Agenda

• Introductions
• Project Status Update
• Summary of Input from Engagement Round 1
• Draft Concepts (Concepts Report Overview)
• Preview of Engagement Round 2
• Next Steps
Project Goals / Objectives

• Educate key stakeholders and community members on basic transit trade-offs
• Identify community transit priorities and values
• Identify existing & future bus transit needs through intensive data analysis
• Design future bus network
  • Unbiased (start with blank slate)
  • Data-driven
  • Incorporates community values for transit
  • Unconstrained
• Address emerging transportation technologies
Other Successful Network Redesigns

Columbus, OH
Significant increase in ridership since 2017 implementation

Houston, TX
Ridership steady despite economic downturn

Richmond, VA
Increase in ridership in first 6 months since implementation
Emerging Technologies

- Complement
- Compete
- Collaborate
Process Update

- Analyzed existing and future conditions
- Completed Choices Report and Round 1 Engagement
- Developed bus network concepts
- Completed draft of Concepts Report

Throughout the plan there will be:
- Updates to the project website
- Civic engagement opportunities
- Coordination meetings with other jurisdictions and transit providers
- Briefings to City leadership

Joint Meetings

Spring 2018
- Project kickoff

Summer 2018
- Analysis of existing and future conditions
  - Engagement Round 1: Choices
  - Community meetings and survey
  - Stakeholder workshop

Fall 2018
- Develop and analyze draft bus network concepts

Winter 2019
- Engagement Round 2: Concepts
  - Community meetings and survey
  - Stakeholder workshop

Spring 2019
- Develop final bus network

Summer 2019
- Draft plan and near-term recommendations
- Final Transit Vision Plan and Near-Term Implementation Plan
Review of Key Choices
Ridership or Coverage

• About 50% of DASH service is Ridership
• Remaining 50% is Coverage and Duplication
• What is the right balance for Alexandria?
Ridership and coverage goals are important, ... but they lead opposite directions!

**Ridership Goal**
- “Think like a business”
- Lower subsidy, higher farebox return
- Support dense and walkable development
- Maximum VMT reduction
- Protect economy from congestion

**Coverage Goal**
- “Access for all”
- Support suburban low-density development
- Lifeline access for everyone, no matter where they live
- Service to every neighborhood or district
Alexandria can’t solve this conflict between goals...

...but it CAN choose a deliberate balance point.
Walking vs Waiting

- The individual experience of frequency vs. coverage is *walking vs. waiting*
  - Are you willing to walk farther to wait less?
  - Or will you accept long waits for a short walk?
Peak or All-Day and Weekend

- Highly peaked service
  - Complex peak services
- Peak productivity is about 30% higher than midday
- Low weekend and evening service
- How should Alexandria balance peak vs all day and weekend?
Level of Investment

• Alexandria is growing
• Increasing density means increasing demand for transit
• How much should Alexandria invest in transit to meet growing demand?
Summary of Engagement
Round 1
Engagement Round #1

- Stakeholder workshop
- 9 pop-up events
  - Braddock Metro
  - King Street Metro
  - Mark Center Station
  - Van Dorn Metro
  - Build America Plaza & Southern Towers
  - Port Festival
  - Four Mile Run Farmers Market
  - Del Ray
  - West End/Beauregard
- 2 community meetings
  - October 16th at Durant Arts Center
  - October 18th at Samuel Tucker Elementary School
- Webpage update and online survey
- Leadership Briefings
  - September 27th – Joint meeting with Alexandria Transportation Commission and DASH Board
  - DASH Board member follow-ups October 17th and November 5th
- Meeting with DASH drivers
Public Participation

- 24,500 views on Facebook, 650 Engagements
- 20% Open Rate on 3,900 emails
- 1,077 unique webpage views
- 33 meeting sign-ins
- 320 distinct survey responses
  - 77% online
  - 23% paper
- 8 email comments

Overall, responses indicated:
- Higher bus frequency and less waiting
- The importance of coverage
- The need for a consistent, reliable system with minimal travel time
**Public Survey – Transit Benefits**

About 60% of respondents saw ridership-related transit benefits as most critical.

- Providing basic public transportation to everyone, regardless of where they live: 15%
- Improving air quality and reducing environmental impacts of travel: 6%
- Providing access to jobs and services for people who don’t have a car, or those with low incomes: 22%
- Providing transportation for people with limited physical ability: 4%
- Providing high-quality transit in areas where the service will be used by a lot of people: 18%
- Allowing people to move around the city efficiently without increasing auto congestion: 35%
Coverage vs. Frequency

Within a fixed budget, a transit agency must make a choice in how to distribute its service.

**High Frequency:** Bus service runs on a few frequent routes, only in the busiest areas. Waits are short and trips are faster in places with the most residents and businesses. However, less-populated areas may have no service at all.

**High Coverage:** Most streets have some minimal bus service, even in places with very few people. Everyone is a short walk from a bus stop, but waits are long and trips are slow.
Public and Stakeholders – Frequency (Ridership) vs. Coverage

- Strongly Prefer High Frequency
- Prefer High Frequency
- Prefer High Coverage
- Strongly Prefer High Coverage

Percent of Responses

Frequency

Coverage

Public Survey
Stakeholder Poll
Walk vs. Wait

This example below shows two different ways to provide transit service in the same neighborhood at the same cost.

**Minimize Waiting:** The bus service is running frequently (every 15 minutes) on one major road. The wait for the bus is shorter but some people may have to walk farther to reach the bus stop.

**Minimize Walking:** There are two bus routes where the service runs less frequently (every 30 minutes). Walks to the bus stop are shorter, but riders must wait longer for the bus to arrive.
Public and Stakeholders - Walk vs. Wait

- I definitely prefer shorter waits.
- I mostly prefer shorter waits.
- I mostly prefer shorter walks.
- I definitely prefer shorter walks.

Public Survey
Stakeholder Poll

Percent of Responses

I definitely prefer shorter waits.
I mostly prefer shorter waits.
I mostly prefer shorter walks.
I definitely prefer shorter walks.

Shorter Waits at Bus Stops

I definitely prefer shorter waits.
I mostly prefer shorter waits.
I mostly prefer shorter walks.
I definitely prefer shorter walks.

Shorter Walks to Bus Stops
Public Survey – Investment Priorities

3. Is there another way you would choose to invest your additional money from transit service?

Better Collaboration with Other Service Providers  Improved Reliability  Bikeshare
More Substantial Bus Shelters  More Comfortable Buses
ELECTRIC VEHICLES  Express Routes  Dedicated Lanes
Replace more school buses with transit  Bus Rapid Transit  SAFETY
Marketing  Accurate Real-Time Information  Trolley
Reduced fares for children, low income, and transit-dependent populations  Reduce environmental impact
Peak and Non-Peak Service

- Nearly all people are covered
- Vast majority of jobs are covered
- Minimal access to frequent service

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**DASH & WMATA Midday Coverage**

- **All Residents**
  - Any Service: 151,473
  - Frequent Service: 16%
- **Non-white Residents**
  - Any Service: 72,652
  - Frequent Service: 98%
- **Residents In Poverty**
  - Any Service: 150,283
  - Frequent Service: 96%
- **Jobs**
  - Any Service: 91,189
  - Frequent Service: 89%
The peaks need more service.
Current peaking is about right. (status quo)
Shift a little service from the peaks to other times.
Shift a lot of service from the peaks to other times.
Service should be constant every day, all week.
Public Survey – Investment Priorities

- Adding service (frequency) during weekday rush hours
- Adding service (frequency) on weekdays outside of rush hours
- Adding service (frequency) on weekends
- Providing service (new routes) to places that don’t currently have service
- Reducing fares to make transit more affordable
- Adding more passenger amenities (shelters, real-time info, onboard WiFi)

Graph showing average scores and count of times ranked #1.
Transit Concepts for Alexandria
Where should the transit network be, on this spectrum?
Key Assumptions

• 2030 networks, with 20% more bus service. Assumes some additional funding for the increased service.
• Bus-to-rail/Rail-to-bus transfer penalty is eliminated
• Potomac Yard Metrorail station is open
• Improved transit centers at Landmark Mall and Southern Towers
• King Street Trolley is better integrated into overall transit network
• West End Transitway station locations and signal priority
• Duke Street Transitway has signal priority
Existing Network

All-day Routes
Midday Frequency
Coverage Concept

All-day Routes
Midday Frequency

Routes outside Alexandria are generally consistent with the Transit Development Plans of each jurisdiction. Any changes to routes outside of Alexandria will be coordinated with the appropriate jurisdiction and WMATA where applicable.
Ridership Concept

All-day Routes
Midday Frequency
Existing Span of Service

Hours of the day

Routes

[Diagram showing service times for different routes on weekdays, Saturdays, and Sundays.]

FREQUENCY

- 15 min or better
- 20 min
- 30 min
- 60 min
- over 60

Data Source: GTFS feed, October 2017 - June 2018
Coverage Concept
Span of Service

Hours of the day

Routes
### Ridership Concept

#### Span of Service

<table>
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<th>Period</th>
<th>Routes</th>
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<tr>
<td><strong>WEEKDAYS</strong></td>
<td>R1, R2, R3, R4, R6, R7, R8*, R9*</td>
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<tr>
<td></td>
<td>7am / 10am</td>
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<td>10am / 10am</td>
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<td>22a, 23b, 25b</td>
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<td>26a / 29m</td>
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<td>29k / 29m</td>
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<td></td>
<td>Metroway, NH2</td>
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<td></td>
<td>NH2, REX</td>
</tr>
<tr>
<td><strong>SATURDAYS</strong></td>
<td>R1, R2, R3, R4, R6, R7, R8*, R9*</td>
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<td>7am / 10am</td>
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<td>Metroway, NH2</td>
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<td>NH2, REX</td>
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<tr>
<td><strong>SUNDAYS</strong></td>
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<td>NH2, REX</td>
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</table>

**Hours of the day**
Saturday Service

Existing  Coverage  Ridership

[Map of existing service coverage]

[Map of coverage map]

[Map of ridership map]
Sunday Service

Existing

Coverage

Ridership
Additional Peak Services

Routes outside Alexandria are generally coordinated with the Transit Development Plans of each jurisdiction. Any changes to routes outside of Alexandria will be coordinated with the appropriate jurisdiction and VMTA (where applicable).
Residents near Transit on Weekdays at Noon
within 1/4 mile of a bus stop in Alexandria, Virginia

- Frequent Service, every 15 minutes or better
- Any Service
- No service within 1/4 mile

Existing

Coverage

Ridership
Jobs near Transit on Weekdays at Noon
within 1/4 mile of a bus stop in Alexandria, Virginia

- Existing Jobs near Transit on Weekdays at Noon within 1/4 mile of a bus stop in Alexandria, Virginia
  - Frequent Service, every 15 minutes or better: 60,000
  - Any Service: 30,000
  - No service within 1/4 mile: 15,000

- Coverage
  - Frequent Service, every 15 minutes or better: 75,000
  - Any Service: 45,000
  - No service within 1/4 mile: 15,000

- Ridership
  - Frequent Service, every 15 minutes or better: 90,000
  - Any Service: 60,000
  - No service within 1/4 mile: 15,000
Residents of color near Transit on Weekdays at Noon
within 1/4 mile of a bus stop in Alexandria, Virginia

- Frequent Service, every 15 minutes or better
- Any Service
- No service within 1/4 mile

Existing Coverage

Ridership
Residents in poverty near Transit on Weekdays at Noon
within 1/4 mile of a bus stop in Alexandria, Virginia

- Frequent Service, every 15 minutes or better
- Any Service
- No service within 1/4 mile

Existing

Coverage

Ridership

Residents in poverty near Transit on Weekdays at Noon within 1/4 mile of a bus stop in Alexandria, Virginia
Isochrone Results

• Counts walking, waiting, in-vehicles travel time, walk and wait for transfer, walk at destination
• Assumes $\frac{1}{2}$ headway for the average wait
• Not just the area – Also what is inside the area
Old Town: Change in Access to People and Jobs

<table>
<thead>
<tr>
<th></th>
<th>People</th>
<th>Jobs</th>
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<tr>
<td>Existing</td>
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<tr>
<td>Coverage</td>
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<tr>
<td>Ridership</td>
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</tbody>
</table>

Coverage Service Concept
11% more residents and 22% more jobs accessible than existing network

Ridership Service Concept
28% more residents and 29% more jobs accessible than existing network

How far can I travel in **30 minutes** from Old Town at 12 pm?
Inova Hospital: Change in Access to People and Jobs

**Coverage Service Concept**
1% fewer residents and 14% more jobs accessible than existing network

**Ridership Service Concept**
5% more residents and 13% more jobs accessible than existing network

How far can I travel in **30 minutes** from **Inova Alexandria Hospital** at **12 pm**?
Landmark Mall: Change in Access to People and Jobs

How far can I travel in **30 minutes** from Landmark Mall at 12 pm?

**Coverage Service Concept**
- 72% more residents and 144% more jobs accessible than existing network

**Ridership Service Concept**
- 81% more residents and 184% more jobs accessible than existing network
W Glebe & Old Dominion: Change in Access to People and Jobs

How far can I travel in **30 minutes** from W Glebe & Old Dominion at 12 pm?

**Coverage** Service Concept
6% more residents and 16% more jobs accessible than existing network

**Ridership** Service Concept
60% more residents and 189% more jobs accessible than existing network
National Landing

- Both concepts, while developed in advance of the Amazon announcement, provide access from all areas of Alexandria to National Landing sites (Crystal City, Pentagon City, Potomac Yard, Oakville Triangle)
- Refinements in draft network plan design
- Continued coordination with jurisdictional and agency partners through plan development and beyond to provide best mobility options

In the Network Design phase the team will consider options such as extending the R7 to create a one-seat ride to Crystal City based on community values expressed in the ongoing Choices phase.
Cautions

• These are not proposals!
• They are illustrations of a policy choice.
• They are starting points for defining the final network.
• View these at high altitude. Not all micro details are meaningful yet.
• Public reaction to these concepts will help you decide where you want to be on the ridership-coverage spectrum.
Upcoming Outreach
Community input focus

• We will be asking the public
  • Which of these Concepts serves your community’s values best?
  • Where on the spectrum between the concepts do you want Alexandria to be?
  • Is the additional investment worth it? How much more, if any, do you want to invest in transit?
## Civic Engagement Framework

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>General Public</th>
<th>Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Information, Choices &amp;</td>
<td>• Round 1 Community Meetings: Choices</td>
<td>Workshop 1: Tradeoffs</td>
</tr>
<tr>
<td>Tradeoffs</td>
<td>• Choices Survey (standard format)</td>
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</tr>
<tr>
<td>Phase 2: Conceptual Networks</td>
<td>• Round 2 Community Meetings: Concepts</td>
<td>Workshop 2: Concepts</td>
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<td></td>
<td>• Concept Survey (MetroQuest)</td>
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<tr>
<td>Phase 3: Final Plan &amp; Implementation</td>
<td>• Tentative Community Meetings</td>
<td>Workshop 3: Final Plan and Implementation</td>
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<td>• Commission &amp; Council Meetings</td>
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Engagement Phase 2

Components
• Stakeholder workshop
• Alexandria & DASH leadership briefings
• Community meetings
• Pop-up Events
• MetroQuest Survey
• Supplemental outreach

Objectives
• Share summary of input received during Phase 1
• Present draft concepts for feedback
• Define process for developing a draft plan and short-term implementations
• Increase outreach to underrepresented demographic groups
• Introduce new Councilmembers and stakeholders to the process
Public Engagement Events

• Public Meetings
  • 3 Meetings
    • Tuesday March 5, 6:30-8:30pm, Hammond Middle School, 4646 Seminary Road
    • Wednesday March 6, 6:30-8:30pm, Armstrong Rec Center, 25 West Reed Avenue
    • Thursday March 7, 6:30-8:30pm, Nannie J. Lee Center, 1108 Jefferson Street
  • Open house display boards & brief presentation
  • Feedback form and opportunity to take MetroQuest survey

• Pop-up Events around the city staffed by City and DASH staff

• Stakeholder Meeting (Feb 26)
• Council Briefing (Feb 26)
Survey & Supplemental Outreach

• Requesting TAC support for promoting/publicizing meetings and survey

• MetroQuest survey
  • Gather input on priorities and rating of concepts
  • Will mirror public meeting activities
  • Timeline:
    • February 19th – Survey Live
    • March 18th – End Survey
    • Late March: Process results

• Pop-up meetings (late February/early March)
• Distribute information via the GO Alex Street team, newsletters and eNews
• Display boards and survey available on project website
Next Steps
What’s the Right Balance for Alexandria?

Existing system is about 50% Ridership and 50% Coverage
Where should the transit network be, on this spectrum?
Service Increases Consistent With Planned Growth
Timeline

• February 11: Concepts Report Released
• February 13: Briefing to TC and Board
• February 19: Metroquest Survey Opens
• Feb-March: Public Engagement on Concepts
• March 18: Survey Closes, Begin Summary of Responses
• April: Board and TC Direction on Key Choices
• April-May: Develop Draft Plan
• Summer: Release Draft Plan and Public Engagement
Questions?

• Discussion, Comments, or Questions
• Have follow up questions? Contact:
   • Steve Sindiong, Steve.Sindiong@alexandriava.gov, 703-746-4047
   • Martin Barna, martin.barna@alexandriava.gov, 703-746-5644
   • Or go to https://www.alexandriava.gov/Transit