 Minute (or less)
  - Frequency
- Other Routes

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
- Weekday Midday Bus Service
  - 20 Minute (or less)
  - Frequency
- Other Routes
Core Frequent Route Network
Saturday Midday Service (30 minute or less)

Existing Service
Moderate Frequency Routes
Saturday Midday Period

Full Service Plan
Moderate Frequency Routes
Saturday Midday Period

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
Saturday Midday Bus Service
- 30 Minute (or less) Frequency
- Other Routes

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
Saturday Midday Bus Service
- 30 Minute (or less) Frequency
- Other Routes
Core Frequent Route Network
Sunday Midday Service (30 minute or less)

Existing Service
Moderate Frequency Routes
Sunday Midday Period

Full Service Plan
Moderate Frequency Routes
Sunday Midday Period

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
Sunday Midday Bus Service
- 30 Minute (or less) Frequency
- Other Routes

LEGEND
- Service Area
- Rail Stations
- Rail Alignment
- Major Roads
Sunday Midday Bus Service
- 30 Minute (or less) Frequency
- Other Routes
Rapid Ride Element

- Seven (7) corridors
- Frequent, limited stop layered over local routes
- Fills the crosstown service gap not met by rail
- 20,000 daily riders projected in 2028
Crosstown/Airport Express Element

- Four (4) corridors
- Fills gap for key crosstown travel markets and airport access
- May be preliminary step to longer-term rail improvements
**Downtown Express Element**

- Similar to today’s express routes
- Modifies downtown routing to provide direct links to growing employment centers (Uptown and Medical District)
On-Call Zones

- Expand from 8 to 14 zones
- New on-call zones proposed for:
  - Northwest Carrollton
  - Northeast Carrollton
  - Rylie
  - Kleberg
  - Far North Plano
  - Red Bird
- Other potential changes:
  - Far North Plano (and potentially other areas) as demonstration project for taxis and private auto ride services such as Uber and Lyft.
  - Sunday only on-call service in North Garland.
Benefits of Draft Service Plan

• Responds to key comments received during outreach

• Targets new/growing travel markets

• Increases ridership and adds service to accommodate population growth

• Increases DART coverage for employment/population within ½ mile of key corridors
Next COA Steps

• Public and stakeholder feedback on draft recommendations

• Complete phasing plan

• Cost associated capital improvements – mainly buses and bus facilities

• Integrate recommendations into 2040 Plan Phase 2 work
Phase 2 - 2040

- Plan Development Process
- 2030 Plan status
- Existing & Future Conditions
- Potential Alternatives to consider
Plan Development Process

**Needs & Opportunities**
- Demographics
  - Land Use
  - Travel Patterns
  - Congestion

**Policy & Program Review**
- New or Changed
- Best Practices
- Funding Opportunities

**Alternatives Development**
- 2030 Rail/Bus
- 2030 Vision
- New 2040 Ideas

**Screening Evaluation**
- STOPS Model
- TCI Tool
- NCTCOG Model
- Cost/Benefit

**2040 Plan Scenarios**
- Service Area Focus
- Regional Opportunities

**Integrate Policy & Programs**

**Evaluation & Trade-Offs**
- System-Level
- Financially Constrained

**Draft 2040**

**Final 2040**
DART Board Action
2030 Transit System Plan
Approved October 24, 2006

Rail
- Rail Line & Station (Existing/Committed)
- Express Rail
- Rapid Rail

Bus
- Express Bus
- Enhanced Bus
- Rapid Bus

Managed HOV Lanes
- DART Participation
- No DART Participation

Paratransit
(service provided systemwide)

Systemwide Mobility
- Intelligent Transportation Systems
- Transportation System Management
- Travel Demand Management
- Safety and Security
- Passenger Facilities
- Bicycle/Pedestrian Integration
- System Accessibility

[Map of Dallas transit system with various lines and stations, noting future rail alignments and station area locations subject to Service Plan amendments]
What’s Changed since 2006?

• Economic recession
  – All new 2030 bus/rail corridors deferred to after 2030, including D2
• By 2015, some projects added to Financial Plan
  – Program of Projects (D2, Red/Blue Platforms, Streetcar)
  – Cotton Belt Corridor
• 2040 Plan will re-evaluate remaining corridors
Program of Interrelated Projects

1. Red and Blue Line Platform Extensions
   - 28 LRT Stations

2. Downtown Second Light Rail Alignment (D2)
   - Victory Station to Green Line

3. Dallas Central Streetcar Link
   - Omni Hotel to St. Paul LRT Station
Platform Extensions

- All DART Stations constructed since 2004 can accommodate 3-car trains
- CBD stations modified in 2008-2009
- 28 Red & Blue stations can only accommodate 2-car trains
- $120 M Project Cost
  - $60 M Texas Mobility Funds
  - $58 M FTA Grant budgeted
D2 Project

FY16 Financial Plan Assumptions
• 2021 Service Date
• $650 M Project Cost (YOE)
• 50% FTA Grant

• Locally Preferred Alternative decision included tunnel spur to HSR/Convention Center area
• Tunnel spur is not in current Financial Plan
Dallas Streetcar Central Link

- Proposed Locally Preferred Alternative
- DART FY16 Financial Plan includes $80M for project
  - $40M external funds
Cotton Belt Corridor

FY16 Financial Plan Assumptions
- 2035 Service Date
- $2.9 Billion option (YOE)
- 20% external funding

• Current efforts focused on public-private partnership options to accelerate and phase service.
FY16 Financial Plan Affordability

Core Capacity Projects
- D2
- Platform Extensions
- Central Streetcar

State of Good Repair/Fleet Replacements

Cotton Belt Rail Project

Financial Capacity opens up considerably after 2035
Existing and Future Conditions

- 2040 Demographics Analysis
- Policy/program review
- Land Use changes

West Dallas

Legacy West Plano

Midtown/Valley View Dallas
Population Growth

POPULATION GROWTH | 2014-2040

- NORTH CENTRAL TEXAS
- DART SERVICE AREA

2014:
- Population: 6,860,993
- Growth: 28%

2040:
- Population: 10,676,844
- Growth: 56%

3,138,398

2,449,829
2014 Population Density

- Darker areas indicate higher residential density
- Higher density areas are suitable for higher level of transit investment
By 2040, population density increases in several areas within DART Service Area.

Many areas outside of DART start to see higher density.
Employment Growth

EMPLOYMENT GROWTH | 2014-2040

- NORTH CENTRAL TEXAS
- DART SERVICE AREA

2014: 4,288,163
2040: 6,691,449

2014: 2,174,737
2040: 3,299,250

↑56%
↑52%
2014 Employment Density

- Darker areas indicate higher concentrations of jobs
- DART Rail serves many high density employment corridors today
2040 Employment Density

- Employment density increases significantly by 2040, especially to the north
- New potential corridors that could support a transit investment become visible
Combined 2014 Population and Employment Density
Combined 2040 Population and Employment Density
1950-2040 Growth Animation
1950-2040 Growth Animation

1960
1950-2040 Growth Animation

1970

- Before 1955
- 1956-1965
- 1966-1975
- 1976-1985
- 1986-1995
- 1996-Present
- 2040 Forecast
1950-2040 Growth Animation

1980

Before 1955
1956-1965
1966-1975
1976-1985
1986-1995
1996-Present
2040 Forecast
1950-2040 Growth Animation

1990

- Before 1955
- 1956-1965
- 1966-1975
- 1976-1985
- 1986-1995
- 1996-Present
- 2040 Forecast
1950-2040 Growth Animation

2000

- Before 1955
- 1956-1965
- 1966-1975
- 1976-1985
- 1986-1995
- 1996-Present
- 2040 Forecast
1950-2040 Growth Animation

2010

Before 1955
1956-1965
1966-1975
1976-1985
1986-1995
1996-Present
2040 Forecast
1950-2040 Growth Animation

- Before 1955
- 1956-1965
- 1966-1975
- 1976-1985
- 1986-1995
- 1996-Present
- 2040 Forecast
Future Congestion

INCREASE IN DAILY VEHICLE HOURS SPENT IN DELAY & VEHICLE MILES OF TRAVEL | 2017-2040

- Wise: +53%, +165%
- Denton: +61%, +134%
- Collin: +69%, +204%
- Hunt: +74%, +221%
- Parker: +63%, +167%
- Tarrant: +52%, +157%
- Dallas: +40%, +94%
- Kaufman: +91%, +416%
- Hood: +65%, +124%
- Johnson: +87%, +279%
- Ellis: +90%, +402%

Vehicle Miles of Travel % Increase
Vehicle Hours in Delay % Increase
Least Congested: Lightest Color
Most Congested: Darkest Color

Map showing increases in vehicle hours and miles of travel for different counties in Texas.
Initial Alternatives

• Several initial alternatives to consider are based on prior DART plan and NCTCOG plan
  – DART 2030 Transit System Plan
  – DART 2030 Vision Element
  – NCTCOG 2040 Recommendations
Initial Alternatives

• Deferred 2030 Transit System Plan Corridors
Initial Alternatives

• Deferred 2030 Transit System Plan Corridors

• 2030 Vision Corridors
Initial Alternatives

- Deferred 2030 Transit System Plan Corridors
- 2030 Vision Corridors
- NCTCOG 2040 Plan Rail and Bus Corridors
Financial Capacity

• There are many potential projects to consider – but there is limited financial capacity.

• 2040 Plan will be closely tied to the DART 20-Year Financial Plan:
  – What level of COA/Bus Service Plan changes DART can afford over the next 10-15 years?
  – What additional Bus Service Plan and longer-range projects or programs can we afford through 2040?
Additional Ideas to Consider?

• Other rail corridors? New or extensions?
  – Dallas North Tollway Corridor
  – TRE Extension south to HSR station area

• Streetcar system expansion?
  – North to Knox-Henderson area, other

• Infill LRT Stations?
  – Knox-Henderson Station

• New programs or policies?
  – Last mile connections/partnerships

• Operational improvements to the current system?

• Other?
Public and Agency Involvement

1. **Monday, March 21 | 6:30pm**
   Gale Fields Recreation Center
   1701 Dairy Road, Garland

2. **Wednesday, March 23 | Noon**
   DART Board Room
   1401 Pacific Avenue, Dallas

3. **Wednesday, March 23 | 6:30pm**
   Eastfield College Pleasant Grove Campus
   802 South Buckner, Dallas

4. **Thursday, March 24 | 6:30pm**
   Addison Conference Centre
   15650 Addison Road, Addison

5. **Tuesday, March 29 | 6:30pm**
   West Dallas Multipurpose Center
   2828 Fish Trap Road, Dallas

6. **Wednesday, March 30 | 6:30pm**
   Hampton Illinois Library
   2951 S Hampton Road, Dallas

7. **Thursday, March 31 | Noon**
   Urban Towers
   222 W. Las Colinas Blvd, Irving
How to Stay Involved

• Visit www.DART.org/2040 for progress

• Participate via the DART MySidewalk page www.DART.org/Talk2040

• Email comments/input to 2040Plan@DART.org

• Attend meetings

• Request a briefing