

Department of Rail and Public Transportation (DRPT) TRANSIT DEVELOPMENT PLAN (TDP) REQUIREMENTS

Transit Development Plans (TDPs) help transit operators around the country improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public. These plans also provide a solid foundation for funding requests and feed directly into the programming process. To capture the benefit of this planning tool, Virginia's Department of Rail and Public Transportation (DRPT) now requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a TDP. This document details the required frequency and format for developing a TDP and the financial and technical resources available from DRPT to assist operators in meeting the requirements.

Frequency of the TDP Requirement

TDPs must be completed every six years. DRPT recognizes that any long-term plan, such as a TDP, is a living document. The planning process must provide flexibility to address changes in areas such as: organizational/governance changes, fare changes, new services/facilities, available funding, land use and development plans, economic conditions, demographic and employment patterns and changes in federal and state laws and regulations. To address these types of changes and report on progress with implementation, **a letter must also be submitted annually** describing progress made towards implementing the TDP and any significant changes similar to those described above.

The TDP that is completed every six years must be adopted by the operator's governing body (Operations Board, City Council, County Board, etc). The annual letter must be signed by the General Manager (or his/her designee) and does not require governing body approval.

Purpose of the TDP Requirement

- To improve the efficiency and effectiveness of public transportation services in the Commonwealth of Virginia.
- To serve as a management and policy document for the transit operators.
- To maximize the investment of public funds and achieve the greatest possible public benefit.
- 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).

Planning Horizon

The planning horizon for the TDP is a minimum of six years. However, a longer planning horizon may be required if necessary to reflect significant capital replacement/rehabilitation needs, or the capital and operating budget implications of significant service expansion.

Plan Requirements

The TDP must include all the plan requirements and follow the chapter structure specified below. Public Transit operators can also go above and beyond the plan requirements to examine other property specific issues, however, 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.

Chapter 1 - Overview of Transit System

The TDP will contain a brief overview of the transit system. The following elements will be included:

- **History**
Provide a brief history of the transit property (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 governing body (including the number of members). Indicate if members are elected or appointed; and if appointed, how, and what agencies and/or groups do members represent (e.g., cities, county, general public)
 - Provide a list of current members and their terms
 - Describe any advisory committees that provide direct input to the governing body

- **Organizational structure**
Provide a brief description of the organizational structure and staffing.

- Include an organizational chart that identifies departments and reporting relationships. The names of key management personnel should be provided in the organizational chart.
 - Identify all contracted transportation services (including the name of contractors and length of current contracts)
 - Identify the labor unions representing agency employees; the length of current contracts must also be provided
- **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.
 - Describe the areas served and the peak vehicle requirement for each type of service provided (i.e. any express bus, radial, circulator services)
 - Include details of any services provided with funding and/or oversight partnerships with others
 - Describe any bicycle accommodations provided
 - Describe pedestrian connectivity
 - Describe how the service is deployed to meet the Americans with Disabilities Act (ADA) requirements
 - Describe any agreements/requirements with localities for transit design (i.e. shelters, platforms, pull-offs)
 - Describe any bus stop and shelter placement guidelines
- **Fare structure**
Describe the fare structure for each mode of transit provided for both fixed route and demand responsive services. 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)
 - Recent changes in fares (include the date instituted) and the reason the fare structure was changed; and any transfer agreements
- **Fleet**
Provide a general description of your revenue and non-revenue vehicle/vessel fleet. The description can be in narrative or graphic format, or a combination of both. Include the following information:
 - The total number of fixed route, demand responsive, and non-revenue vehicles/vessels by type (e.g., standard bus, articulated bus, over-the-road coach, cutaway van, passenger ferryboat) in the active fleet
 - The total number of fixed route and demand responsive vehicles/vessels in reserve fleet by type
 - The spare ratio of fixed route and demand responsive vehicles/vessels (at maximum pullout) by type
 - The useful life of revenue vehicles/vessels

- The next rehabilitation or replacement of vehicles/vessels, even if beyond the TDP horizon

In the appendix, provide a table with a complete inventory of both the revenue and non-revenue fleets by mode. This table can be copied, and should coincide, with the table from the fleet inventory input into DRPT's On-line Grant Application System (OLGA).

- **Existing facilities**

Describe individual or grouped facilities, according to the following categories:

- Administrative
- Maintenance and fueling
- Storage and staging
- Parking
- Stations, transit centers and bus stops (total number of stops)
- Right-of-way
- Track or guideway
- Bicycle facilities
- ADA accommodations (i.e. how are ADA requirements being achieved)

Indicate location, ownership, function, age, and amenities, if applicable, for each facility.

- **Transit security program**

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

- System Security and Emergency Preparedness Plan
- Fare Inspection
- Security features on vehicles
- Security features at transit stations/facilities
- Security training programs and drills/exercises
- Public Awareness Programs and Campaigns

- **Intelligent Transportation Systems (ITS) program**

Describe ITS program for the agency and any technology projects that are intended to improve efficiency and operations. Include information on the following:

- Computer Aided Dispatch (CAD) or Automatic Vehicle Locator (AVL) systems
- Automatic Passenger Counters (APC)
- Traffic Signal Priority (TSP)
- On-board cameras
- Trip planners
- Scheduling and runcutting software
- Maintenance, operations and yard management systems
- Information displays
- Real time arrival
- 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 the following:

- Electronic registering fareboxes (ERF)
- Cash fareboxes (rural systems only)
- Automatic passenger counters (APC)
- 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
- Financial audit review of verification method

- **Public Outreach**

Describe your agency's public outreach and involvement process including outreach relative to service expansion and reduction.

Chapter 2 - Describe Goals, Objectives, and Standards

Describe the current goals, objectives and standards, and the process for establishing, reviewing and updating these goals, objectives, and standards. Also discuss new or revised goals and related objectives and standards, and identify changes from prior TDP's. The goals, objectives and standards should reflect the basis under which new service would be deployed and existing service increased or reduced.

- The goals and objectives should be comprehensive and address all major areas of concern and activity for public transit operators (e.g., 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).
- Performance standards should address both the efficiency and effectiveness of the services provided by the operator. Performance standards should be specific, measurable and quantified where feasible.

Chapter 3 - Service and System Evaluation

Describe the evaluation process and evaluate route-level and system-wide performance against current performance standards for each mode and/or type of

service (e.g. local, express, or commuter service) for both fixed route and demand response services. Evaluate the most recent year for which complete data is available.

- For current fiscal year, include data on the system for certain evaluation measures, including minimally 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 and directional route mileage.
- Prepare a retrospective analysis of performance (e.g. prior three years), including trend analysis for measures required for T the Performance Based Operating Assistance Allocation, as adopted by the Commonwealth Transportation Board in October, 2013.. Performance measures include: net cost per passenger, passengers per revenue hour and passengers per revenue mile. Definitions of the performance measures may be found in the DRPT Program Application Guidance.
- Based upon data from the most current year available, use the evaluation measures selected for the retrospective analysis noted above to provide a comparison of at least three peer systems (inside and/or outside of Virginia) with similar operating parameters (service area, revenue miles/hours, fleet size, equipment used, budget, etc.).
- Conduct appropriate onboard ridership surveys at least once within each six year TDP cycle. The survey should gather pieces of data such as: customer demographics, customer satisfaction and origin-destination data.
- Conduct interviews with key regional stakeholders (e.g. MPO/PDC staff, local elected officials or business interests) to determine the level of support for transit within the community
- Conduct focus groups with transit system users to discuss perspectives on existing services and any perceived needs for changes to service or route structure
- Conduct focus groups with non-users real or perceived shortcomings that may constrain potential riders from using the transit agency's services.
- Evaluate recent changes in patronage, operating costs, and operating revenue.
- Describe the land use plan for the counties and/or localities served by the transit agencies to document existing land use and proposed land use changes, as it is related to providing transit services (e.g. is the county

proposing future transit oriented developments that will be served by transit services?). Intent is not to document the full information on land use.

- Describe existing documentation on ITS technologies used by the transit agencies and opportunities to tie into other systems.
- Identify 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.
- Describe equipment and facility deficiencies and describe proposed remedies. Provide a summary of the agency's most recent federal Title VI Report and FTA Triennial Review, if available. Discuss any deficiencies found, and describe related remedial actions. Attach the most recent Title VI Report and the FTA Triennial Review to the TDP in the appendix, if available.
- Create GIS maps of each transit route and submit shapefiles to DRPT.

Chapter 4 - Service Expansion Project Descriptions

Provide a separate description summarizing each proposed service expansion project.

- Provide an overview of demographics with available information from the 2010 US Census and/or Virginia Employment Commission Communities Profile on projected population growth, employment levels, and senior citizen population, as appropriate, for the jurisdictions served by the transit agency.
- Estimate ridership through the use of models for any 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.
- Estimate each project's capital cost, including: description of secured and/or programmed funds, the conditions imposed on the use of funds, and when the funds must be expended.
- 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 other systems of a similar type and size.
- Explain any changes in secured or anticipated funding from prior TDPs.

- Show project cash flow needs, including any anticipated difficulties, and approved or anticipated decisions on bond financing.
- Provide current schedule for projects, showing key completed and anticipated milestone dates.
- Provide the anticipated operating expenses and revenue projections (including source funds).
- Discuss current transit supportive development land use activities or relevant changes in land use policy in the current or proposed transit service area.
- Discuss any other current or anticipated policy, planning, funding, or operating issues that may affect the operations of the existing transit system.
- Discuss whether or not the proposed service expansion project(s) is 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.

Chapter 5 - Operations Plan

Describe fixed route and demand response services the operator intends to provide over the TDP period. From current base operations, the plan will incorporate changes that reflect the ongoing evaluation of services/systems with respect to adopted goals, objectives, standards, and legal and regulatory requirements. The plan will be constrained based on “reasonably” expected revenues. Accordingly, the TDP shall:

- Describe the modes and types of transit services to be operated over the period covered by the TDP. The description should include a summary of the existing services and a description of planned new activities and services. For new service, identify the mode, and describe the planned service characteristics.
- 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 in order to achieve a balanced operating budget, describe the reductions and assess their impact on the affected service areas and communities.

- Describe planned service changes in response to the most recent federal Title VI report and/or FTA Triennial Review.
- Describe any planned facility improvements or capital projects to improve operations.

Chapter 6 - Capital Improvement Program

The Capital Improvement Program (CIP) describes the capital programs (vehicles/vessels, facilities and equipment) required to carry out the operations and services set forth in the operating plan described above. The CIP provides the basis for requests for federal, state and regional funding for capital replacement, rehabilitation, and expansion projects. The CIP should reflect the operator's "reasonable" expectation of funding. DRPT's Asset Management System may be helpful in assembling the required information. Evaluate the system's existing Capital Improvement Program (CIP) to ensure any major capital items are listed in the program document, including but not limited to the following:

- **Vehicle/Vessels: Replacement, Rehabilitation, Retrofit, Expansion, and Reduction**

Describe the policies and/or justification for replacement, rehabilitation, retrofit, expansion, and reduction of revenue and non-revenue vehicles/vessels. Include a discussion of the basis for the types of vehicles/vessels desired, including: life cycle, passenger amenity, mode of power and/or emissions, and any other considerations (e.g., safety, lack of availability of service parts, etc.).

- **Vehicle/Vessels: Replacement, Rehabilitation, Retrofit, Expansion, and Reduction**

Provide a table that shows by mode, the replacement, rehabilitation, retrofit, expansion, and reduction plans for revenue and non-revenue vehicles over the TDP planning horizon. Include the following:

- 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.)
- **Major System Maintenance and Operations Facilities: Replacement, Upgrade, and Expansion**
Identify the function and the location of planned new or expanded 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 current and/or proposed bus stop improvements or waiting shelters installations or other upgrades to passenger waiting facilities.
 - **Tools and Equipment: Replacement and/or Upgrade**
Discuss current and/or proposed tool and equipment replacement and upgrade projects. Combine projects into a lump sum and indicate costs, sources of funds and amounts.
 - **Technology Upgrades (new systems or projects):**
Discuss current and/or proposed technology upgrades such as installation of CAD/AVL systems, APCs, scheduling and runcutting software, fare collection equipment, automated data processing (ADP) hardware or software.
 - **Transit System Expansion (new or existing service):**
Identify the function and route structure of any planned Identify the function and route structure of any planned new transit service and/or mode, such as a new bus route streetcar, LRT, BRT or streetcar project. Provide the project status and project budget, including: capital and operating costs, source of funds, and amount from each source. Identify funds that have been programmed, allocated or received, and funds that have not been secured.

Chapter 7 - Financial Plan

A principal objective of the TDP is to demonstrate that the operator is planning a sustainable level of transit service over the planning period, including rehabilitation and replacement of capital assets. The capital and operating budgets need to consider expense forecasts; federal, state, regional and local revenue projections; fare policies; labor or service agreements; competitive

demands on funding; and regional priorities and policies. The TDP should show clearly the “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.

- Develop a financial plan consisting of the capital and operating budget forecasts; federal, state, regional, and local revenue projections; fare policies, etc.
- In separate tables, provide the six year fiscally constrained operating and capital budgets. 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 are to be stated in year of expenditure dollars, with the assumed escalation factor of four 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.
- In narrative format, explain 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, describe 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.
- Describe 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.
- Separately identify funding sources and amounts to support operating and capital budgets for fixed route and demand response services.
- Significant service expansion or reduction, and the introduction of new service, must be clearly shown.
- Indicate 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 TDP should include in the appendix, a three-year retrospective of operating and capital expenses and revenues (provide audited budgets if available).

Chapter 8 - TDP Monitoring and Evaluation

Describe the process that will be undertaken to periodically monitor and evaluate the progress that has been made towards successfully implementing the TDP and integrating it with other internal and external planning documents.

Appendix

Provide an appendix that includes, at minimum, the following:

- The transit operator's most recent FTA Triennial Review report;
- The transit operator's most recent Title VI report; and
- A table containing the transit operator's Fleet Inventory from DRPT's On-Line Grant Application system ("OLGA").
- A three year retrospective of operating and capital expenses and revenues (audited if available).

TDP Funding

For small urban and rural transit operators, DRPT will provide technical assistance.

Schedule of Deliverables

- Annual TDP Update - Submit one electronic version to the DRPT Program Manager and the Manager of Transit Planning. The operator's governing body must adopt the full TDP.
- Annual update letters are due December 1st (or the following business day if November 30th falls on a weekend). Operators may request an extension however if a TDP is not submitted to the satisfaction of DRPT by February 1 the following year, DRPT will not review or approve the transit operator's grant application.