



TRANSIT DEVELOPMENT PLAN MINIMUM REQUIREMENTS

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TABLE OF CONTENTS

Α.	Tra	Transit Development Plan – A Strategic Approach1		
B.	Pu	Purpose of a Transit Development Plan1		
C.	Pla	Planning Horizon		
D.	Transit Development Plan Update Frequency		. 2	
	TD	TDP Major Update		
	TD	TDP Annual Minor Update		
E.	Pla	Plan Requirements		
	i.	Chapter 1: Overview of the Transit System	. 3	
		History	. 3	
		Governance	. 3	
		Organizational structure	. 3	
		Transit services provided and areas served	. 4	
		Fare structure, payment methods, and pass/ticket purchasing	. 4	
		Existing Fleet and Facilities	. 5	
		Transit security program	. 5	
		Intelligent transportation systems programs	. 5	
		Data collection and ridership and revenue reporting methodology	. 6	
		Coordination with Other Transportation Service Providers	. 6	
		Public outreach	. 6	
	ii.	Chapter 2: Goals, Objectives, and Service Design Standards	. 7	
	iii.	Chapter 3: Service and System Evaluation	. 7	
	iv.	Chapter 4: Service and Capital Improvement Plan	. 8	
		Service Improvements and Needs Identification	. 8	
		Service and Needs Prioritization	. 9	
		Service Development	. 9	
	٧.	Chapter 5: Implementation plan	. 9	
		Rolling stock utilization	10	
		Major system maintenance and operations facilities	11	
		Passenger amenities	11	
		New technology systems or upgrades	11	
	vi.	Chapter 6: Financial Plan	12	
F.	Pla	an Deliverables	13	

A. Transit Development Plan – A Strategic Approach

Virginia's Department of Rail and Public Transportation (DRPT) requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a Transit Development Plan (TDP). These plans also provide a solid foundation for funding requests and feed directly into the programming process.

Beyond these administrative motivations, TDPs help transit operators in the Commonwealth of Virginia improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public. It is helpful to approach the preparation of a transit development plan as a strategic planning and visioning process. A TDP is not an operations plan. By its very nature, the TDP must address strategic issues. The TDP offers opportunities to rethink transit's mission in a given area and define actions to help the agency achieve its mission.

This document details the required frequency and format for developing a TDP. DRPT will continue offering financial and technical resources to assist in meeting the requirements.

B. Purpose of a Transit Development Plan

The purposes of a transit development plan are:

- 1. To serve as a planning, management, and policy document for the transit operators;
- 2. To inform DRPT of transit operators' capital, operating and maintenance needs;
- To provide the basis for inclusion of an operator's capital and operating programs in planning and programming documents such as: the Six Year Improvement Program (SYIP), Statewide Transportation Improvement Program (STIP), Transportation Improvement Program (TIP) and Constrained Long Range Plan (CLRP);
- 4. To provide a clear understanding of unmet or unfunded needs;
- 5. To develop and track the progress of mid- and long-term visions for transit in the region;
- 6. Plan to continually improve efficiency and effectiveness of public transportation services; and
- 7. To be better prepared to respond to internal and external factors;

C. Planning Horizon

The planning horizon for a TDP is 10 years; this includes the fiscal year for which funds are being sought and the subsequent nine (9) years.

The minimum 10-year planning horizon will provide a clearer understanding of unmet or unfunded needs. Affordability is not a reliable measure of what is needed. A longer planning

horizon allows for agencies to better prepare for SMART SCALE and other discretionary grant programs. A longer planning horizon also reflects significant capital replacement/rehabilitation needs, or the capital and operating budget implications of significant service expansion.

D. Transit Development Plan Update Frequency

TDP Major Update

At a minimum, a new transit development plan (referred to as a "major update") must be prepared every six years. The purpose of six-year TDP major update is to take a fresh look at conditions and accordingly develop plans. This major update will be a new transit development plan and must include, with a high level of detail, each of the six required TDP chapters discussed in this requirements document.

The TDP major update that is completed every six years must be adopted by the operator's governing body such as an Operations Board, City Council, or County Board. A resolution shall be provided with the TDP update document.

TDP Annual Minor Update

DRPT recognizes that a TDP is a living document. The planning process must provide flexibility to address major changes in areas such as: organizational/governance changes, fare changes, new services/facilities, available funding, economic conditions, demographic and employment patterns, and changes in federal and state laws and regulations. To reflect and address these changes, the plan must be amended every year if necessary. These annual minor updates to adopted six-year TDP major updates serve as intermediate corrections in accounting for unexpected changes.

The annual minor TDP update must replace any language that is no longer accurate or conflicts with updated language. If there are no major changes or inaccuracies in the language, the only update required is a financial plan that removes the previous year and adds a new tenth year (rolling basis). Using this format, the TDP covers the present ten-year period beginning with the current year.

The entire TDP document, and not just the updated portion, is due on January 15th of each year.

E. Plan Requirements

The TDP must address all plan requirements and follow the chapter structure specified below. Public transit operators may go above and beyond the plan requirements to examine specific issues. However, for DRPT funded plans, DRPT must be informed of the budget impacts and any additional funding needs prior to examining any issues outside of the plan requirements.

Title page

The TDP title page must include the words *Transit Development Plan*, the fiscal years covered by the plan, the official name of the transit operator, and the date approved by the governing board.

i. CHAPTER 1: OVERVIEW OF THE TRANSIT SYSTEM

The TDP will contain a brief overview of the transit system. The overview shall include:

History

Provide a brief history of the transit system (e.g., year of formation, facilities and fleet development, changes in service focus areas, key milestones and events).

Governance

- Indicate the type of governance (e.g., city, joint powers authority, transit district);
- Describe the composition and nature of representation of the governing body (including the number of members). Indicate if members are elected or appointed and if appointed, how; what agencies and/or groups do members represent (e.g., cities, county, general public);
- Provide a list of current members and their terms; and
- Describe any advisory committees that provide direct input to the governing body.

Organizational structure

Provide a brief description of the organizational structure and staffing including:

- An organizational chart that identifies departments and reporting relationships. The names of key management personnel should be provided in the organizational chart;
- Identification of all contracted transportation services (including the name of contractors and length of current contracts); and
- Identification of the labor unions representing agency employees (including the length of current contracts).

Transit services provided and areas served

Describe all fixed route, demand response and connecting services for each transit mode (i.e., commuter rail, heavy rail, light rail, bus rapid transit, express bus, local bus, ferry service) provided including:

- The areas served and the peak vehicle requirement for each type of service provided (i.e. any express bus, radial, circulator services);
- Details of any services provided with funding and/or oversight partnerships with other agencies or organizations;
- Any bicycle or pedestrian accommodations provided;
- General description of the nature of pedestrian connectivity;
- How the service is deployed to meet the Americans with Disabilities Act (ADA) requirements;
- Any agreements or requirements with localities for transit design (i.e., shelters, platforms, pull-offs);
- Any bus stop and shelter placement guidelines; and
- Additional transportation services in the area that may impact transit and its connections.

Create GIS maps of each transit route or service area and submit shapefiles to DRPT. In the GIS data, include origins and destinations, trip generators, and transit facilities and, if the agency has existing GTFS data, check the accuracy of the data and making corrections. If agency does not have GTFS data, create GTFS feeds for all fixed routes and provide agency with instructions for updating.

Fare structure, payment methods, and pass/ticket purchasing

Describe the fare structure and payment methods for each mode of transit provided for both fixed route and demand responsive services. Describe how and where customers can purchase fare media. Include information on the following:

- Single fare (e.g., adults, seniors, student/youth);
- Discounted or multi-ride fares/passes (e.g., adults, seniors, student/youth);
- Changes in fares since the last TDP (include the date instituted) and the reason the fare structure was changed;
- Transfer agreements if applicable;
- Customer payment methods (Cash, magnetic strip paper farecards, smartcards, credit cards, mobile apps, etc.); and
- Fare media purchase locations (website, mobile app, ticket vending machines, commuter store, etc.).

Existing Fleet and Facilities

On July 26, 2016, FTA published a Final Rule for Transit Asset Management in Federal Register Volume 81, Number 143. The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure. Transit providers have the option to develop their own plans or, depending on their characteristics, use DRPT's Transit Asset Management group plan. In this subsection, provide status of provider's Transit Asset Management plan or, if applicable, reference the use of the state Transit Asset Management Plan as the chosen alternative. In the appendix, provide transit asset management plan if necessary.

Transit security program

Describe all security plans and programs that are in place to protect riders, employees and general public, including:

- System security and emergency preparedness plan(s);
- Fare inspection;
- · Security features on vehicles;
- Security features at transit stations and facilities;
- · Security training programs and drills or exercises; and
- Public Awareness programs and campaigns.

Intelligent transportation systems programs

Describe any intelligent transportation systems (ITS) programs for the agency and any technology projects to improve efficiency and operations and provide information to customers.

Include information on:

- Computer aided dispatch (CAD) or automatic vehicle locator (AVL) systems;
- Automatic passenger counters (APC);
- Traffic signal priority (TSP) system;
- On-board cameras;
- Trip planners;
- Scheduling and run cutting software;
- Maintenance, operations and yard management systems;
- Information displays;
- · Real time arrival; and

Information to mobile devices or applications.

Data collection and ridership and revenue reporting methodology

Describe the agency policies for collecting, processing, verifying, storing and reporting ridership and revenue service data. Include information on:

- Electronic registering fareboxes (ERF);
- Cash fareboxes (rural systems only);
- Automatic passenger counters (APC) and status of any APC calibration/validation efforts made for NTD reporting;
- · Manual count including free fares;
- Scheduling software;
- Accounting/payroll systems;
- Mobile data terminals (MDT) for demand response service;
- Automatic vehicle locator (AVL) system;
- Odometer readings or driver logs if used for mileage and hours;
- Operating expense and revenue data including fares and revenue from leases, advertising, contract service and other sources;
- Agency accountability policy;
- On-Line Grant Administration (OLGA) performance data submission;
- Executive director or board certification of adherence to standards and accuracy of data submitted to OLGA:
- National Transit Database (NTD) data submission practices (or explanation of why agency does not submit data to the NTD); and
- Financial audit review of verification method.

Coordination with Other Transportation Service Providers

Describe any coordination with transit service providers in adjacent jurisdictions, Transportation Network Companies (TNC), taxi companies, human service providers, bikeshare systems, carshare companies, etc. including designating pickup and drop off at stations or transit centers, schedule coordination, fare agreements, programs to subsidize fares, programs to utilize TNCs for senior or disabled service, or other initiatives.

Public outreach

Describe your agency's public outreach and involvement process including outreach relative to service schedule or fare changes, service expansion, and reduction.

ii. CHAPTER 2: GOALS, OBJECTIVES, AND SERVICE DESIGN STANDARDS

Describe the current goals, objectives and service design standards, and the process for establishing, reviewing and updating these goals, objectives, and standards. Also discuss new or revised goals and related objectives and service design standards, and identify changes from prior TDP's. Incorporate strategic goals of adopted regional transit or mobility vision plans, CLRP, etc.

The goals, objectives, and service design standards should reflect the basis under which new service would be deployed and existing service modified. The goals and objectives should be comprehensive and address all major areas of concern and activity for public transit operators. Service design standards should address all facets of transit such as scheduling and route planning; service reliability; system effectiveness; system efficiency; safety and security; funding and reserve policies; customer service; multimodal connectivity and statutory and regulatory compliance.

Goals, objectives, and service design standards should be based SMART principles, that is - Specific, Measurable, Agreed, Realistic, Time-bound. It is recommended that each goal and objective have an associated performance measure to track progress.

iii. CHAPTER 3: SERVICE AND SYSTEM EVALUATION

Develop performance measures to evaluate route-level and system-wide performance against the performance standards for each mode and/or type of service (e.g., local, express, or commuter services), for both fixed route and demand response services. Evaluate the most recent year for which complete data is available. Any service standards for each mode should be included as well. Chapter 3 should include:

- Performance measures to track progress towards established standards. Incorporate
 performance measures as defined in the June 2014 SB1140 Performance-Based
 Funding Allocation Study report, adopted regional transit or mobility vision plans and/or
 CLRPs to the extent possible. Performance measures and standards should include and
 correspond with Transportation/Metropolitan Planning Organization's performance
 measures.
- Current fiscal year data on the system, including service area population and density, service area square mileage, operating cost, number of vehicles in peak service, number of vehicles available for peak service, ridership, revenue hours, total hours, revenue miles, level of service (days of the week operated, trips per day and average headway) and directional route mileage.
- A three-year retrospective analysis of performance including trend analysis for the performance measures defined in the SB1140 report: net cost per passenger, passengers per revenue hour, and passengers per revenue mile.

- Conduct appropriate ridership surveys at least once within each six year TDP cycle. The survey should gather pieces of data such as: customer demographics, customer satisfaction, Title VI compliance related information, and origin-destination data.
- If necessary, consult with key regional stakeholders (e.g. MPO/PDC staff, local elected officials and other stakeholders) to determine the level of support for transit within the community.
- Deviations from currently adopted service standards (if they exist for the system) and describe proposed remedies, including service expansion and/or contraction. Use narrative, tables, and other graphic formats as warranted.
- Describe specific solutions to any gaps or service deficiencies for fixed-route and demand response services.

iv. CHAPTER 4: SERVICE AND CAPITAL IMPROVEMENT PLAN

This chapter is the centerpiece of the plan, as it focuses on improving transit service by modifying existing services and by meeting previously unmet needs. This section should include the following:

Service Improvements and Needs Identification

- Provide projected population growth, employment levels, and senior citizen population for the jurisdictions served by the transit agency.
- Describe fixed route and demand response services the operator intends to provide.
 From current base operations, the plan will incorporate changes that reflect the ongoing evaluation of services/systems with respect to adopted goals, objectives, standards, short-term needs, and legal and regulatory requirements.
- Develop potential transit services to address the identified needs.
- Identify short- (1 to 3 years), mid- (3 to 10 years), and long-term (beyond 10 years) transit needs, and provide a separate description summarizing each proposed service expansion project supporting an identified need. What is affordable is not a reliable measure of what is needed. A long planning horizon allows for agencies to be better prepared for SMART SCALE and other discretionary grant programs.
- Estimate ridership through the use of models for any proposed fixed route or demand response services for other similar type and size systems in Virginia, or through the application of one or more generally employed ridership proxies, such as the number of riders per bus-hour that is based on actual transit agency ridership characteristics.

Service and Needs Prioritization

- Estimate each project's capital and operations cost and assign a desired time-frame for implementation. Time-frames can be categorized as short- (1 to 3 years), mid- (3 to 10 years), and long-term (beyond 10 years). Mid- and long-term projects should be considered part of the agency vision. Inclusion of these projects is primarily for agency use and to provide a clearer understanding of unmet or unfunded needs.
- Capital and operating cost estimates associated with any potential service expansions or modifications should be prepared using standard vehicle acquisition and operating cost information for systems of a similar type and size.
- Describe any planned facility improvements or capital projects to improve operations.
- Discuss whether or not the planned or proposed capital and/or service project(s) are currently contained in the STIP, SYIP, and/or CLRP and if not, when the project is expected to be submitted for inclusion in these documents.
- Prioritize the identified short, mid, and long-term transit capital and service needs.

Service Development

- Describe the levels of service planned using a table to show service hours and service
 miles. Separately identify fixed route service (by mode and type of service), demand
 responsive service (by type of service), and expansion services (by mode and type of
 service). The table will clearly identify service expansion and/or reduction by the year of
 planned deployment and/or elimination. There must be a rational relationship between
 the information portrayed and the "Service and System Evaluation" section of the TDP.
- Where reductions in service levels are required to achieve a balanced operating budget, describe the reductions and assess their impact on the affected service areas and communities.
- Describe any planned service changes in response to the most recent federal Title VI report and/or FTA Triennial Review.
- Discuss any additional, current, or anticipated policy, planning, funding, or operating issues that may affect the operations of the existing or planned transit system.
- Provide current schedule for projects, showing key completed and anticipated milestone dates.
- Describe any new programs to coordinate with TNCs. Discuss any policy changes, funding or capital projects needed for implementation.

v. CHAPTER 5: IMPLEMENTATION PLAN

The Implementation Plan lists steps required by an agency to carry out the operations and services described in Chapter 4.

Rolling stock utilization

- Describe the policies and/or justification for replacement, rehabilitation, retrofit, expansion, and reduction of revenue and non-revenue vehicles/vessels to carry out the plan developed in Chapter 4.
- If the operator has a Transit Asset Management plan, provide appropriate references and indicate how the operator's asset management plan will meet rolling stock needs to implement the plan developed in Chapter 4.
- If the operator has not yet developed a Transit Asset Management plan, please include the following details:
 - Number and type of vehicles/vessels to be rehabilitated by year;
 - Number and type of vehicles/vessels to be removed from service, including intended disposition (e.g., sale, placed for lease, salvaged);
 - Identification number, (individual VIN or VIN sequence for subfleets) of vehicles/vessels being rehabilitated or removed from service;
 - Number and type of replacement and expansion vehicles/vessels;
 - Anticipated year of manufacture of replacement and expansion vehicles/vessels;
 - Expected life of new vehicles/vessels;
 - Year new vehicles/vessels will be placed in service;
 - Length of new vehicles/vessels;
 - Seating capacity of new vehicles/vessels;
 - Wheelchair capacity of new vehicles/vessels;
 - New vehicle/vessel type (e.g., cutaway van, standard bus, articulated bus, trolley bus, articulated trolleybus, over-the-road coach, light rail, heavy rail, passenger ferryboat, diesel-electric locomotive, trailer car);
 - Placement of the new vehicles in fixed route service or demand responsive service;
 - Mode of power (e.g., diesel, CNG, LPG, gasoline, electric, hydrogen fuel cell, hybrid gasoline-electric, diesel-electric locomotive, trailer car not powered);
 - Estimated cost of new replacement and expansion vehicles/vessels (unit cost and total by mode), with a four percent annual escalation rate clearly stated; and
 - Sources and amounts of funding for replacement and expansion vehicles/vessels (unit cost and total by mode with four percent annual escalation rate clearly stated).
 - Include a discussion of the basis for the types of vehicles/vessels desired.

- Estimated cost of new replacement and expansion vehicles/vessels (unit cost and total by mode), with a four percent annual escalation rate clearly stated; and
- Sources and amounts of funding for replacement and expansion vehicles/vessels (unit cost and total by mode with four percent annual escalation rate clearly stated).

Major system maintenance and operations facilities

- If the operator has a Transit Asset Management plan, provide appropriate references and indicate how the operator's asset management plan will meet maintenance and operations facilities needed to implement the plan as developed in Chapter 4.
- If the operator has not yet developed a Transit Asset Management plan, provide the nature and function of any existing and planned maintenance and operations facilities.
- Provide the project budget, including cost, source of funds, and amount from each source.
- Identify funds that have been programmed, allocated or received, and funds that have not been secured.

Passenger amenities

- Discuss plans to maintain current bus stops, improve current bus stops, add new passenger facilities, waiting shelter installations, or other upgrades to passenger facilities.
- Provide the project budget, including: cost, source of funds, and amount from each source.
- Identify funds that have been programmed, allocated or received, and funds that have not been secured.

New technology systems or upgrades

- Discuss current and/or proposed technology upgrades such as installation of CAD/AVL systems, APCs, scheduling software, fare collection equipment, and automatic data processing hardware or software.
- Provide the project budget, including: cost, source of funds, and amount from each source.
- Identify funds that have been programmed, allocated or received, and funds that have not been secured.

vi. CHAPTER 6: FINANCIAL PLAN

- In the financial plan, service costs are projected and financial resources are identified.
 Consequently, it is through the development of the TDP's financial plan that transit agencies determine which service improvements can be realistically achieved and when those service improvements should be implemented. The financial plan should include:
- "Baseline" level of service at the time of the TDP preparation. Committed service changes must also be defined, with their expenses and revenue separately identified in the operating and capital financial plan tables.
- Capital and operating budget forecasts; federal, state, regional, and local revenue projections; fare policies, labor or service agreements, competitive demands on funding, and regional priorities and policies.. Show projected cash flow needs, including any anticipated difficulties, and approved or anticipated decisions on bond financing. Identify funds that have been programmed, allocated or received, and funds that have not been secured. Include the source of funds and amount from each source for the last five years. Use the recently approved Six Year Improvement Program (SYIP) to help with current and future estimates.
- The capital and the operations budget must be sustainable and generally balanced each year over the period of the TDP, using currently available or reasonably projected revenues.
- All capital and operations expenses and revenues stated in year of expenditure dollars, with the assumed escalation factor of at least three percent per year. All sources of revenue shown in the operations and capital plans should be identified individually. All assumptions that relate to expenditure and revenue estimates must also be documented;
- A narrative explaining any major changes in service hours and miles due to deployment
 of new service or major service reductions; changes in fare revenue due to changes in
 the level of service; changes in expenses due to changes in the level of service, and
 changes in expenses due to a labor or service contract changes.
- Where increases in revenues (e.g., fares, sales taxes, general fund revenues) are required in order to sustain service levels, the steps and timelines needed to achieve the revenue increases, and the policies and actions that will be taken if the proposed revenues do not materialize;
- Planned fare increases and decreases, and/or changes in fare policies, including the
 years these changes are planned to take effect. Also describe planned changes in interoperator transfer agreements and/or regional policy on fare coordination;
- Significant service expansion or reduction, and the introduction of new service.
- Reserves available for operations and changes to reserves over the period of the TDP, including anticipated unallocated reserves.

• In addition to future year forecasts, the Appendix should include a three-year retrospective of operating and capital expenses and revenues (provide audited budgets if available).

F. Plan Deliverables

For each major TDP update and minor annual update, the following shall be submitted to DRPT:

- An electronic editable copy of the plan, in a commonly used word processing software, including all appendices and related documents;
- Proof of adoption of the TDP major update by the applicable board or commission;
- Approval of the TDP minor update by the Accountable Executive;
- All GIS data created or obtained for the plan in a geodatabase and a system-wide General Transit Feed Specification (GTFS) feed where applicable. At a minimum, GIS data should include route alignments, stop locations and routes serving, route-specific schedule and span of service.