



Project Overview

This document describes the technical process that will be followed for the Transitway Corridor Feasibility Study. The document briefly lists expected input from the High Capacity Transit Corridor Work Group (CWG).

1. Study area inventory

Inventory maps will be developed showing the following existing information along each study corridor:

- Land uses
- Transportation infrastructure (vehicular, transit, pedestrian, and bicycle) along each study corridor
- Traffic operations – identify existing deficiencies, issues, and concerns
- Possible development

CWG Input:

- Existing conditions and issues
- Areas of importance
- Personal perspective

2. Develop transitway evaluation criteria

Develop evaluation criteria, weightings, and matrix format. Evaluation criteria could include:

- Relative transit ridership
- Multimodal opportunities and (reducing) auto dependency
- Transportation network impacts
- Access to employment, education, and other major activity centers
- Supportive of transit-oriented development, consistency with planning efforts
- Environmental impacts
- Funding feasibility

CWG Input:

- Evaluation criteria
- Weightings
- What is important to the community

3. Develop preliminary transitway concepts for screening

The transitway concept plans will consider the following:

- Existing physical conditions along each corridor
- General traffic operations along each corridor
- Future initiatives for corridors
- General alignment (route) for each transitway
- Operating plan for each transitway



- Pros/cons and advantages/disadvantages of curb-running, median-running, or a mixture and further define the preferred alternative
- Dedicated travel lanes, mixed traffic lanes, or a combination
- Fatal flaws of potential corridor configurations – vehicular operations, pedestrian and bicycle safety, transit operations, cost, adverse property or environmental impacts, and implementability

Preliminary transitway concepts for each corridor will describe the following:

- Mode technology
- Overall map layout of route/plan
- Typical cross sections for segments
- Service and runningway concepts
 - Median or curb running
 - Dedicated or mixed traffic lanes (or combination) and locations of lanes
 - Frequency/headways
 - Intersection operational treatments (queue jump, TSP, coordination, pre-emption)
- Physical concepts/elements
 - Potential locations of widening
 - Potential corridor width
 - Potential ROW width
 - Corridor configuration (cross-sectional)
 - General station locations

CWG Input:

- *Transitway concept elements and ideas*

4. Evaluate preliminary concepts and develop preferred alternative

The transitway concept plans will be evaluated based on the criteria developed in Task 2.

CWG Input:

- *Review of evaluation matrix*
- *Define preferred elements from different concepts*

Based on the evaluation matrix results and CWG input, a preferred alternative will be defined and summarized. Preliminary transitway concepts for each corridor will describe the following:

- Mode technology
- Typical cross sections for segments of each corridor
- Overall map layout of corridor-wide conceptual improvements route/plan for each corridor
- Service and runningway concepts
 - Operational plan
 - Median or curb running
 - Dedicated or mixed traffic lanes (or combination) and locations of lanes
 - Frequency/headways



- Intersection operational treatments (queue jump, TSP, coordination, pre-emption)
 - Proposed termini in each of the corridors (possible loops as well)
 - Corridor segment plan (localized logical termini)
- Physical concepts/elements
 - Potential locations of widening
 - Potential corridor width
 - Potential ROW width
 - Corridor configuration (cross-sectional)
 - General station locations
- Phasing scheme
 - Initial phase – enhanced bus service with targeted facility (stop) improvements
 - Later phases – enhanced transit services and facilities

5. *Develop station area plan*

Potential transit station locations will be identified based on factors including:

- Operating plan
- Mode technology type
- Community connectivity
- Adjacent existing and proposed land uses
- Roadway configuration
- Pedestrian access and safety
- Bicycle access and safety
- Connections to other transit services

A preliminary station location map and typical station prototype concepts will be prepared. Each prototype which will address/identify the following:

- General station footprint
- Preferred location/operational configuration
- General station dimensions
- ADA accessibility accommodations
- Pedestrian safety/accommodation features
- Bicycle accommodations
- Locations of passenger information
- Number of vehicles that can be accommodated

CWG Input:

- *Station locations*
- *Station features*



6. *Develop an Implementation Plan*

The implementation plan will include the following:

- Opinions of probable cost
 - Construction costs for stations, transit, infrastructure mitigation
 - Vehicle costs
 - Program costs for planning, permitting, design, inspection construction and program management, and start-up/testing
 - Preliminary operating cost model
- Environmental feasibility and constraints analysis
 - Recommendations regarding the type of NEPA documentation that may be appropriate for the proposed project and provide a definition of general future project environmental document requirements at the local, state, and federal levels
 - Consultation and coordination with agencies regarding the likely environmental document type required for implementation including FTA, FHWA, VDOT, and DRPT
 - Anticipated agency permits that may be required for the project will also be identified
- Broad service strategies for the 5- to 30-year time horizon - making recommendations on the preferred types of transit on exclusive right-of-way, priority schemes, traffic mitigation measures and their anticipated impact
- Phasing with various horizons for the transitway corridors
- Potential partnerships with stakeholders, public agencies, and joint ventures for economic development
- Consideration of partnership opportunities such as joint development ventures and identification of various responsibilities, roles, and requirements
- Funding, financing, operations, maintenance, capital costs, and potential phasing
- Summary of significant issues, opportunities, and constraints for implementation
- Governance considerations

CWG Input:

- *Review*

7. *Full Draft Plan*

Technical memorandums and graphics from each task will be compiled into a draft document for review.

CWG Input:

- *Review*

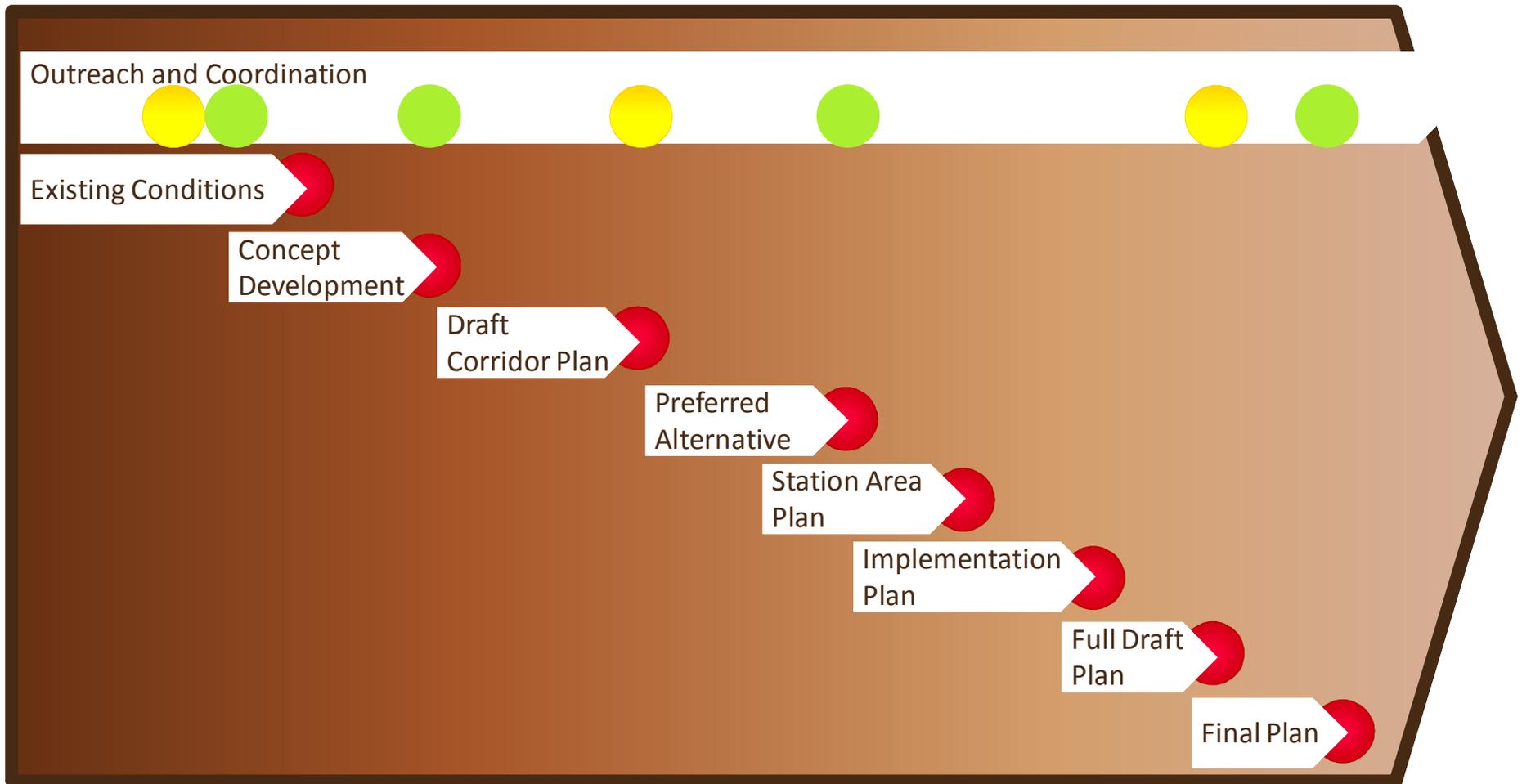
8. *Final Plan*

TRANSITWAY CORRIDOR FEASIBILITY STUDY

ALEXANDRIA



Anticipated General Corridor Planning Process



Legend:



High Capacity Transit Corridor Work Group



Public Meeting



Deliverable