City of Alexandria, Virginia

Old Town North Small Area Plan
Transportation / Environmental Subcommittee Meeting #1

Wednesday, February 10, 2016
4:00 – 6:00 PM
City Hall – Room 2000
TRANSPORTATION
Guiding Principle: Further encourage an integrated multimodal transportation network using the existing street grid, and grid extensions where necessary, to promote a healthy, auto-independent lifestyle (walkability and accessibility)
Opportunities:
– Promote accessibility
– Promote public transit
– Promote walkability
– Improve Fairfax Street
– Connectivity between Marina Towers, Parkway, Old Town
– Strengthen ped/bike/transit links to Metro
– Historic trolley using rail tracks – connect to Potomac Yard, Braddock, Old Town
– Promote / protect Washington Street as gateway
Charrette Overview – Transportation
Citizen Feedback

Comments / Challenges:
- Traffic study needed prior to changing one-way streets
- Public input needed with discussion of extending streets
- Study railroad easements on private property
- Slater’s Lane grade crossing – Use for vehicles, bike, trolley
- Complete Streets – separate bikes from pedestrians
- Reconsider parking reductions
- Visitor friendly parking policies
- Future transit hub – trolley, shuttle, motorcoaches
Current Transportation Strategies

- Capital Improvement Program
- Pedestrian and Bicycle Master Plan Update
- Complete Streets program / Resurfacing
- Transit Studies / Comprehensive Operations Analysis
- Transportation Long Range Plan
- Parking Program
- Development Review process
SUBCOMMITTEE
TRANSPORTATION RELATED DISCUSSION ITEMS
Near Term Transportation Analysis

Present – Spring 2016

- Based on “What we know”
- Railbanking process
- Streetscape improvements
  - Lighting, sidewalk enhancements, etc.
- Considerations in Madison/Montgomery two-way street conversion analysis prior to detailed analysis
Mid Term Transportation Analysis

Spring – Summer 2016

- Development Projects
- Parking data / analysis
  - On-street
  - Garages
Broader transportation analysis
- Uses input from development review analysis
- Adds NRG land use assumptions developed through the small area planning process
- Analyze connectivity
- Traffic analysis
- Analysis of converting Montgomery Street to two-way traffic
- Non-motorized, bicycle and pedestrian planning
- Transit concepts
- Identify mitigation
INFRASTRUCTURE AND ENVIRONMENTAL SUSTAINABILITY
Guiding Principle: Create an eco-district model with sustainable environmental solutions that support sewer and stormwater management (including mitigation and recovery), efficient energy use including renewable energy, and clean air and soil.
Objectives:
- Design Principles / Guidelines
- Renewable energy
- Combined sewer
- Green infrastructure
- Open space
Opportunities

- Include an Eco-District and Measures
- Expand tree canopy and use permeable materials for better stormwater management
- Explore research and development of new methodologies related to the environment
Comments/Challenges

- Bury electrical views
- Consider concern about electromagnetic fields from lines
- Consider existing substation and future expansion and possibility of substation needs shrinking overtime
- Look at environmental impacts from new construction such as debris, dust and traffic
- Ensure appropriate infrastructure is in place before new developments are built
- Consider low carbon and alternative fuel; vehicles and infrastructure
SUBCOMMITTEE INFRASTRUCTURE AND ENVIRONMENTAL SUSTAINABILITY RELATED DISCUSSION ITEMS
What is an Eco-District?

- An Eco-District employs a range of holistic environmental objectives to reduce the ecological footprint of the community.
**DIVERSITY & MIXED USE**
- Achieve a variety of building types, heights, and densities that support a diverse population and allows for aging in place.
- Prioritize the provision of on-site affordable housing.
- Achieve, sustain, and utilize a balanced land use mix including key features to create a complete neighborhood to meet the community's social and economic needs.
- Explore innovative housing solutions such as micro-units and existing building conversions as feasible.
- Use open spaces to connect neighborhoods to viewsheds and public amenities such as, parks, and the Waterfront.

**MULTI-MODAL TRANSPORTATION**
- Provide a mix of land uses with an interconnected network that emphasizes walking, biking, and public transit to reduce vehicle trips.
- Prioritize public transport, biking, and walking as an economic, environmental and public health tool.
- Enable adoption of low-emission & electric vehicles through charging and clean fuel infrastructure.

**ENERGY AND GREEN BUILDING**
- Prioritize energy efficiency and high performance and enhanced green building.
- Emphasize on site renewable and district-scale energy systems
  - Solar
  - Ground source heat pumps
  - Microgrid
  - Storage

**CARBON FOOTPRINT REDUCTION**
- Prioritize clean, renewable and low-carbon energy sources locally and from external utility distribution.
- Promote 'Smart Cities' technologies.

**WATER QUALITY**
- Address impact of combined sewer overflows (CSOs).
- Implement stormwater management through green infrastructure and low-impact development.
- Increase tree canopy and enhance green space through appropriate planting, native trees and green roofs.
- Conserve water through re-use and use of low-flow fixtures.

**MEASURES**
- Energy and Greenhouse gas emissions per capita.
- Increase in open space.
- Percent of energy supply from renewable resources.
- Number of green / roofs, light colored pavements and increase in tree canopy coverage.
- Number of green infrastructure projects.
- Number of acres with separated sewer system.
- Increase in transit ridership / service.
- Increase in number of bike / pedestrian trips.
Consistent with the Eco-City Charter, overarching strategy emphasizes application of sustainable techniques that are above and beyond existing requirements and building codes, such as the following:

- City’s stormwater requirements, CSO policy
- City’s current Green Building Policy
- Energy efficiency under 2010 Virginia Building Code
Overall - Incorporate specific goals in the Environmental Action Plan regarding transportation, open space, tree canopy, energy and climate change, etc.

Diversity & Mixed Use
- Increase open space and tree canopy

Water Quality
- Assess present and future infrastructure (stormwater, CSO) requirements for this SAP and apply green Infrastructure where feasible and cost effective

Energy and Green Building
- High-performance energy efficient new building designs
- Roofs are to have more than one use such as open space, a green roof, power generation
Carbon Footprint Reduction

- Apply innovative clean and renewable energy technologies including solar energy and/or natural gas
- Energy-efficient exterior and street lighting
- Facilitate increased use of electric vehicles

Challenge: Strategy for existing buildings and developments aimed at

- Increasing energy efficiency and reducing carbon footprint
- Reducing water usage and stormwater discharge
Subcommittee Discussion

- Draft Goals for Eco-District implementation
- Draft Timeline for Eco-District implementation
- Are they complete?
- What should change?
OTN Eco-District: Potential Goals for Discussion

**Short-term**

- Acres treated by green infrastructure for stormwater management
- Percent tree canopy
- Acres of open space per 1,000 population
- Voluntary annual energy reporting
- Percent existing buildings having energy audit

**Medium-term**

- New building specific energy consumption
- Facilities that accommodate electric vehicle use
- City’s greenhouse gas reduction targets
OTN Eco-District: Potential Goals for Discussion

Long-term

- Per capita carbon dioxide emission
- City’s greenhouse gas reduction targets
NEXT STEPS

- ADVISORY GROUP MEETING #5 - SUBCOMMITTEE REPORT OUT TO ADVISORY GROUP (Date To Be Determined)
- MARCH – STUDY/TESTING
- APRIL – NEXT SUBCOMMITTEE MEETING
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