Briefing on Ridership-Coverage Ratio for DARTzoom Bus Network Redesign

Committee-of-the-Whole
October 20, 2020

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Today’s Briefing

• This briefing will summarize discussions on the ridership/coverage balance policy decision and answer a key question from the October 6, 2020 Committee-of-the-Whole meeting
The Board continues to consider a policy decision driving the next phase of the bus network redesign work: the appropriate balance between ridership and coverage.

The Board has discussed this issue in a series of meetings, starting in August 2020.

During these meetings staff presented a hybrid network that combines service frequency improvements over a ridership-based network, expanded GoLink service, and 11 coverage-oriented routes.

Along the way, we have also presented analysis of the impact of different ratios and concepts on residents, jobs, low-income residents, and persons of color.
Hybrid Approach

• The hybrid approach is designed to maintain service coverage while setting aside resources for frequency improvements

• This option fits between 75/25 and 70/30 ratios

• At the last meeting, we were asked to assess the impact if we were to shift resources to higher frequency routes to ensure a final ratio of 75/25

Expanded fixed-route coverage in GREEN
Hybrid Approach Variations

• We can adjust the hybrid approach to reach a range of desired ridership/coverage ratios by reducing or increasing the number of additional fill in coverage routes
• Spending $4 million/year less on fill in coverage yields a 75/25 network, with fewer coverage routes and more frequency improvements
• Spending a similar amount more on fill in coverage yields a 70/30 network, with fewer frequency improvements and more coverage routes
• There are no changes to the expanded GoLink service in either situation
Example: 75/25 Hybrid Approach

- For today’s meeting, we have prepared an example of what a variation to the hybrid scenario would look like.
- In this example, we make adjustments to reach a 75/25 ratio.
- Four of the additional coverage routes from the original hybrid concept would be excluded.
- The map on the right highlights the four routes in RED.
Example: 75/25 Hybrid Approach

• We would note that other combinations of routes and route adjustments could achieve the same basic result, and can be addressed in the development of the full draft Bus Network Plan

• To help better visualize what this network would look like, we have prepared a series of detail maps showing different parts of the DART Service Area

• These detailed maps appear on the following slides
Example: 75/25 Hybrid Concept in Carrollton, Farmers Branch, Addison

**BLUE**: Ridership Concept
**LIGHT GREEN**: Fill-In Routes
**GREEN**: GoLink Zones
**RED**: Excluded Fill-In Routes
**GREY**: Existing Routes

75/25 adjustments would have no impact in Carrollton, Farmers Branch, or Addison
Example: 75/25 Hybrid Concept in East Dallas, Pleasant Grove

75/25 adjustments would have no impact in E Dallas or Pleasant Grove
Example: 75/25 Hybrid Concept in NW Dallas, NE Dallas, Highland Park, University Park

BLUE: Ridership Concept
LIGHT GREEN: Fill-In Routes
GREEN: GoLink Zones
RED: Excluded Fill-In Routes
GREY: Existing Routes

75/25 adjustments would affect coverage routes in a small part of this area.
Example: 75/25 Hybrid Concept in Garland, Rowlett

75/25 adjustments would have no impact in Garland or Rowlett.
Example: 75/25 Hybrid Concept in Irving

BLUE: Ridership Concept
LIGHT GREEN: Fill-In Routes
GREEN: GoLink Zones
RED: Excluded Fill-In Routes
GREY: Existing Routes

75/25 adjustments would no impact in Irving
Example: 75/25 Hybrid Concept in W Dallas, Oak Cliff, Cockrell Hill, Glenn Heights

75/25 adjustments would affect some coverage routes in Oak Cliff and surrounding areas.
Example: 75/25 Hybrid Concept in Plano

75/25 adjustments would have no impact in Plano

BLUE: Ridership Concept
LIGHT GREEN: Fill-In Routes
GREEN: GoLink Zones
RED: Excluded Fill-In Routes
GREY: Existing Routes
Example: 75/25 Hybrid Concept in Richardson

BLUE: Ridership Concept
LIGHT GREEN: Fill-In Routes
GREEN: GoLink Zones
RED: Excluded Fill-In Routes
GREY: Existing Routes

75/25 adjustments would have no impact in Richardson
Network Coverage Splits with Hybrid Approach

**High Ridership Concept**
- 85% towards ridership, 15% towards coverage

**Hybrid 75-70/25-30**
- ≈25-30% of routes operate 20 minutes or better
- ≈73% of residents within 1/2-mile of service
- Expanded GoLink

**Existing DART Network: 55% – 45%**

**High Coverage Concept**
- 60% towards ridership, 40% towards coverage

**80/20**
- ≈35% of routes operate 20 minutes or better
- ≈54% of residents within 1/2-mile of service
- Basic GoLink

**75/25**
- ≈29% of routes operate 20 minutes or better
- ≈59% of residents within 1/2-mile of service
- More GoLink

**70/30**
- ≈24% of routes operate 20 minutes or better
- ≈63% of residents within 1/2-mile of service
- More GoLink

**65/35**
- ≈18% of routes operate 20 minutes or better
- ≈68% of residents within 1/2-mile of service
- Expanded GoLink
Potential Board Action

• We believe that it would be beneficial for the Board to direct DART Staff to design the bus network based upon the hybrid concept while retaining flexibility on the actual ratio of ridership to coverage: 75/25, 70/30, or anywhere in between.

• Given the large impacts of potential service changes within neighborhoods and cities, this offers the Board the flexibility to adjust the ultimate network ratio once the draft Bus Network Plan is shared with the Board, DART Cities, and the public.
Next Steps

• If the Board approves the hybrid concept at the November meeting, staff will conduct a virtual network design session with DART staff, DART City staff, and JWA consulting team in November 2020 to design the draft Bus Network Plan.

• The draft Bus Network Plan would then be presented to the Board in January, and may be modified before presentation to the public.

• We would then bring back a Board action item to authorize the second phase of community engagement and a Call for Public Hearing on January 2022 service changes.

• Approval of the final Bus Network Plan and January 2022 changes would happen during the Summer after the public process, and would include any needed modifications based upon community feedback.
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<td>Work on Draft Choices Report</td>
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<td>20Q2</td>
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<td>20Q3</td>
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<td>21Q1</td>
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<tr>
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<td>Develop Draft Bus Network Plan</td>
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<td>Complete Draft Bus Network Plan *</td>
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* Board decision points; Board briefings and discussions normally monthly