Today’s Discussion

• The purpose of today’s briefing is to update the committee on the status of the Draft 2045 Transit System Plan, with a focus on highlighting the range of capital and operating program opportunities under each theme

• Investments in capital programs along with service enhancements will help to define a new mobility future that will sustain the DART system and benefit our communities and riders
Recent Activities

• **January 12, 2021** – Planning and Capital Programs Committee briefing
  – Review December public meeting input
  – Highlight DART Service Area city staff meetings and feedback

• **March 5, 2021** – Board memorandum documenting specific DART city staff feedback on draft 2045 Transit System Plan goals and actions

• **April-May 2021** – Coordination and production activities
  – Participate in DARTzoom public meetings with brief overview of Transit System Plan and how it includes and builds upon DARTzoom
  – Initiate production of the Draft 2045 Transit System Plan document
  – Coordinate with finance staff on 20-Year Financial Plan
Draft 2045 Transit System Plan

- Vision for future transit mobility
- Strategic plan to improve bus, rail, and other mobility programs
- Guide for future capital projects and operations
- Link to DART 20-Year Financial Plan
  ✓ Program budgets/reserves
  ✓ Opportunity to refine in future years as programs or projects are defined in more detail
Transit System Plan Framework

**OUR SYSTEM**
WHAT WE DO AND HOW IT’S CHANGING

**OUR OPPORTUNITY**
HOW WE’RE PREPARING FOR OUR FUTURE MOBILITY

**OUR GUIDE**
HOW WE’LL IMPLEMENT OUR FUTURE

- RIDER EXPERIENCE
- MOBILITY & INNOVATION
- SERVICE & EXPANSION
- LAND USE & ECON DEVELOP.
- COLLABORATION

**GOALS & ACTIONS**

- DART 20-YEAR FINANCIAL PLAN

**ACCESS**
- Regional
- Core Frequent
- Local
- Circulator
- Walk/Bike
- New Mobility
Our Guide
Goals & Actions

- Goals and actions reviewed with DART Board Planning & Capital Programs committee

- Matrix includes proposed timelines (short, mid, long-term) and potential partners

- Input on themes, goals and actions from the public and city staff
What is of most interest to the public and City staff?

- Enhanced access for our riders (pedestrian/bike connections)
- Expand and pursue advancements in bus stop amenities
- Integration of mobility options – “mobility hubs” as way to refresh our existing facilities or create new facilities
- Electric vehicle charging opportunities and electric bus fleet
- Expand core frequent route network, more frequent and direct routes
- Expand GoLink zones
- Work with cities on bus rapid transit (BRT) improvements
- Focus on coordinated land use planning
- Work with cities on range of housing options and transit-supportive zoning along corridors and at stations
What is important for our system?

• Leverage our infrastructure and facilities through coordinated planning to enhance ridership and access
• Ensure system capacity and flexibility
• Maintain our system in a state of good repair
• Avoid obsolescence - plan and budget for modernization of our fleets and systems to improve efficiencies, improve service reliability and upgrade/consolidate systems
Financial Plan Considerations

• The “Our Guide” section of the plan outlines strategic goals and actions

• Some of the actions will require new capital or operating funds if advanced

• Some actions relate to studies or plans necessary to evaluate and better define costs or new programs

• The following slides highlight examples including potential costs
Rider Experience Theme

- Potential policy and cost-sharing program to build upon work conducted by NCTCOG on its FTA TOD Planning Grant
  - Program and criteria subject to Board approval

- Potential capital costs: to be determined after further study of national best practices and regional examples
Rider Experience Theme

• Expand funding for bus stop amenities for local and Core Frequent bus routes

• DART has $1M per year for bus stop amenities budgeted for next few years

• Potential capital costs: to be determined after post DARTzoom assessment

GOAL 2
EXPAND BUS STOP AMENITIES FOR LOCAL BUSES, CORE FREQUENT BUS ROUTES, AND FUTURE BUS RAPID TRANSIT (BRT) FOCUSING ON THOSE BENEFITTING RELIANT AND TASK RIDERS

ACTION 2.1 Develop and regularly update a multi-year program to implement and replace bus stop amenities per DART Service Standards

ACTION 2.2 Review advancements in bus stop and shelter design, materials, customer information, and technology and conduct rider preference surveys/focus groups

Improving the Bus Commute

Amenities make riding more pleasant

With more than 11,900 bus stops across the service area, DART places passenger support facilities at the busiest ones for customer convenience and comfort.
Service & Expansion Theme

- DARTzoom Phase 2 study will assess an “aspirational plan” in 2022 for expanded bus services

- **Potential operating costs:** to be determined
Service & Expansion Theme

**GOAL 3**
PROMOTE TRANSIT PRIORITY WITHIN KEY BUS CORRIDORS TO ENHANCE OPERATIONAL EFFICIENCY AND INCREASE RIDERSHIP

**GOAL 4**
DEFINE AND DEVELOP BUS RAPID TRANSIT (BRT) CORRIDORS THAT APPEAL TO EXISTING RIDERS, ATTRACT NEW RIDERS, AND SUPPORT MAJOR JOB CENTERS

**ACTION 3.1** Develop a Corridor Improvement Program for core frequent bus routes to document benefits and define capital investment needs

**ACTION 4.2** Upgrade top performing Core Frequent bus routes or identify new bus routes for BRT or Rapid Ride improvements based on adopted standards
Core Frequent Bus Improvements

• DARTzoom proposes 22 core frequent routes (245 miles)

• There is an opportunity to brand and support these corridors with infrastructure/facility improvements

• Investment levels may vary by route and can be phased

• Post DARTzoom route assessment will help prioritize

• Potential capital costs: $430M ($1.75M per mile / 245 miles)
BRT – Rapid Ride Improvements

- High ridership Core Frequent Bus routes could be upgraded to BRT with FTA grants

- FTA “Small Starts” BRT criteria:
  - Minimum 3,000 daily boardings
  - Peak period or dedicated bus lanes where possible (50% or more)
  - Defined stations with passenger amenities, schedule and route info
  - Active transit signal priority
  - Frequent service (15-min or better)
  - Branded vehicles/stations

- Potential capital cost range:
  - $50M (Corridor-based BRT)
  - $200M (BRT w/dedicated bus lanes)
BRT Examples

MetroRapid, Austin

HealthLine, Cleveland
Service & Expansion Theme

GOAL 1
PRIORITIZE ASSET MANAGEMENT AND MAINTAIN A STATE OF GOOD REPAIR FOR VEHICLES, FACILITIES AND SYSTEMS TO PROVIDE SAFE, COST-EFFECTIVE, RELIABLE SERVICE

- DART LRT system elements are becoming obsolete and difficult to maintain. $8M existing contract to upgrade SCADA system in the short term. A future study will be done to evaluate and recommend a modernization program
- Potential capital costs: not defined, but could be major capital investment
Service & Expansion Theme

- TRE fleet consists primarily of older vehicles, near end of useful lives
- TRE has evaluated options to continue to overhaul current fleet or replace with conventional or DMU fleet

- **TRE Fleet capital cost range (50% DART - 50% Trinity Metro):**
  - Current fleet replacement: ~$185M
  - DMU fleet replacement/modify infrastructure: ~$475-500M

- **TRE Sunday Service operating cost range:** $575-$600K annually
Mobility & Innovation Theme

- DART has 14 bus transit centers (some co-located with LRT), and 65 LRT and 5 TRE stations; DARTzoom may recommend new (SW Dallas) and expanded transit centers (Addison)

- Mobility Hub program to be defined; assume 20 facilities

- **Potential capital costs:**
  $100M total/ $1-10M average cost per facility
Mobility & Innovation Theme

**GOAL 5**
EXPLORE FLEET OPTIONS AND FACILITY ENHANCEMENTS THAT SUPPORT LOCAL AND REGIONAL AIR QUALITY AND CLIMATE ACTION GOALS

**ACTION 5.1** Evaluate potential to transition to all electric bus fleet by 2045 while considering other emerging clean technologies

- DART operates seven zero-emission, all electric buses
- CNG buses programmed for replacement FY25-32 in Financial Plan ($356M)
- **Potential capital costs**: $270M more for electric fleet replacement
Land Use & Economic Development Theme

GOAL 2
INCREASE TRANSIT RIDERSHIP THROUGH COORDINATED LAND USE PLANNING AND QUALITY DEVELOPMENT

ACTION 2.4 Encourage development of station area plans and zoning to optimize stations as community assets

ACTION 2.5 Utilize DART staff and consultants to assist interested cities in creating station area plans

- DART park & ride lots are key opportunity for TOD; 50% are under underutilized
- DART could partner with Service Area cities on “station adjacent plans” for redevelopment that benefits DART cities and future ridership
- **Potential planning costs**: to be determined after further study of peer city best practices
Collaboration Theme

• Potential to partner with NCTCOG, DART Service Area cities, electric companies, and/or electric car manufacturers to establish pilot program for DART P&Rs

• Potential capital and operating costs: to be determined after further study of regional examples and potential partners

Source: https://www.dfwairport.com/park/evchargers/
Summary Highlights

• Develop sidewalk improvement policy and program for Board consideration
• Define service enhancements beyond DARTzoom as operating funds become available
• Corridor improvement program for core frequent routes
• Define BRT in service standards and define a set of core frequent routes for BRT improvements
• Create mobility hub guidelines with range of items tailored to community locations and/or facility types
• Take more proactive role in station catalyst opportunities with DART cities to document the benefits under different scenarios
• Work with agency/private partners on EV charging station program
# Proposed System Plan Schedule

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<thead>
<tr>
<th>Timeframes</th>
<th>Major Activities and Deliverables</th>
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<tbody>
<tr>
<td>May - June</td>
<td>Complete Draft 2045 TSP and supplemental “theme” brochures</td>
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<tr>
<td>June - July</td>
<td>Preliminary Draft TSP for Executive Management Review</td>
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<tr>
<td>August 24</td>
<td><em>Board approval of DARTzoom bus plan</em></td>
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<tr>
<td>Sept 14</td>
<td>Present Draft 2045 TSP to Planning/Capital Programs Committee</td>
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<tr>
<td>Sept 28</td>
<td>Present Draft 2045 TSP to COTW for approval to distribute publicly</td>
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<tr>
<td>October</td>
<td>Joint city staff meeting and virtual public meetings</td>
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<tr>
<td>November</td>
<td>Update TSP with DART cities and public input</td>
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<tr>
<td>December</td>
<td>Present Final 2045 TSP for Board approval</td>
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