

Richmond Regional
**Transportation
Planning
Organization**

SUPPORTED BY **PlanRVA**
THE REGIONAL
COMMISSION

Connect RVA 2045



Advisory Committee Meeting

May 28, 2020

3.LRTP Process Update

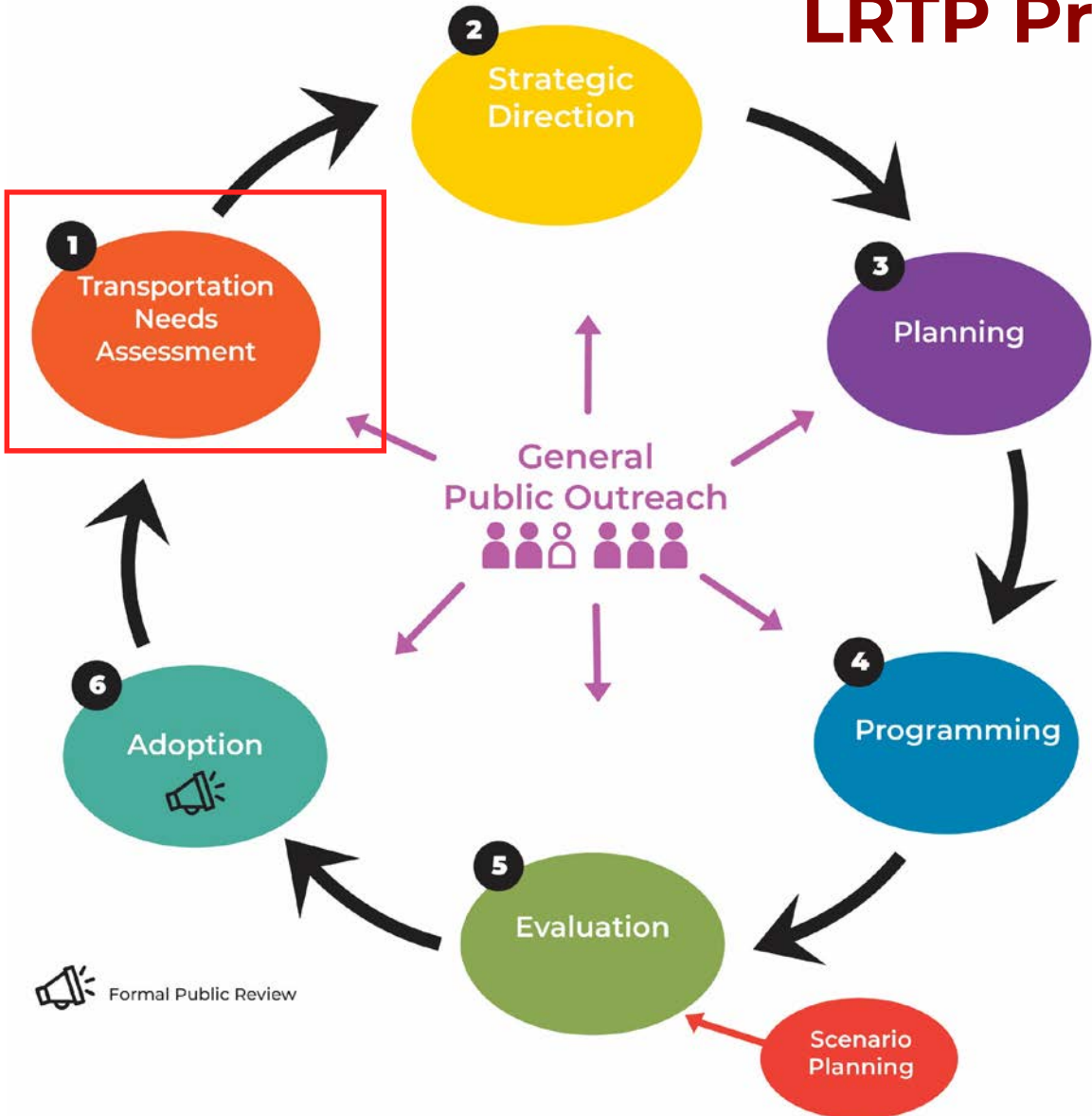
Task 1.0:

2045 Long Range Growth
Forecast Analysis Report

Task 1.1:

RTC Model Development

L RTP Process Flow



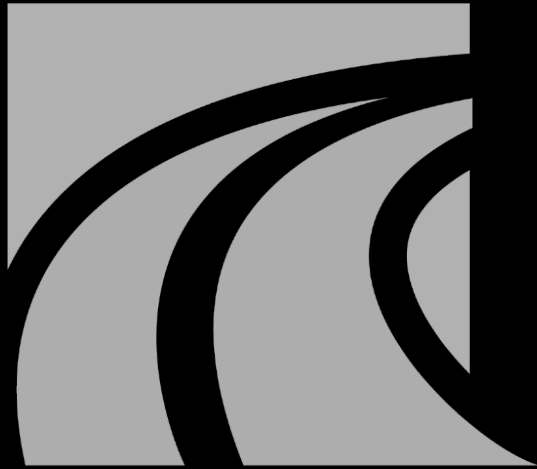
 Formal Public Review

2045 Long Range Growth Forecast Analysis Report

1. Based on 2017 and 2045 Socioeconomic Data approved by RRTPO policy Board in September 2019.
2. The document examines historical trends as well as anticipated future growth for socioeconomic indicators like population , households and employment.
3. Delineates Regional Activity Centers based on TAZ level data.
4. Environmental Justice datasets based on ACS for the base year developed. Data needed for Task 5.1 Environmental Justice Analysis and Task 5.2 Accessibility Analysis

RTC Model Development

1. Development of the new Richmond/Tri-Cities(RTC) Travel Demand Model updated to a base year 2017 and a future year of 2045 is now completed.
2. Important tool for ConnectRVA 2045
 - Identify future capacity needs for the regional highway and transit network (Task 1.2)
 - Measure system performance measures (Task 3)
 - Project Prioritization and Scoring(Task 4.0)
 - Accessibility Analysis (Task 5.2)
 - Impact of different land uses changes and different Investment priorities in Scenario Planning parallel process of the LRTP (Task 6)



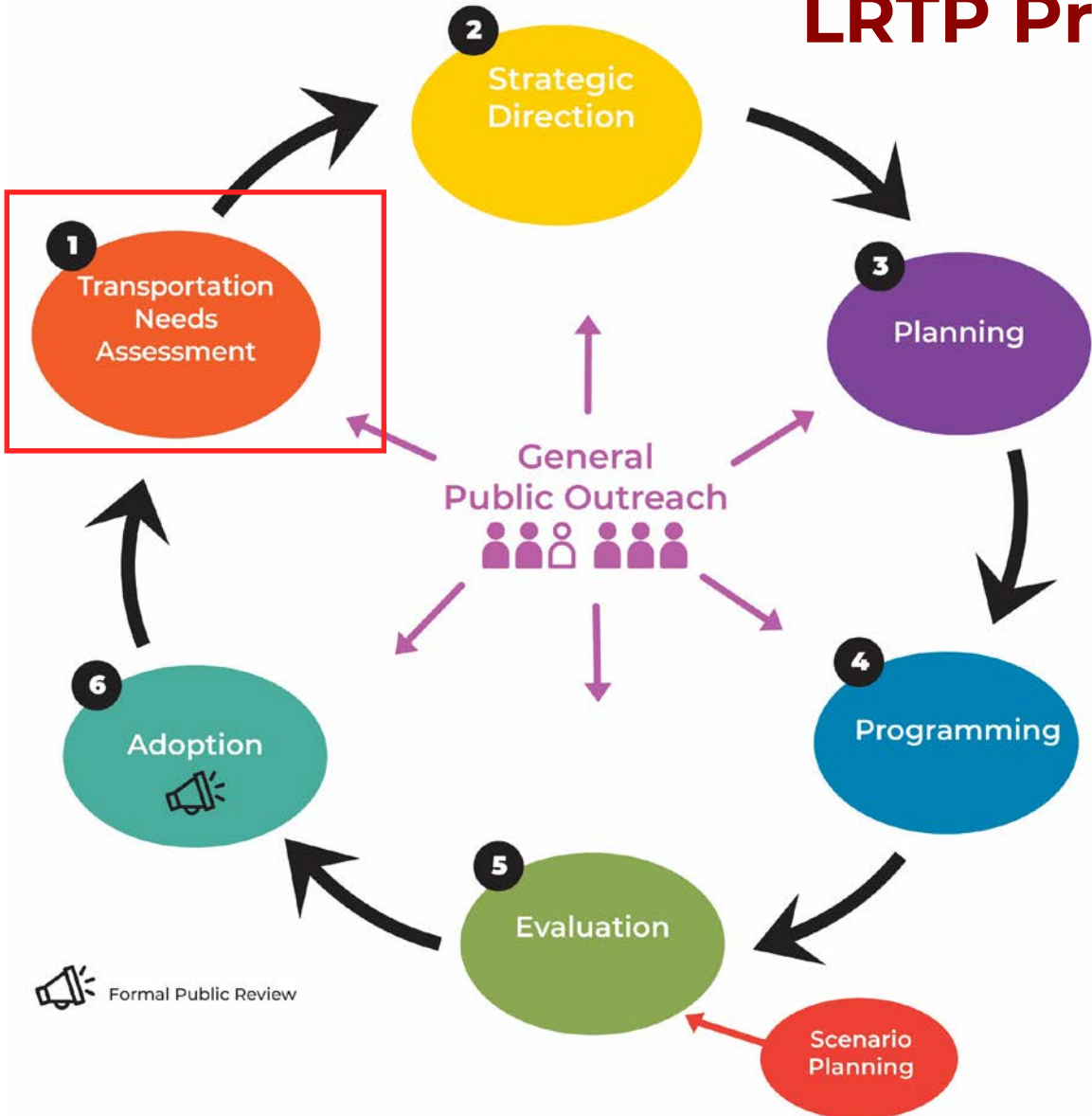
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4.LRTP Process Update

Task 1.2: Transportation Needs Assessment

L RTP Process Flow



 Formal Public Review

Task 1.2 Transportation Needs Assessment

Identify regional and local multimodal transportation Issues based on

- Congestion
- Safety issues
- Lack of interconnectivity
- Operational problems
- Maintenance Issues
- Inadequate roadway/transit capacity
- Transit expansion
- Accessibility
- Other issues (travel demand management, transportation system resiliency and economic development, etc.)

and establish LRTP-specific Regional Transportation Needs

Transportation Issues Identification

- Staff Review of Regional and Local Plans and Studies
- Richmond/Tri-Cities Travel Demand Model Runs
- LRTC-AC Additions
- Public Input

Transportation Issues Identification

❑ **List Sent to LRTP–AC (April 1st)**

- 531 LRTP Specific Issues
- 127 VTRANS Issues
- 272 Other Issues
 - Policy/Program
 - Transportation Study
 - Local and Programmatic Issues

❑ **Public Input (Feb–April 15th)**

- 135 Issues
 - Wikimaps
 - Real Estate Agents Transportation Survey
 - Community Meetings

Transportation Issues Identification

□ Formal Public Review Period

- 1089 Issues
- May 5th – May 20th
- 11 Comments on the website
- Comments addressed if directly related to the issue inventory.
- Other comments to be addressed during the course of the plan.

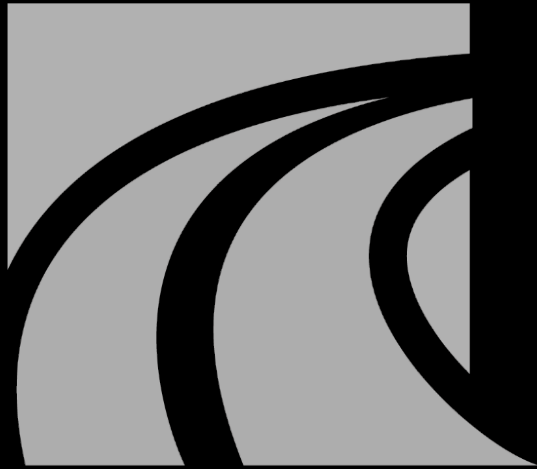
Transportation Issues Identification

❑ Disclaimer

- Issues are not transportation projects
- Some of the capacity related issues and underlying needs were based on desktop engineering analysis. Factors like availability of Right of Way, relocating of utilities or political will of the locality to move forward with the project have not been considered.
- The above factors would be considered when we convert the issues into logical transportation projects in Task 3.

Action Requested

The Long Range Transportation Plan (ConnectRVA 2045) Advisory Committee approves the Local and Regional Transportation Needs Inventory as presented by RRTPO staff.



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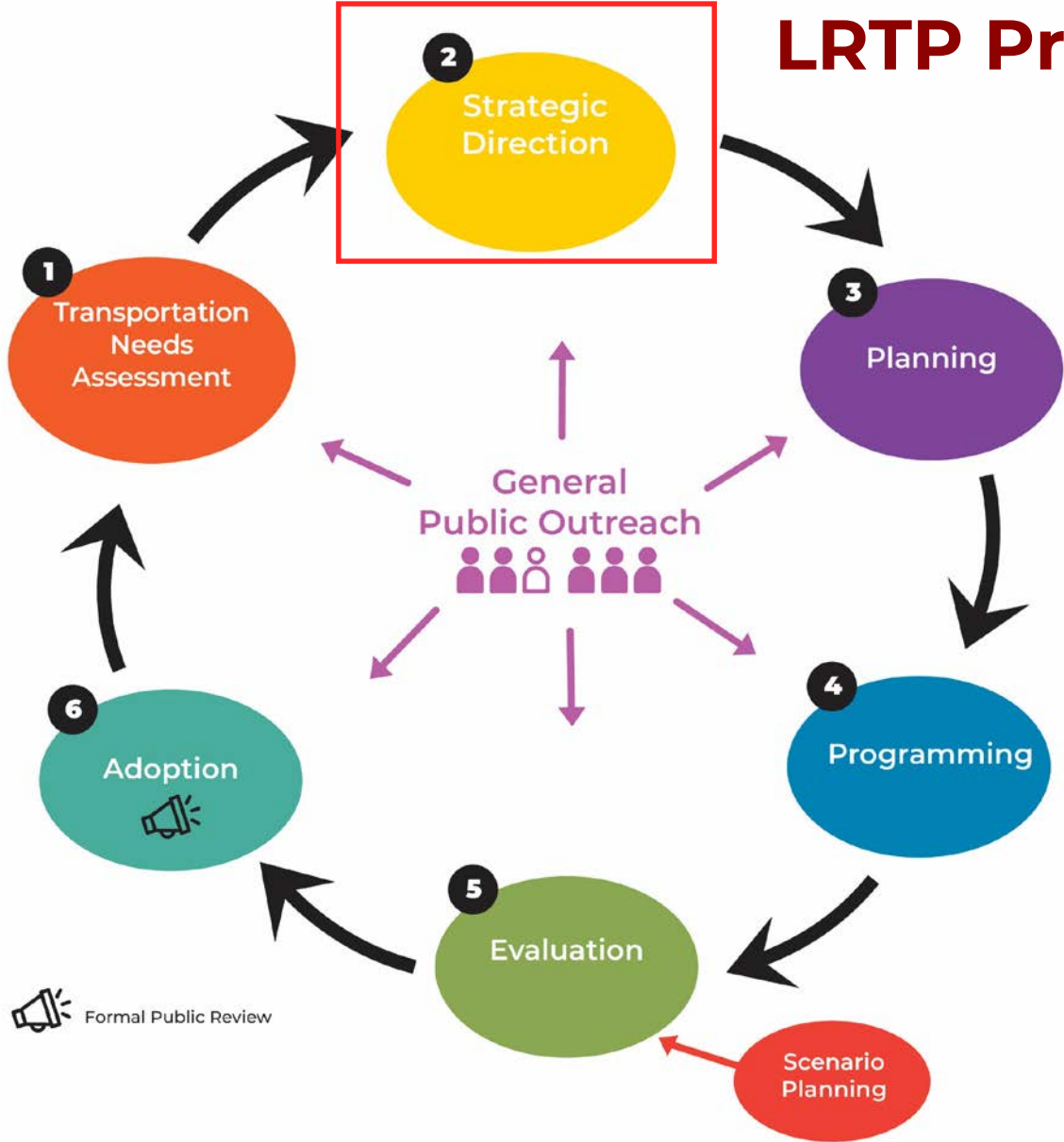
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5.LRTP Process Update

Task 2:

Vision, Goals and Objectives: Introduction

L RTP Process Flow



Work Scope

- To develop vision and goals for the LRTP.
- Also, to develop objectives within each goal and performance measure which could measure the objective. The performance measures would feed into Task 4.0 Project Selection, Prioritization Process and Scoring

Framework

1. Introduction and discussion in LRTP-AC Meeting
2. Public Outreach
3. Development of Vision, Goals, Objectives by Staff
4. Basic framework for performance measures developed by staff to feed in Task 4.0
5. Introduction and discussion in the Policy Board Meeting
6. Approval LRTP AC
7. Formal Public Review Period
8. Approval Policy Board

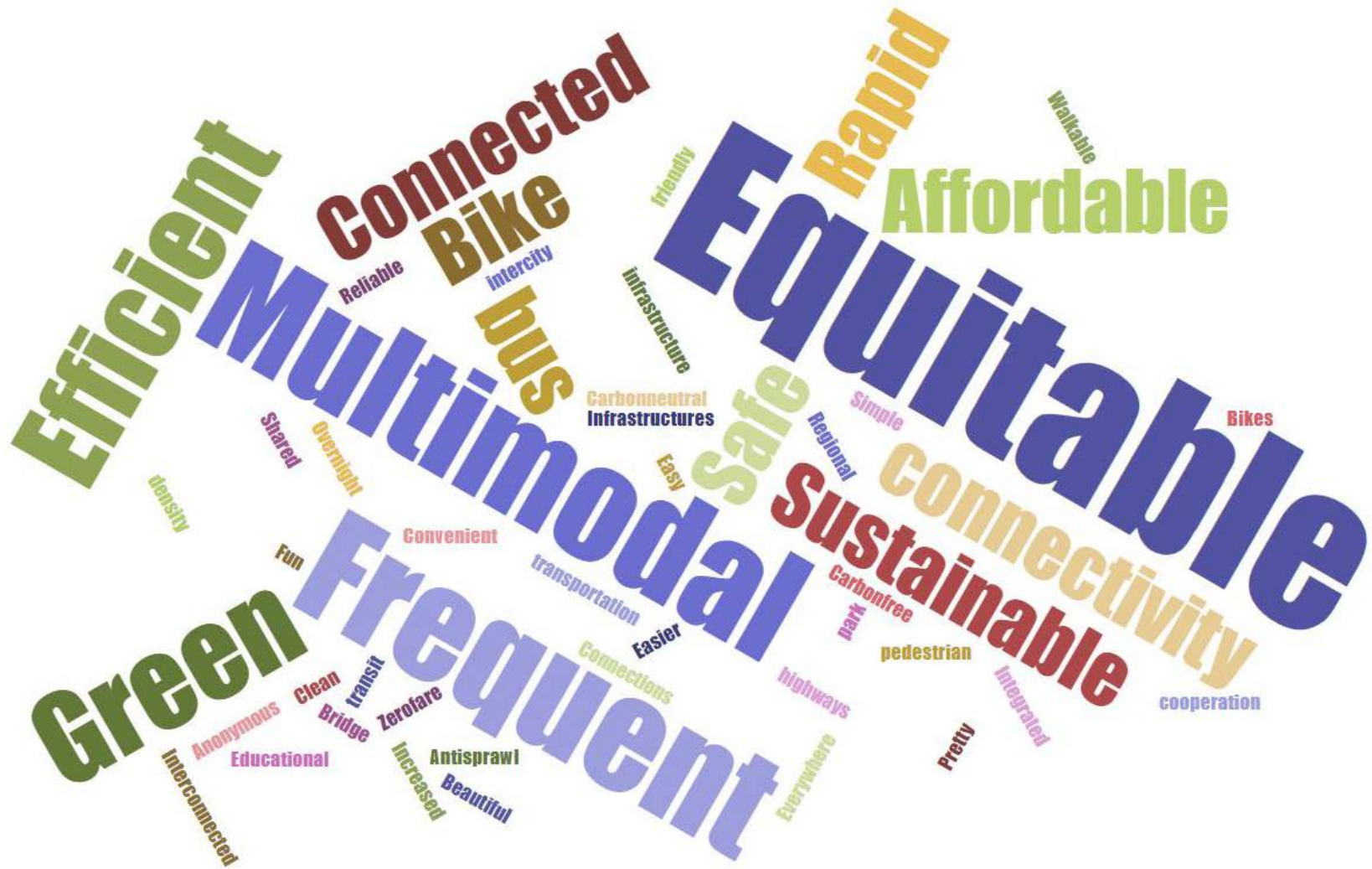
Vision

The vision statement will describe Richmond region's transportation aspirations in a concise manner, focus on what is really important, and provide a foundation for all other aspects of the plan.

2031 LRTP Vision Statement

By 2031, the Richmond region will have strengthened its economic vitality by planning and funding a transportation system that is regional in nature; encourages the cooperation of localities; coordinates land uses with transportation; protects the environment and conserves energy; promotes safe and efficient access and alternative modes; and is socially equitable and sustainable.”

Public Outreach



Goals

The goals will describe a series of desired end states for the region's transportation system informed by the vision – and will provide foundation for objectives and measures.

Goals

Address Federal Planning Factors (FAST ACT)

1. Increase the safety of the transportation system for motorized and non-motorized users
2. Emphasize the preservation of the existing transportation system
3. Promote efficient system management and operation
4. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
6. Increase accessibility and mobility of people and freight
7. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
8. Increase the security of the transportation system for motorized and non-motorized users
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
10. Enhance travel and tourism

Goals

Address MAP-21 Goals

1. Safety
2. Infrastructure condition
3. Congestion reduction
4. System reliability
5. Freight movement & economic vitality
6. Environmental sustainability
7. Reduced project delivery delays

Goals

Consider State (VTRANS 2045) Goals

1. Safety for all users

Provide a safe and secure transportation system for passengers and goods on all travel modes.

2. Proactive system management

Maintain the transportation system in good condition and leverage technology to optimize existing and new infrastructure.

3. Economic competitiveness & prosperity

Invest in a transportation system that supports a robust, diverse, and competitive economy.

4. Healthy Communities and Sustainable Transportation Communities

Support a variety of community types promoting local economies and healthy lifestyles that provide travel options, while preserving agricultural, natural, historic, and cultural resources.

5. Accessible & Connected Places

Increase opportunities for people and businesses to efficiently access jobs, services, activity centers, and distribution hubs.

Goals

goals & objectives



Access to Employment

Provide for transportation system connections to areas of employment density and key activity centers, with an emphasis on connecting to areas of high poverty rates.



Freight Mobility

Enhance freight corridors and intermodal connections to facilitate goods movement into, within and out of the region.



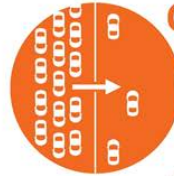
Safety & Security

Provide for transportation improvements that increase safety and security for system users.



System Reliability

Implement technologies and programs to improve travel times and support the ease of travel throughout the region.



Congestion Mitigation

Support transportation system improvements that address existing and expected future traffic congestion.



Environment & Air Quality

Provide for project alternatives that protect and enhance the region's natural resources.



Multimodal Connectivity

Improve accessibility and interconnectivity of various transportation modes for all system users.



Preservation & Maintenance

Ensure that existing transportation infrastructure and facilities achieve a constant state of good repair.



Transportation & Land Use Integration

Support transportation investments that meet the needs of existing and future land use and development patterns.

plan2040

Goals

Next Step

1. LRTP – AC Input – ConnectRVA2045 Goal Setting spreadsheet
2. Staff Recommendations

Objectives

- Describes specific, measurable statements that support achievement of the goals.
- SMART (specific, measurable, agreed-upon, realistic, time-bound).
 - Goal – Improve travel options for bicycling and walking
 - Objective - By 2045, achieve 10 percent of work trips made by bicycling and walking.
- To be developed by staff and vetted by LRTP-AC

Performance Measures

- Performance measures provide the technical mechanism (data) to monitor progress towards objectives, goals, and vision
- Align with Federal Performance Measures

PM1 - Highway Safety Performance Measures

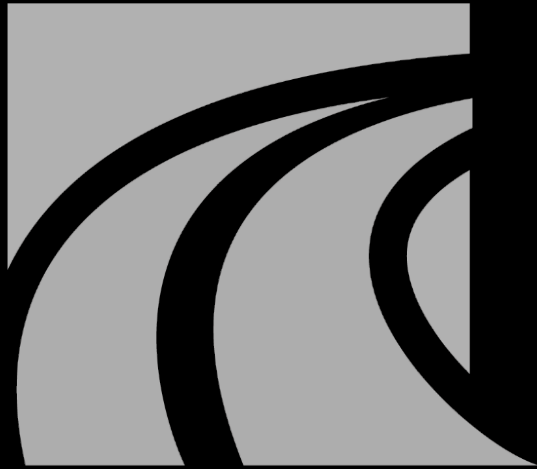
1. Number of fatalities
2. Fatality rate (per 100 million VMT)
3. Number of serious injuries
4. Serious injury rate (per 100 million VMT)
5. Number of non-motorized fatalities and serious injuries

PM2 – Pavement/Bridge Performance Measures

6. % of pavements on the Interstate system in good condition
7. % of pavements on the Interstate system in poor condition
8. % of pavements on the non-Interstate NHS in good condition
9. % of pavements on the non-Interstate NHS in poor condition
10. % of NHS bridges classified as in good condition
11. % of NHS bridges classified as in poor condition

PM3 - System Performance / Freight / CMAQ Performance Measures

12. % of person miles on the Interstate system that are reliable
13. % of person miles on the non-Interstate NHS that are reliable
14. % of Interstate mileage providing for reliable truck travel times
15. Annual hours of peak-hour excessive delay per capita
16. Percent of non-single occupant vehicle travel
17. Total emissions reduction (CMAQ projects)



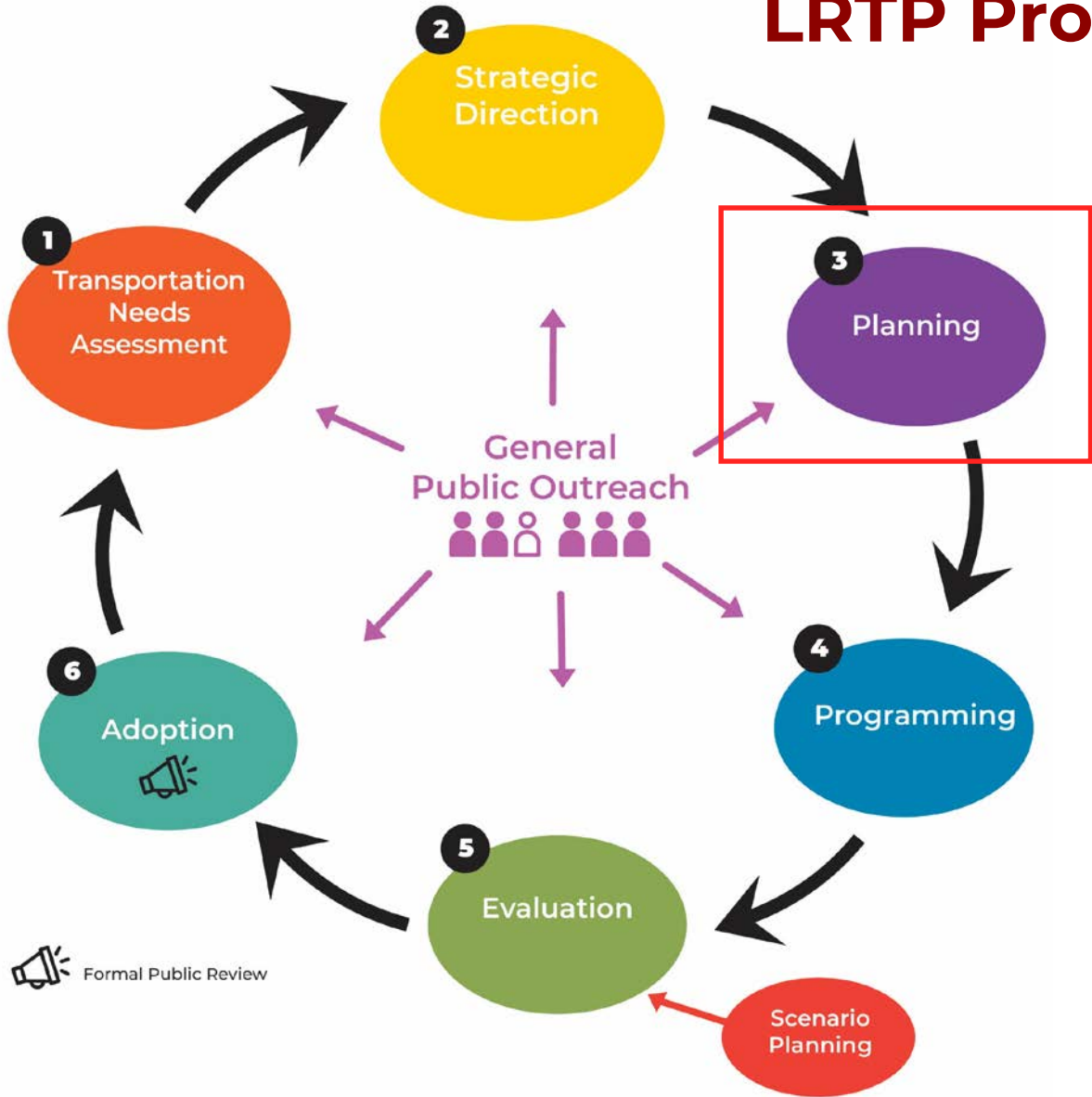
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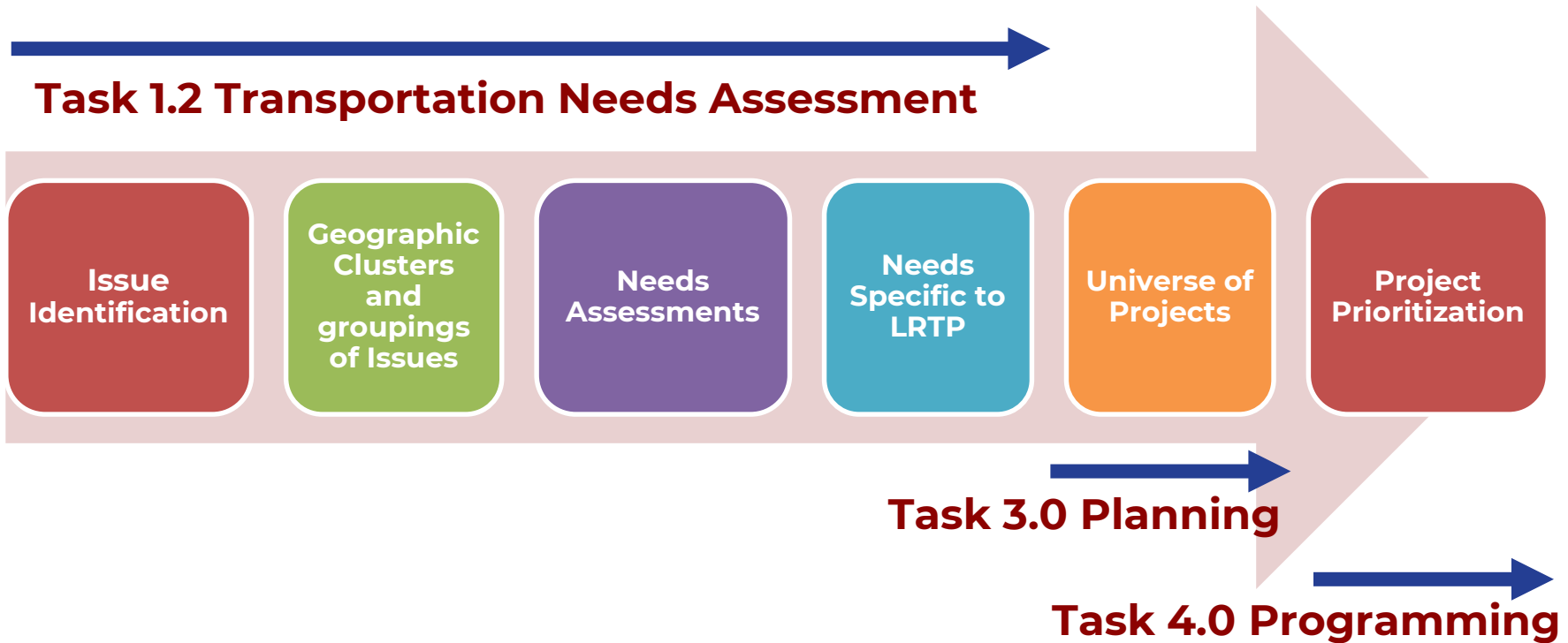
6.LRTP Process Update

Task 3: Planning

L RTP Process Flow



Process Flow – Issue Identification to Project Prioritization



Framework

- Transportation issues/need as identified in Task 1.2 to be converted into logical projects. (Staff, LRTP-AC Members, VDOT and DRPT Staff)
- Project would require at the minimum the location details of the project, anticipated project cost (capital, maintenance and operations) and time frame for which it is phased for completion.
- Complex projects like interchanges would require some kind of conceptual sketch.
- Project Champion (applicant) to be decided.
- Project Inclusion Guidelines
- Projects type categorized by funding allocation
 - Bicycle and Pedestrian Facility
 - Bridge (Local or State System)
 - Highway
 - Intersection
 - Intermodal
 - Public Transit
 - Rail
 - State of Good Repair
 - Other (Maintenance, Operations, Safety, Enhancement)
- **Final product - List of Universe of projects for ranking and prioritization.**

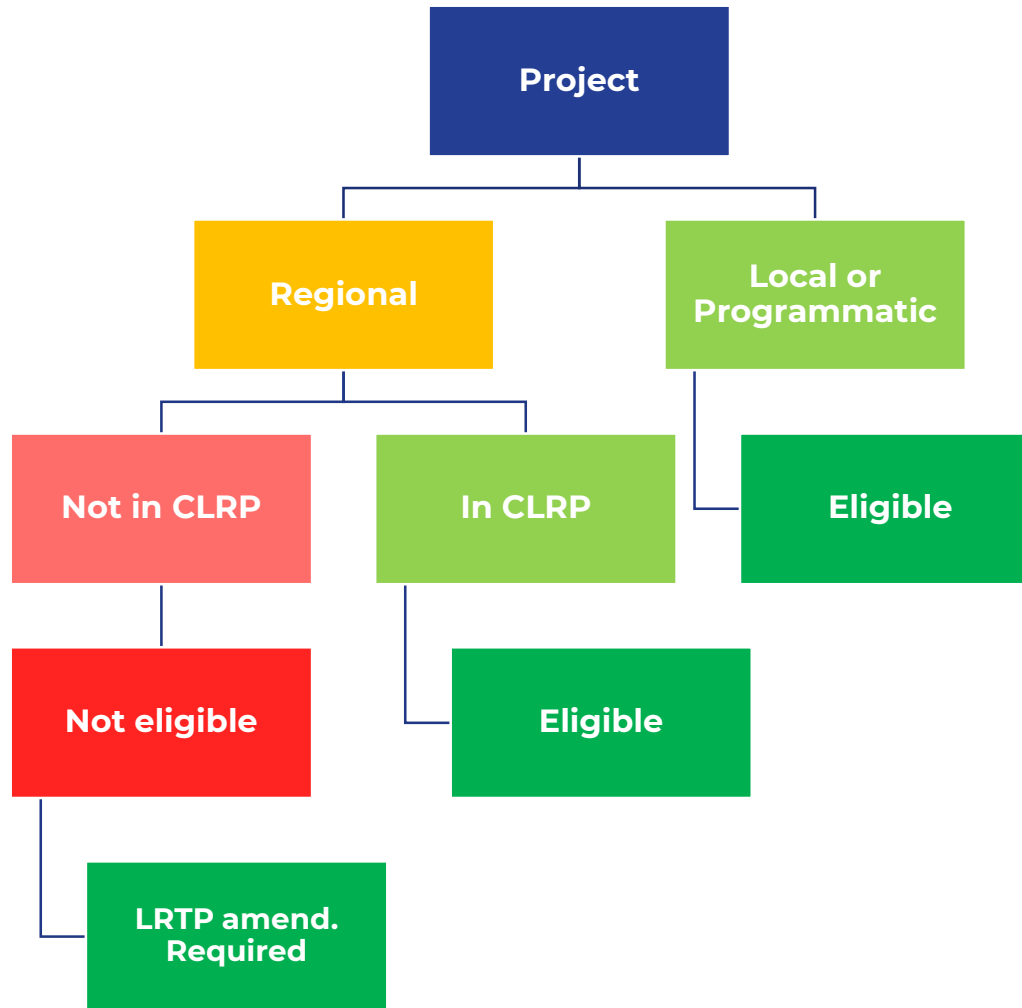
Project Champions

| ID | Project Champion |
|-----------|---|
| TPO-H | RRTPO Highway Project |
| TPO-T | RRTPO Transit Project |
| AS | Town of Ashland Project |
| CC | Charles City County Project |
| CH | Chesterfield County Project |
| GO | Goochland County Project |
| HA | Hanover County Project |
| HE | Henrico County Project |
| NK | New Kent County Project |
| PO | Powhatan County Project |
| RI | City of Richmond Project |
| GRTC | GRTC Project |
| CRAC | Capital Region Airport Commission Project |
| RF | Ride Finders Project |
| PR | Passenger Rail Project |
| VDOT* | VDOT Project |
| DRPT* | DRPT Project |
| POV** | Port of Virginia Project |

* State Agency

** Is not a RRTPO Member

TIP and Regional Funding Eligibility



Project Inclusion Guidelines

Regional Projects (must be in the LRTP)

Drawn from 23 CFR § 450.104 Regionally Significant for Air Quality Conformity

- 1. Roadway Projects** (all roads included in the RTC Model's transportation network)
 - Capacity change (add/remove lane; changing use of lanes e.g. HOT or HOV lanes, bus only lanes)
 - Realignment or relocation
 - New interchanges
 - Over/underpasses
- 2. Bridge Projects (SGR)**
 - Replacement/major rehabilitation of National Bridge Inventory (NBI) structures on National Highway System (NHS)
- 3. Transit Projects**
 - New dedicated transit right-of way
 - All new proposed transit routes
 - New or relocated transit centers/stations
 - New Park & ride lots with 200 spaces or more
 - Park & ride lot expansions to existing lots that require 200 or more new spaces

Project Inclusion Guidelines

4. Bike/Ped Projects

- Projects on segregated lanes within dedicated rights of way
- Projects of independent utility that are part of a larger multi-jurisdiction network or significantly contribute to filling identified gaps in an existing bike/ped network.

5. Intermodal Projects

- Capacity change in Intermodal corridors.

(Richmond Region's intermodal corridor includes highways, navigable waterways and rail lines linked to the regional hubs including RMT, RIC, regional airports, major railroad yards and stations and distribution and warehousing facilities throughout the region).

6. SYIP Projects

- All projects listed in the latest SYIP become projects for Time Band 1 in the LRTP. These projects are exempt from ranking and prioritization process.

Project Inclusion Guidelines

Programmatic & Local Projects (Not in the LRTP)

1. Roadway Projects

The following work on any facility drawn from 40 CFR § 93.126 list of exempt projects

- Rehabilitation and maintenance
- Safety Projects
- Operations
- Intersection improvements
- Others projects not specifically listed in the regional projects list

2. Bridge Projects (SGR)

- Replacement/major rehabilitation of National Bridge Inventory (NBI) structures outside the National Highway System (NHS)

3. Transit Projects

- New Bus purchase
- Bus shelter/stop improvements
- Transit maintenance and operations facilities
- Park and ride lots under 200 spaces
- TDM programs

Project Inclusion Guidelines

4. Bike/Ped Projects

- Bike and pedestrian infrastructure within or adjacent to the existing right-of-way

5. Intermodal Projects

- All other intermodal projects (purchase, maintenance) not listed in the regional projects list

6. ITS Projects

7. Planning Studies (including PE only projects)

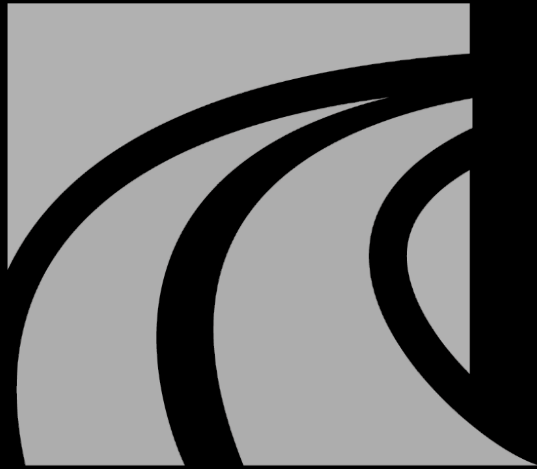
8. All other projects not listed in the Regional Projects List

Next Steps

- **LRTP-AC vetting of the LRTP - Project Inclusion Guidelines**
- Screen Issues/Needs Inventory for LRTP–specific needs based on Project Inclusion Guidelines
- Develop Projects for the screened needs/issues

Action Requested

The Long Range Transportation Plan (ConnectRVA 2045) Advisory Committee approves the LRTP Project Inclusion guidelines as recommended by the RRTPO staff.



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6. LRTP Community Outreach Meetings Report

Connect RVA 2045



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