Capital Budgeting and Programming

Presented by the Southern Windsor County Regional Planning Commission

with support from the Vermont Agency of Commerce and Community Development and the US Department of Housing and Urban Development

SWCRPC
SOUTHERN WINDSOR COUNTY
REGIONAL PLANNING COMMISSION

TAC Meeting
August 27, 2014

EAST CENTRAL VERMONT
what we want

What is a Capital Budget and Program?

A Capital Budget and Program is authorized under 24 V.S.A. §4403 and 4430. It is sometimes referred to as a capital improvements plan. It is a planning tool that identifies and prioritizes desired municipal capital investments over a six year period of time. It includes a:

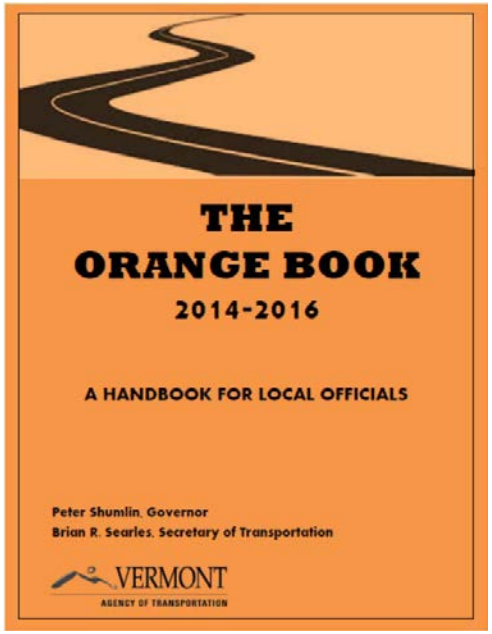
- **Capital Budget**: municipal capital projects for the coming fiscal year, estimated project costs, proposed method of financing.
- **Capital Program**: a plan of municipal capital projects for the following five (or more) years, estimated project costs, proposed method of financing.

Why do you need a Capital Budget & Program?

- A Capital Budget and Program is ***optional***
- Tool for municipal fiscal management
- Levelize annual budgets & avoid tax rate fluctuations
- Integrates town plan with annual budgeting process
- Required to levy impact fees
- Designation under the Vermont Downtown Program
- A basis to phase development to avoid or mitigate impacts on existing or planned municipal facilities or services

Reasons for other forms of Capital Planning

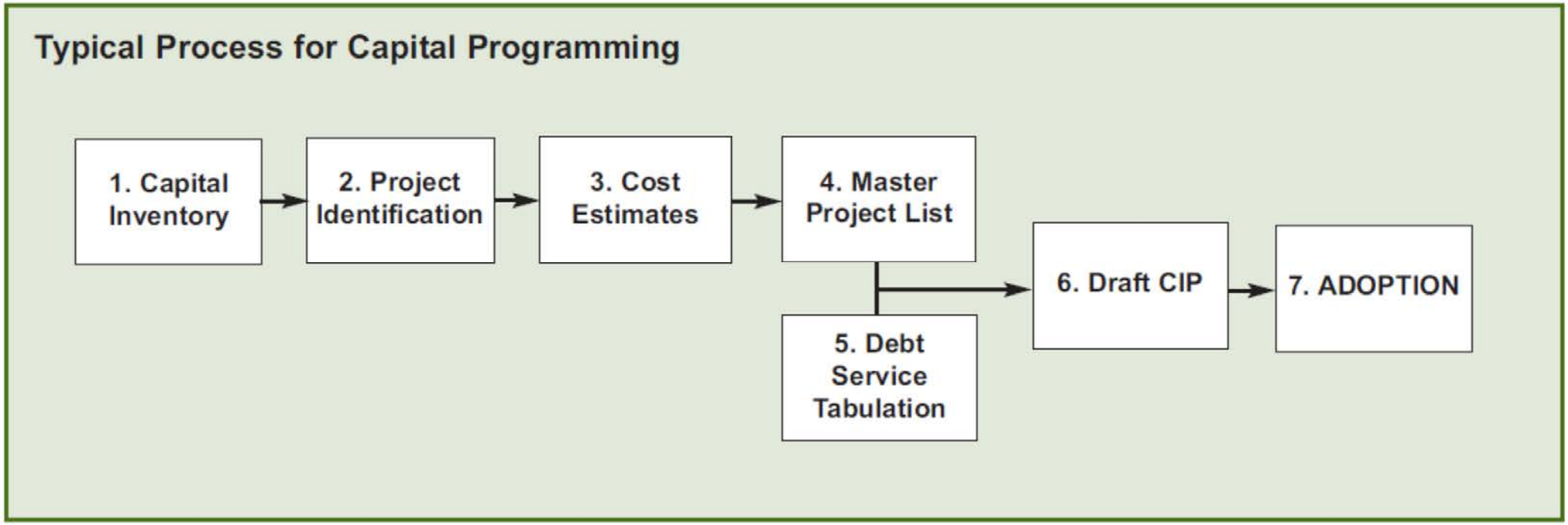
- A town plan needs to include (24 V.S.A. §4382):
  - Map / inventory of transportation facilities, type and character of improvements/new facilities, priority of need;
  - Map / inventory of community facilities and services, recommendations to meet future needs, priority of need, costs and methods of financing.
- Reduced local match for certain VTrans funding programs requires a network inventory:
  - Roads, culverts & bridges
  - Location, size, condition & estimated cost of repair
  - Updated at least every 3 years
- Can inform the Annual Financial Plan (TA-60) required by VTrans for annual State Aid for Town Highways



Who Develops a Capital Budget & Program?

- It needs to be adopted, amended or repealed by the Selectboard following one or more public hearings (24 V.S.A. §4443).
  - The Planning Commission may prepare and present a Capital Budget and Program (24 V.S.A. §4325(6)).
  - The Planning Commission may submit recommendations annually to the Selectboard for the Capital Budget and Program, that shall be in conformance with the municipal plan (24 V.S.A. §4433(c)).
  - The Planning Commission may submit a report on the proposal to the Selectboard prior to the public hearing (24 V.S.A. §4443(b)).
- Department head input is critically important

Process to Develop a Capital Budget & Program



Source: *Vermont Land Use Planning Implementation Manual*

Sample from a Town Plan

Table 6

Bridge & Culvert Condition Assessment

Structure Type	Good*	Fair*	Poor*	Total
Long Bridge (20+ ft. span)	7	4	3	14
Short Bridges (Less than 20 ft. span)	7	1	0	8
Culverts	539	36	10	585

Source: VTrans, 2007; Town Bridge & Culvert Inventory, 2003

*Condition assessment for long bridges: Poor = 0 - 49, Fair = 50 - 79, Good = 80 - 100

Table 7

Culvert Needs

	No. of Culverts	Percent of Total
Routine Maintenance (cleaning, extensions, header repair)	61	10.4%
Replace / Upgrade	36	6.2%

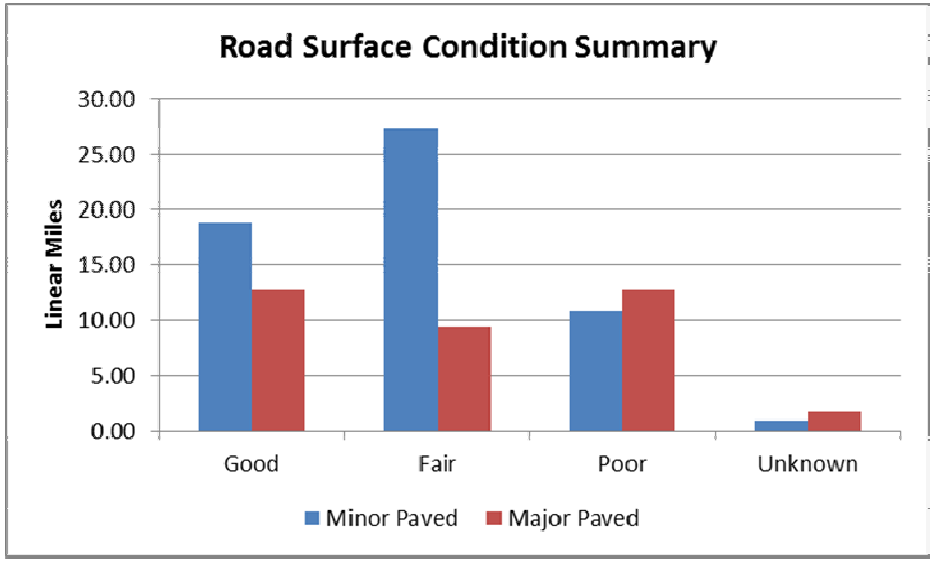
Culvert Replacement Costs

Total Cost for 36 Culverts	$99,000
Annual Cost for 6-Year Replacement Program	$16,500

Sample in response to Budget Committee Questions

Surface Type of Town-Maintained Roads		
Surface Type	Mileages	%
Paved - Major Rds	33.359	27.0%
Paved - Minor Rds	57.903	46.9%
Unpaved	32.207	26.1%
Total	123.469	100.0%

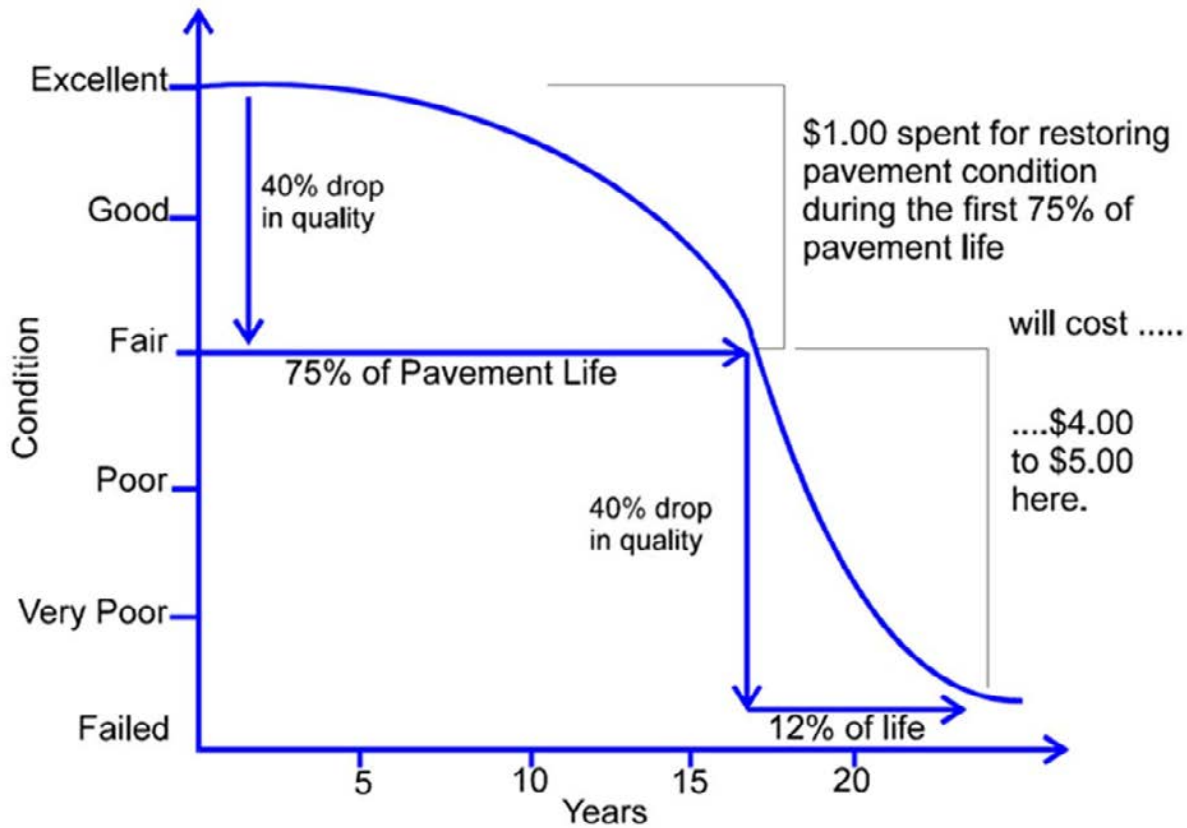
Other Roadway Infrastructure
18 State Long Bridges (20 ft or more span)
19 State Short Bridges (less than 20 ft span)
14 Town Long Bridges
40 Town Short Bridges
712 Culverts (not including driveways)
22 linear miles of sidewalk



In a statewide comparison, the town is…

- 2nd in miles of maintained roadway (2013)
- 10th in population (2010)
- 32nd in equalized municipal property value (2012)

Road Condition Decline Curve



Typical Cost Estimates for Paved Roads

Maintenance Category	Treatment Options	Est. Costs (Mile)
Preventive	Chip seal w/ 3/8" washed stone	$30,000
	Shim without overlay	$60,000
	Shim with 1 1/2" overlay	$120,000
	1 1/2" overlay	$90,000
	Cold plane (mill down 2", pave 2 1/2")	$145,000
Rehabilitate	Reclamation (ditching, reclaim, grade, compact, traffic, 3 1/2" mix)	$300,000
	Reclamation+ (all the above + tree removal, underdrain, new culverts)	$400,000
Reconstruct	Reconstruct (contracted rebuild)	$900,000
Note: All costs are based on 1 mile of 22 foot wide roadway		

Fiscal Constraints

- Need **$18.95 million** to reconstruct **23.7 miles** of paved roadways in poor condition
- Town currently budgets about **$400K/year** for road paving or reconstruction
- More than **47 years** to fund improvements

Possible Solutions to Address Identified Needs

Category	*Miles*	*Reconstruct*	*FDR/Pave*	*Shim/Ovrly*	*Chip Seal*
Major Rds - Poor	12.88	$10,304,000	$3,477,600	$1,159,200	
Minor Rds - Poor	10.81	$8,648,000	$2,918,700	$972,900	
Major Rds - Fair	9.42	$7,536,000	$2,543,400	$847,800	$282,600
Minor Rds - Fair	27.33	$21,864,000	$7,379,100	$2,459,700	$819,900

Sample List of Prioritized Needs

Top 10 Road Projects				
Priority	**Road**	**Solution**	**Lineal Feet**	**Estimated Cost**
in process	Pleasant Valley	Full Depth Reclaim/Pave	12,500	$639,205
1	Brook Rd	Full Depth Reclaim/Pave (Class 2 Grant)	10,150	$519,034
2	Carley Road	Full Depth Reclaim/Pave	6,400	$327,273
3	Spencer Hollow Rd	Full Depth Reclaim/Pave	6,000	$306,818
4	Summer Hill	Mill(CP)/Overlay	500	$20,000
5	Main St (No. Spri.)	Mill(CP)/Overlay	2,900	$100,000
6	Brockway Mills Rd	Short term: shim	14,950	$84,943
		Long term: FDR/Pave (Class 2 Grant)	14,950	$764,489
7	Eureka Rd	Full Depth Reclaim/Pave	6,700	$342,614
8	Upper Dutton Rd	Full Depth Reclaim/Pave	3,500	$178,977
9	Town Farm Rd	Shim/Overlay	2,900	$49,432
10	Elm Hill Rd	Full Depth Reclaim/Pave	8,450	$432,102
NOTES:	Ditching and culvert replacement year before paving			
	Ditching and culvert replacement are not included in costs			
	Consider targeting 1/4 of annual paving funds for contractor to perform ditch/culvert work			

Example.

Your town is looking to purchase a new truck in ten years. At today's price the new truck would cost **$315,000**

Simply dividing the cost over ten years would equal:

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	$31,500.00	**=$315,000**

Factoring in a 4% inflation rate to the cost, and using that, gives you more money for higher future costs.

+ 4% *+ 4%* *+ 4%* *+ 4%* *+ 4%* *+ 4%* *+ 4%* *+ 4%* *+ 4%*

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
$327,600	$340,704	$354,332	$368,505	$383,245	$398,575	$414,518	$431,099	$448,343	$466,277	**=$466,277**

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
$46,627	$46,627	$46,627	$46,627	$46,627	$46,627	$46,627	$46,627	$46,627	$46,627

You can then use an equal annual amount as above, which is stable, or use a progressively larger amount.

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
$44,100	$44,604	$45,128	$45,673	$46,240	$46,830	$47,443	$48,081	$48,744	$49,434	**=$466,277**

Source: TRORC

Example of several costs from a single reserve with a level annual input

Pomfret Capital Improvements Plan for Highway Equipment - 5 yr Replacement
(Assuming all purchases come out of the reserve account)

	Yr. Prch'd	Prch. Price	Yrs in Svc	Repl. Yr.	Replacement year and cost ($1000) at 5% inflation											
					2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2013 Freightliner 4WD truck	2012	150	5	2017	150					191					232	
1999 International 2WD truck	1999		14	2013		183					201					255
2006 International 2WD truck	2006	101	8	2014			165					211				
2008 Ford 550 4WD truck	2007	54	8	2015				80					102			
2010 John Deere loader	2010	85	11	2021										138		
2002 John Deere grader	2002	121	14	2016					252							
Komatsu Excavator and Trailer	2008	98	12	2020									196			
2005 International 4WD truck	2004	108	Spare													
Total purchases					150	183	165	80	252	191	201	211	298	138	232	255
Reserve Acct. Bal. at beginning of year					160	168	68	88	193	126	120	104	78	-	47	-
Addition to Reserve Acct.					-	-	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**	**185**
Reserve Acct. Expenditure					-	100	165	80	252	191	201	211	298	138	232	255
Reserve Acct. Balance at end of year					168	68	88	193	126	120	104	78	(35)	47	-	(70)
					2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

Source: TRORC

Example of Capital Budget & Program

Town of Stowe, VT
Capital Budget and Program

Project Expenditures	FY'12	FY'13	FY'14	FY'15	FY'16	FY'17
Helen Day Renovations Phase 3	$ 250,000					
Cemetery Road Reconstruction	$ 150,000					
Mountain Road Village Sidewalk Design	$ 60,000					
Community Event Field permitting and archeology	$ 34,000					
Town-owned or Adams Camp Trail Development	$ 25,000					
Bridge St. Bridge Reconstruction	$ 20,000		$ 170,000			
Main Street Sidewalk & Underground Utility Schematic Design		$ 30,000				
Mountain Road Village Sidewalk Construction		$ 150,000				
Maple and South Main St. Sidewalks		$ 263,000				
Community Event Field Improvements		$ 168,000				
Village Other Sidewalk Improvements (locations TBD)			$ 44,000	$ 59,000	$ 82,000	$ 89,000
Replace 167 Street Lights (to LED)			$ 100,000			
Luce Hill Road Culvert replacement			$ 100,000			

Considerations

- Start simple and add a few new things each year.
- Don’t include the small stuff (under $5,000).
- Consider major pieces of equipment (i.e. a new fire engine may cost as much as the fire station).
- This process helps to sort out the *needs* versus the *wants*.
- Transparency of the budget process is key; public process can be a great tool.

Funding Options

- Class 2 Town Highway Program
- VTrans Paving Program
- Structures Program
- Town Highway Bridge Program
- Better Backroads Program
- Transportation Alternatives Program
- Bicycle & Pedestrian Program
- Downtown Transportation Fund
- Special Assessment Districts
- Capital Reserve Fund
- Vermont Infrastructure Bank
- Local property taxes

Resources

For more information see the:

- *Implementation Manual, Capital Improvement Program* (Vermont Land Use Education & Training Collaborative, 2007)
- *The Orange Book: A Handbook for Local Officials* (VTrans, 2014-2016 or most recent)
- Road System Management Software (RSMS 2011)
- VT Online Bridge & Culvert Inventory Tool