

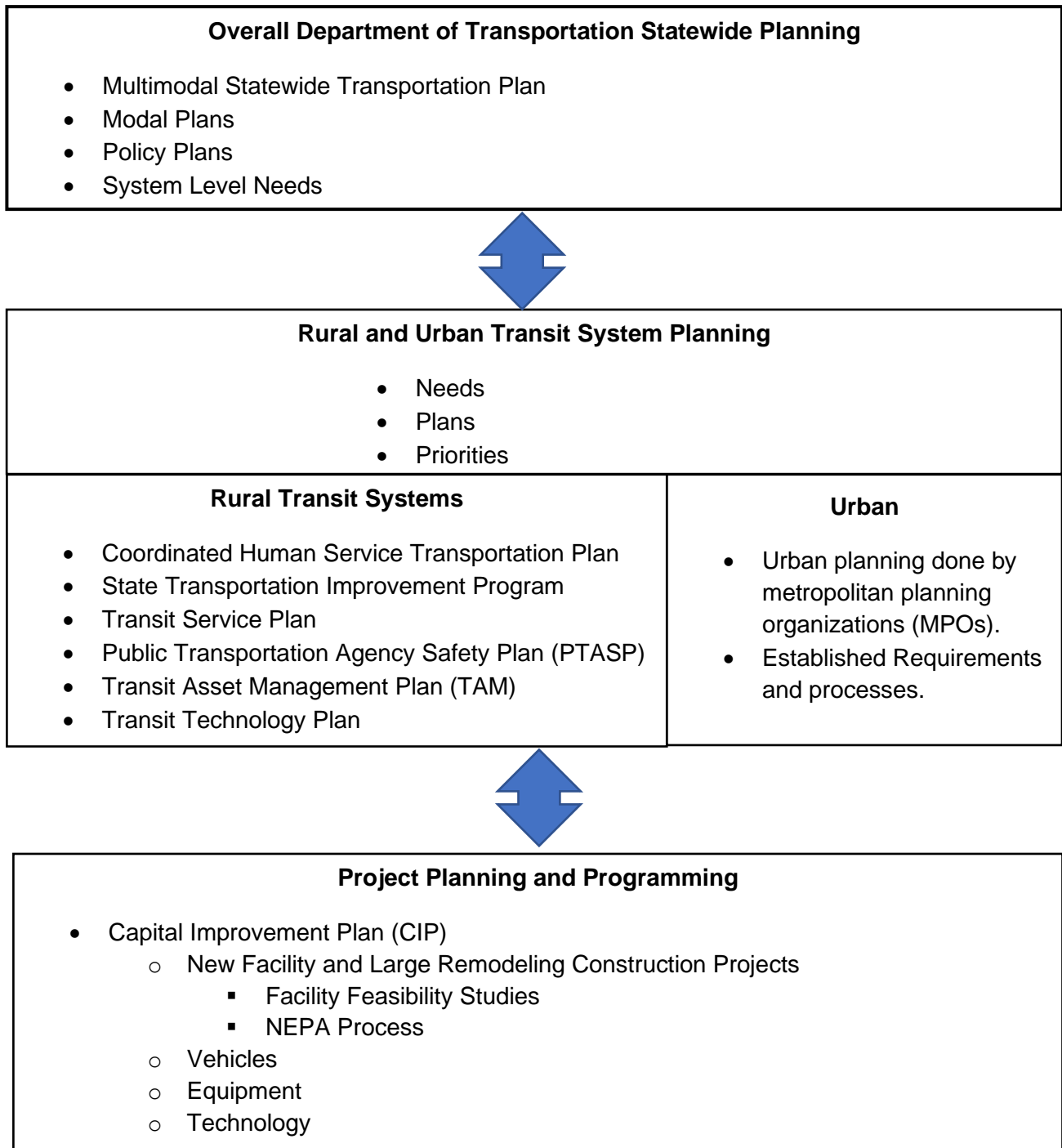


TRANSIT AGENCY CAPITAL  
IMPROVEMENT PLAN (CIP) MANUAL



Transit planning is part of an intermodal transportation planning process covering primarily highways and transit, but also includes other transportation modes such as bicycle/pedestrian and freight. The best planning processes also integrate transit planning with human services planning, as well as planning for other community services. The basic structure and elements common to transit planning are detailed in the diagram below.

### South Dakota Transportation Planning Hierarchy



This manual is a guide for developing the Capital Improvement Plan (CIP) listed in the bottom box of the Planning Hierarchy diagram. The capital assets of transit systems include existing rolling stock such as buses and vans, fixed facilities such as buildings, and major capitalized equipment such as vehicle lifts and diagnostic equipment. They are funded through a variety of local sources including farebox revenues, along with state and federal grant programs.

Despite the availability of these funding sources, resources are limited and both the South Dakota Department of Transportation (SDDOT) and the transit agencies must make decisions about how to spend funds prudently. SDDOT has to determine on an annual basis the total statewide transit capital need for the next five years. Providers currently submit this information to SDDOT in what is known as the 5 Year Plan. The 5 Year Plan can also be called the CIP to better reflect the use of the data captured.

This manual broadly outlines the process that systems can use to develop a CIP. Some best practices used by transit agencies to develop the CIP include:

- Develop a vision for the system that is compatible with community goals
- Conduct capital planning on an ongoing basis
- Gather equipment and facility information from the TAM Plan
- Base project priorities on a long-term capital investment strategy
- Engender the support of federal, state, and local officials
- Build community support for the capital program

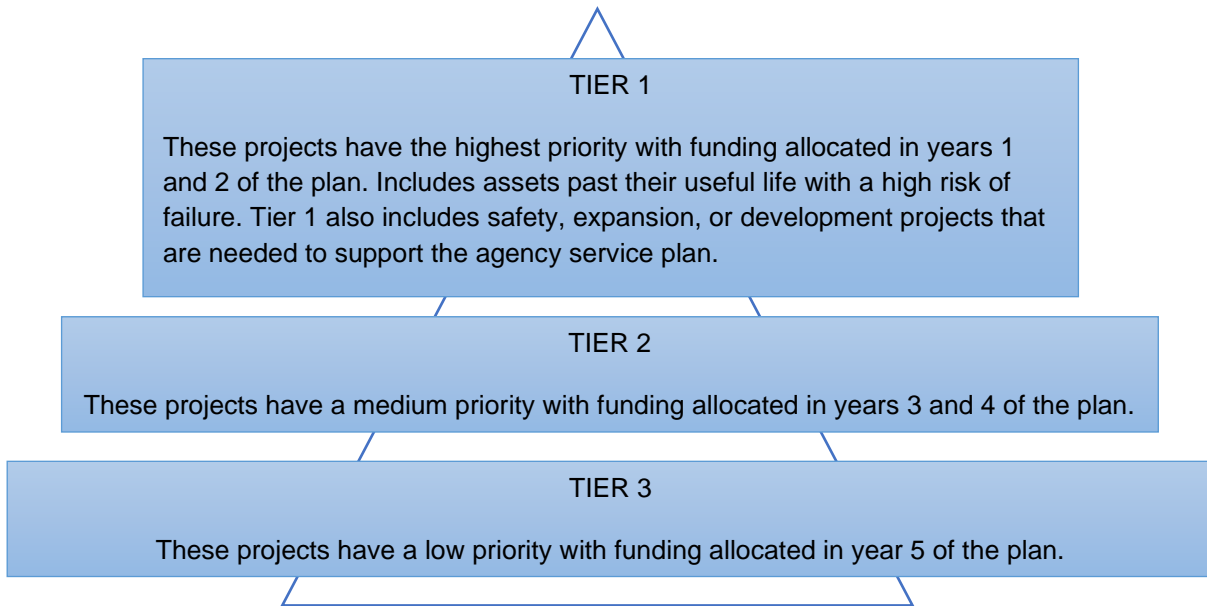
## Capital Improvement Plan

A CIP can be thought of as an annualized program of capital facility and equipment needs – programmed annually for the next 5 years. In the past, plans represented an idealized vision of the future and they became little more than “wish lists.” Today, plans are constrained by the revenues that are reasonably expected within the planning timeframe. A financially constrained CIP presents prioritized improvements based on the financial capacity to fund the plan.

To prepare a CIP there must be an accurate understanding of the replacement value and condition of the existing capital asset base and a projection of future service needs. The capital asset base is defined as existing revenue rolling stock (revenue vehicles), fixed facilities (administrative, maintenance, and passenger), and major capitalized equipment such as vehicle lifts, diagnostic equipment, and maintenance vehicles. Also, implicit in development of an accurate financially constrained CIP is a projection of future capital funds availability and overall financial capacity to supply the forecasted service levels along with any capital asset expansion and maintenance costs.

## Determine the Priorities

Start the capital planning process by determining the assets needed to meet current and future transit service goals. Rank the projects in order of importance and assign a tier based on anticipated funding levels. The projects selected for the capital plan optimize limited resources and align with the agency’s immediate and long-term goals.



## Classify the Projects

Organize projects into three categories which relate to the Capital Grant Application form.

Rolling Stock (Transportation Projects)	<ul style="list-style-type: none"> <li>• Minivans</li> <li>• Narrow Body</li> <li>• Wide Body</li> <li>• Etc.</li> </ul>
Equipment	<ul style="list-style-type: none"> <li>• Software</li> <li>• Tablets</li> <li>• Cameras</li> <li>• Etc.</li> </ul>
Facility	<ul style="list-style-type: none"> <li>• Maintenance</li> <li>• Remodel</li> <li>• New Construction</li> <li>• Etc.</li> </ul>

## Prioritize the Projects Based on Funding Capacity

A CIP has two parts – a capital budget and a capital program. The capital budget is the upcoming year’s spending plan for capital items. The capital program is a plan for capital expenditures that typically extends four years beyond the capital budget.

Example Table 1: 5-Year Costs

Projects	Current	FY2	FY3	FY4	FY5
<b>Rolling Stock</b>	\$168,000	\$95,000	\$112,000	\$95,000	\$178,000
ADA Van Replacements	\$58,000				\$63,000
16 + 2 Bus Replacements		\$95,000		\$95,000	
28 + 2 Bus Replacements	\$110,000		\$112,000		\$115,000
<b>Facilities</b>	\$125,000	\$190,000	\$690,000		
Replace Boilers	\$125,000				
Vehicle Lifts – 2 Each Year		\$190,000	\$190,000		
New Storage Facility			\$500,000		
<b>Equipment</b>	\$30,000	\$43,500	\$7,000	\$21,500	\$50,000
Shop Equipment	\$25,000	\$12,000	\$7,000	\$14,500	\$17,000
Furniture & Office Equipment	\$5,000			\$7,000	
Administration Vehicle		\$31,500			\$33,000
<b>Total Costs</b>	\$323,000	\$328,500	\$809,000	\$116,500	\$228,000

The sources for paying for the capital improvement plan need to be identified in the corresponding 5-Year Funding Plan.

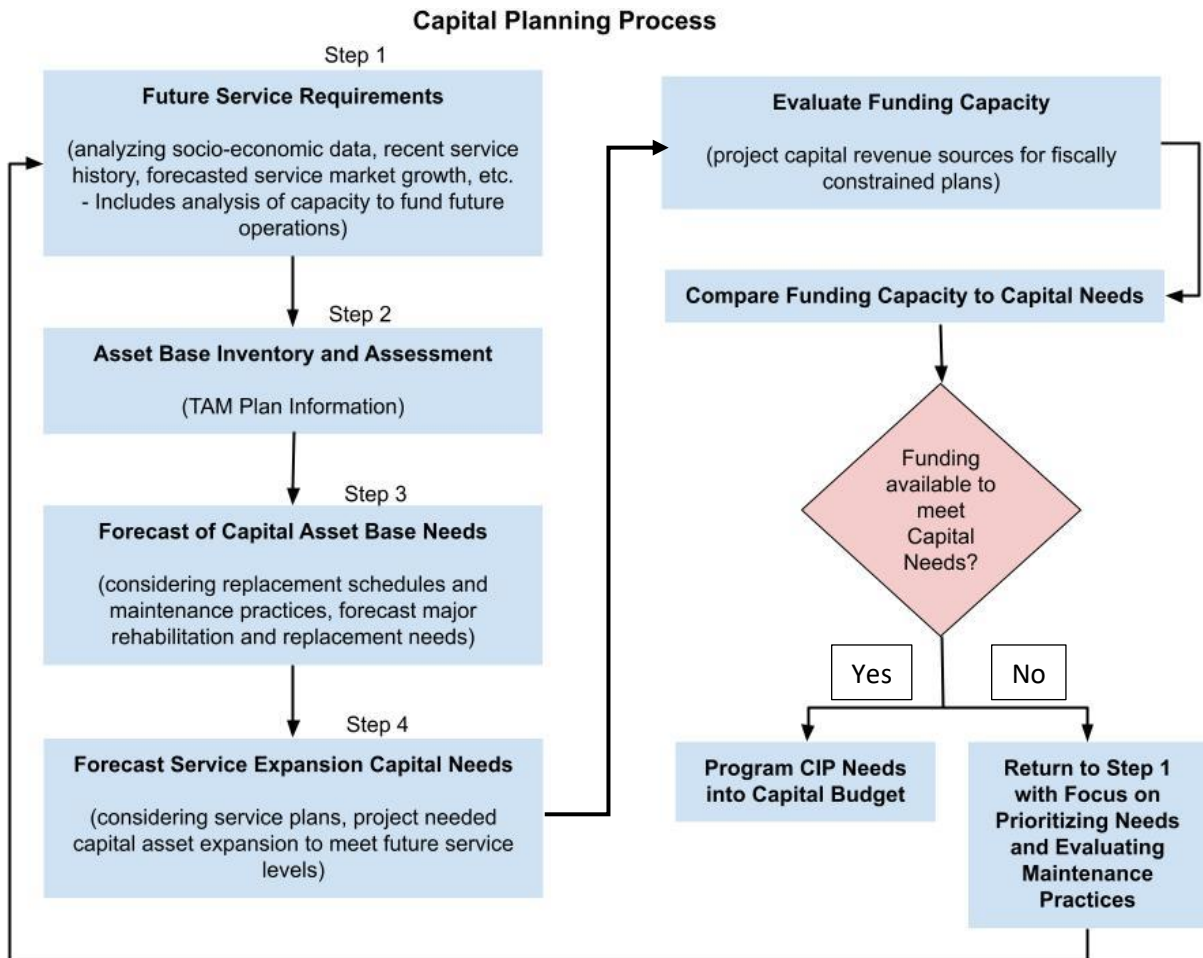
Example Table 2: 5-Year Funding Plan

Funding	Current	FY2	FY3	FY4	FY5
<b>Federal</b>					
Section 5310 Funds					
Section 5311 Funds					
Section 5339 Funds	\$258,400	\$262,800	\$647,200	\$93,200	\$182,400
State					
State Funding					
<b>Local</b>					
Local Capital	\$64,600	\$65,700	\$161,800	\$23,300	\$45,600
<b>Total Funding</b>	\$323,000	\$328,500	\$809,000	\$116,500	\$228,000

Note how a new facility is planned in FY3 with a large amount of local capital. By carefully planning the project, management can begin to accumulate local match for the project years in advance. A recovery year can be programmed the following year.

## Summary

The flowchart below illustrates another way to prioritize projects with limited funding.



A sound and well-designed program of capital investments can provide a transit system with a host of benefits including improved system reliability, reduced operating costs and increased ridership and farebox revenues. A capital improvement plan is the result of a process that identifies needs, inventories assets, assesses funding availability and resources, and prioritizes investments.

The more in-depth the consideration of future investments, the more likely the agency will be able to fund and sustain a long-term capital investment strategy. This strategy should be based upon the vision for transit in the community, knowledge of historical and current system performance and an awareness of the market forces and trends that will influence transit in the future.

The more a transit agency is visible and active in the community, the more successful it will be at garnering support and financial resources for its capital program. These best practices combined with the proper planning tools can be used to help transit agencies

develop a capital program that meets current and future needs. A sound capital improvement plan and proper planning tools allows transit providers to provide valuable planning data to the communities they serve.