Warrensville/Van Aken Station Area Plan

October 27, 2015
1. Strategic Investment Plan
2. Warrensville/Van Aken TOD Plan
3. Blue Line Extension Study
4. WVA Intermodal Transit Center Plan
5. Warrensville/Chagrin/Northfield-Van Aken Intersection Reconstruction
Vision: Prepare a Station Area Plan for the new end-of-the-line Warrensville Station on the RTA Blue Line that coordinates RTA light rail station and bus circulation needs with private development to create a vibrant, walkable mixed-use district within a functional transportation network.

Goals

- Enhance public transportation
- Maintain roadway traffic operations
- Maximize developable land (long & short term)
- Livable district
Roadway

Existing

Reconfigured
Rail Blue Line

Bus #5, #14 (east-west)
#41/41F (north-south)
Van Aken district

Phase 1

Phase 2
Challenges

- Schedule
- Redevelopment phasing
- Competing needs
  - Transit operations
  - Mixed-use development
Strategy

- Series of collaborative 2-day workshops
  - Identify “must have” criteria
  - Identify desired criteria
  - Understand & balance needs
  - Develop design concepts
  - Review with key staff
# Plan Development Process

<table>
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<tr>
<th>Month</th>
<th>Milestone</th>
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<tr>
<td>Oct 2014</td>
<td>Step 1: Project Kick-Off</td>
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<td>Oct-Nov</td>
<td>Step 2: Research &amp; Analysis</td>
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<td>November</td>
<td>Step 3: Concept Development (2-day workshop)</td>
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<td>Nov-Dec</td>
<td>Step 4: Refine Concepts (2-day workshop)</td>
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<td>December</td>
<td>Step 5: Identify Preferred Concept &amp; Funding Strategy</td>
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<td>Jan-Feb 2015</td>
<td>Step 6: Prepare Plan</td>
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Workshop #1

**Day 1**
- Technical meeting
  - *Share operational requirements*
- Concept development workshop

**Day 2**
- Concept development workshop *(continued)*
- Presentation of concepts
Workshop #1: Roadway

- Warrensville/Chagrin reconfiguration
  - Construction complete Dec 2015

- Site access constraints
  - Access intersections locations and permitted movements
Workshop #1: Roadway

- Warrensville/Chagrin reconfiguration
  - Construction complete Dec 2015
- Site access constraints
  - Access intersections locations and permitted movements
Workshop #1: Transit

- Substation
- Station platform
- Rail alignment
- Transit routes
- Transfers
  - Bus-rail
  - Bus-bus
RAIL DESIGN PARAMETERS

- **Platform**
  - 300 ft platform + 15/20 ft attenuator
  - Center platform preferred
  - Head platform loading is acceptable

- **Pedestrians**
  - Crossovers at both ends of platform
  - Pedestrian experience

- **Substation**
  - Replacement soon (<5 yrs)

- **Rail: Crossover**
  - Crossover replacement scheduled +8 years out

- **Rail: 3rd track**
  - Requires 75 ft turnout
  - Min length 280 ft
**BUS DESIGN PARAMETERS**

- **Bus capacity:**
  - 2 artics + 6 x 40 ft OR
  - 4 artics + 4 x 40 ft

- 10 ft platform for loading/alighting
- 40 ft spacing between bus
- 23 ft carriageway for passing
- Bus turning radii: Outside/inside 50 ft/30 ft
- Minimize bus-ped conflict
- Minimize travel time impacts
- Provide kiss-and-ride area (2-3 vehicle storage)
- Pedestrian experience
DEVELOPMENT DESIGN PARAMETERS

- Integrity of street grid
- Accommodate minimum parcel dimensions
- Public realm integrates transit and development
- Transit integral part of site and visible from street
  - Integrate transit within site development, designed to encourage future development
  - Avoid massive bus parking area
  - Integrated urban experience
  - Transit doesn’t inhibit pedestrian flow within the site
- Pedestrian experience
Long Term Objectives

- Relocate substation
- Relocate crossover to west
- Relocate 3rd track to west
  - Optimizes opportunity to interconnect transit within development
- Combine Warrensville & Farnsleigh Stations
- Parking garage & bus operations
Concept 1
Phase 1 & Phase 2
Bus Routes
New Challenges

- **Roadway**
  - *Intersection reconfiguration complete Dec 2015*
  - *Interior roadway not signalized until much later*
  - New phase: Interim
  - Bus needs signal for left turns

- **Substation**
  - Include concept that doesn't require relocation

- **Site redevelopment**
  - No buses on north-south road, north half
  - New roads must be within existing right-of-way
Workshop #2
Understanding Bus Ops

- No signal at new E-W road/Warrensville
- No buses on north half of interior road: no buses
Workshop #2
Understanding Bus Ops

Signal

No Signal
Workshop #2
Site Impacts

- Wald-Fisher constraints (Walgreens)
- Substation
Workshop #2
Site Impacts

- Wald-Fisher site
- Substation
Workshop #2
Station Area Plan

- Phases
  - Interim
  - Phase 1
  - Phase 2

- Features
  - Bus circulation and operations
  - Rail operations
  - Bus/rail interface
  - Intersection operations
  - Site development
Phase 1
Station Area Plan

Keys to success

- Complicated problem
- Schedule deadline
- Teamwork
- Communication
- Flexibility
- Creative problem solving