

## Norwich Bond Vote 2015

Seeking a facility with “beauty, integrity, affordability, fairness, connections, strength, timelessness, wholeness, and practicality”

— Mary Layton

## Two articles

### **Article 1** (\$2,805,000)

- Repair and expand DPW
- Replace police station
- Improvements to existing fire station
- Improve training for fire department

### **Article 2** (\$211,000)

- Energy enhancements
- Achieve Net-Zero readiness
- For police/fire facility

## Project evolution since March

- Reduced program
- Reduced bond amount
- Scheduled town meeting
- Reduced total tax required
- Reduced peak tax (smoothing)
- Explored additional savings
- Prepared to spend less than authorized

## Article 1

## Article 1 Text

- Shall general obligation bonds or notes of the Town of Norwich in an amount not to exceed \$2,805,000, subject to reduction from available grants-in-aid, be issued to finance the cost of public safety building construction at an estimated cost of \$2,110,000 and public works buildings improvements at an estimated cost of \$695,000, the aggregated estimated cost thereof being \$2,805,000?

## Article 1 Components

- Maximum authorization: \$2,805,000
  - Amount assures sufficient funds for project
- Police/Fire administration: \$2,110,000
  - Building and renovations: \$1,720,000
  - Other costs: \$390,000
- Public Works repair and expand: \$695,000
  - Repair/expand existing: \$522,553
  - Cold storage with solar potential: \$172,447

## Article 1: What's different?

### New

- **One-story** fire/police
- Request: **\$2.8M**
- Maximum tax request (over FY 2015): **\$10/\$100K**
- Project alone:
  - \$24.10 without smoothing
- Project With other bonds:
  - \$33.50 without smoothing
- DPW cold storage 60'x100'

### Old

- **Two-story** fire/police
- Request: **\$3.0M**
- Maximum tax request (over FY 2015): **\$16.60/\$100K**
- Project alone:
  - \$25.80 without smoothing
- Project With other bonds:
  - \$35.20 without smoothing
- DPW cold storage 60'x150'

## Police-Fire Administration

- **Scope reduced from March**
- Replaces existing police station
- Joins existing fire station



#### Site work includes:

- Demolition & disposal of police station
- Removal of existing septic and oil tanks
- Parking—TBD
- New septic system
- Storm Drains
- 6" Water line for fire sprinkler system

## Police Department

- Offices for the police chief, a supervisor and administrative assistant.
- A shared office for the patrol officers
- Men's and women's locker rooms
- Break room.
- Two interview rooms: (victim and suspect)
- Secure garage protects patrol car and allows secure transfer of suspects and saves energy in winter
- Evidence processing and storage
- Archived storage of materials
- Departmental meeting/conference room

## Other functions

### **Fire Department**

- Fire Chief's office
- Office for general record keeping
- Men's and women's bathrooms with showers
- Shop/tool room and general storage (in existing fire station)

### **Shared facilities**

- Training room for 40 people
- Eat-in kitchen
- Emergency Operations Center, including backup dispatch

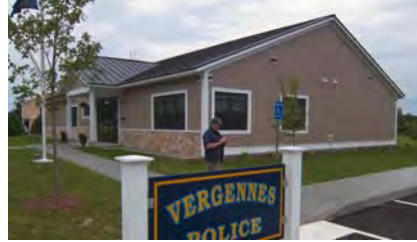
# Other police stations

(Norwich pop. 3,414)

**Hinesburg (pop. 4,340)**



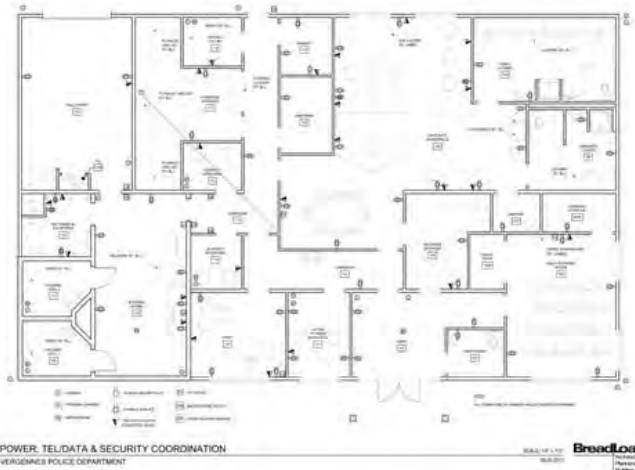
**Vergennes (pop. 2,588)**



# Example: Vergennes PD



## Example: Vergennes PD

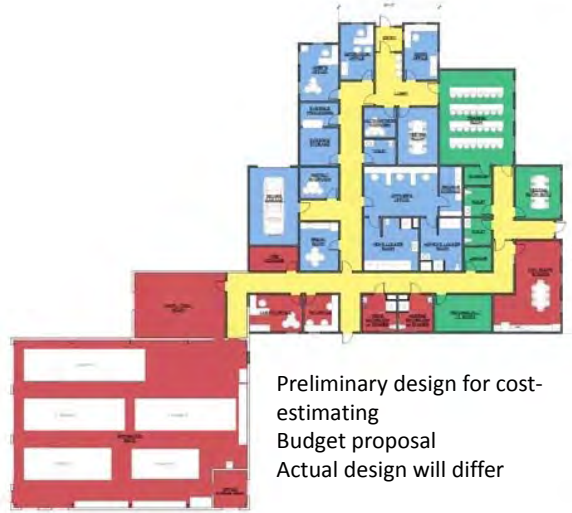


## Example: Vergennes PD

Vergennes Police New Facility - Route 22A Location  
 Total Overall Project Budget December 20, 2013

BUILDING AREAS:	
Facility Area	4,611 sqft.
<b>Total Area</b>	<b>4,611 sqft.</b>
CONSTRUCTION COST:	
Site and Facility	\$1,115,183
Construction Administration (Part 2)	\$7,932
Original Contract Amount	\$1,123,115
Approved Change Orders (#1 & 2)	\$4,499
<b>TOTAL CONSTRUCTION COST</b>	<b>\$1,127,614</b>
OTHER/ OWNER COSTS	
Architectural and Engineering Services (Part 1)	\$71,307
Land Purchase	\$252,000
Financing/Legal	\$5,639
Site Prep and Concrete Testing/Inspection	\$3,000
Phase 1 Environmental Site Assessment	\$1,500
Reimbursable - Printing Cost	\$3,000
All Permits	\$6,857
All Utility Charges & Fees	\$1,050
Security and CCTV System	\$34,078
Telephone System (Handsets and Hardware)	\$8,700
Data System - Server	\$0
Moving	\$2,000
Miscellaneous Expenses	\$2,595
Owner Contingency	TBD
Furniture, Fixtures and Equipment	\$24,232
Window Treatment	\$2,000
Efficiency Vermont Rebate	(\$2,000)
Site Test Pits & Geotech Engineering	\$2,258
Building Demolition	\$5,170
<b>TOTAL OTHER/OWNER COSTS</b>	<b>\$423,590</b>
<b>TOTAL PROJECT BUDGET</b>	<b>\$1,551,114</b>

## Example: Norwich 1-Story



Preliminary design for cost-  
estimating  
Budget proposal  
Actual design will differ

Page 1 Floor Plan

NOT FOR CONSTRUCTION

## Comparison

### Vergennes PD

- Owner costs: \$423,590
  - Includes land at \$252K
- Building gross SF: 4,611
- Construction cost: \$1,127,524
- **Construction \$/SF =**  
 $\$1,127,524 / 4,611 \text{ SF} = \mathbf{\$245/SF}$

### Norwich 1-Story

- Owner costs: \$253,000
- Site cost: \$416,000
- Building gross SF: 6,990
- Building cost: \$1,304,000
- Building \$/SF =  
 $\$1.304 \text{ M} / 6,990 = \mathbf{\$187/SF}$
- Construction cost:  
 $\$1.304 \text{ M} + 0.416 \text{ M} = \mathbf{\$1.72 \text{ M}}$
- **Construction \$/SF =**  
 $\$1.72 \text{ M} / 6,990 = \mathbf{\$246/SF}$



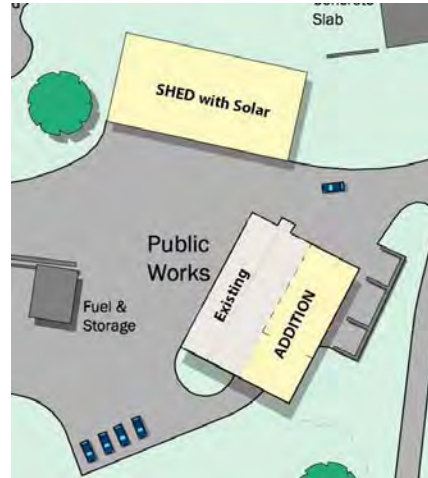
## Public Works

### Public Works Garage:

- Repair roof and fix structural issues
- Heated storage for plow trucks
- Maintenance space for vehicles
- Office for DPW Director
- Locker and break room for employees

### Storage shed:

- Storage for \$1.2M of equipment
- **Now 60' x 100'**
- Space for solar tenant available



## DPW facilities

- DPW Chief's office
- Crew break/conference and locker room
- Toilet
- Hazardous material storage
- Equipment cold storage
- Improvements:
  - Roof repair
  - Structural reinforcement
  - Insulation
  - Water
  - Connection to septic system.

## Other highway garages

(Norwich pop. 3,414–44 mi.<sup>2</sup>)

**Lyme (pop. 1,700–55 mi.<sup>2</sup>)**



**Royalton (pop. 2,800–41 mi.<sup>2</sup>)**



**Strafford (pop. 1,050–44 mi.<sup>2</sup>)**



**West Windsor (pop. 1,200–25 mi.<sup>2</sup>)**



## Article 2

## Article 2 Text

- If Article I shall be approved, shall the general obligation bonds or notes of the Town of Norwich approved in Article I be increased by \$211,000 to finance the cost of installing energy efficiency improvements at the new public safety building with a goal that the energy uses of the buildings would be from renewable resources, the aggregated estimated cost of such improvements being \$211,000?

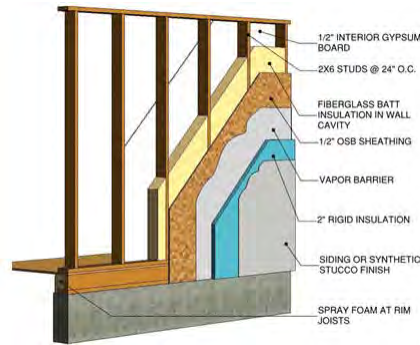
## Article 2 Basis

- From town survey: 10% of building cost for greenhouse gas abatement
- Bread Loaf: \$211K upper limit for:
  - Improved insulation
  - Better windows
  - Cold-climate heat pumps from solar project
  - Participation in for Net Zero energy building program with Efficiency Vermont incentives
- Efficiency Vermont: basic measures can be done for \$10/SF
- \$70K discussed by SB
- Additional costs for Net Zero incentives:
  - Envelope commissioning
  - Energy charrette
  - Systems commissioning
  - Energy modeling
  - Energy monitoring

# Building Efficiency

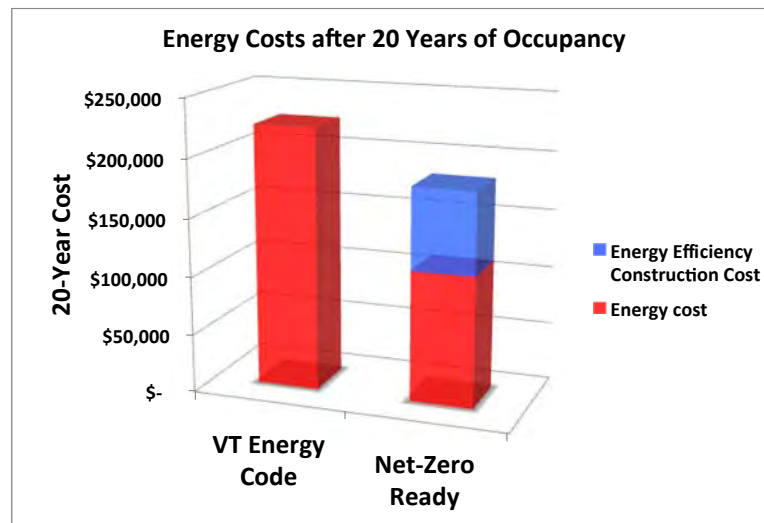
## Measures

- Building Envelope
- Interior & Exterior Lighting
- Heating, Cooling, and Ventilation Systems
- Integrated Design
- Commissioning
- Energy Monitoring



Source: Efficiency Vermont

# Efficiency Scenarios



Source: Efficiency Vermont

## Efficiency Scenarios

### Financing

- Principal: \$70,000
- Interest Rate: 3.10%
- Term: 30 Years

	Utility Cost Savings	Payements (Principal & Interest)	Net Annual Cash Flow
0	0	0	0
1	5,600	-3,600	2,000
2	11,300	-7,200	4,100
3	16,900	-10,800	6,100
4	22,500	-14,300	8,200
5	28,200	-17,900	10,200

Source: Efficiency Vermont

## Article 2: Energy Enhancement Bond

### Added Impact: \$211,000

- Project tax impact/\$100K :
  - FY 2017: \$1.80

### Total Impact: \$3,016,000

- Project tax impact/\$100K :
  - FY 2017: \$25.90
- Debt tax impact/\$100K :
  - FY 2015: \$18.60
  - FY 2017: \$35.30
  - 2017-2015: \$16.70
  - **Smoothing: \$10**

## How did we get here?

### Chronology since town meeting

- March 11: Discussed project binder
- March 18: No meeting
- March 25: Discussed timeline and program
- April 1 (S): Detailed program review
- April 8:
  - Police/fire program passed 5-0
  - DPW program passed 3-2
  - Bond articles passed 3-2

## Budgeted amounts

### Police/Fire

- Administrative building and repairs to fire station: \$2.11 million
- 4,805 net SF building:
  - \$1.72 million
  - \$187/ft<sup>2</sup> (building only)
- Site work:
  - \$416 thousand
  - \$246/ft<sup>2</sup> (total project)
- Other costs:
  - \$138 thousand A/E fees
  - \$253 thousand for contingency/ owner costs

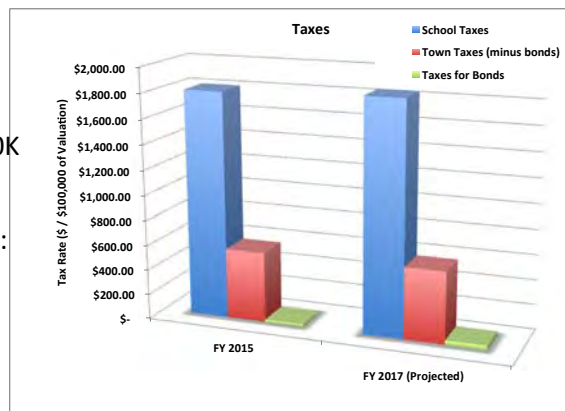
### Public Works

- \$695,000 for garage repair, expansion and shed
  - Repair/expand existing: \$522,553
  - Cold storage with solar potential: \$172,447

## Article 1: Facilities Bond

### \$2.8 million

- Expected 3.1% for 30 years
- Historically low rate
- Vermont Bond Bank
- Project tax impact/\$100K :
  - FY 2017: \$24.10
- Debt tax impact/\$100K :
  - FY 2015: \$18.60
  - FY 2017: \$33.50
  - 2017-2015: \$14.90
  - **Smoothing: \$10**



## Cost determination

### Completed steps

#### 1. Budgeting phase

- Selectboard identified functions required in program
- Areas derived from functions
- Conceptual designs reviewed

#### 2. Budget for bonding

### Next steps

#### 3. Design/construction phase

- Selectboard decides among:
  - Design-Build
  - Design-Bid-Build
  - Construction Management at Risk
- Selectboard finalizes functions
- Selectboard approves design
- Bid package prepared:
  - Detailed drawings
  - Specified level of quality

#### 4. Successful bid packages

- Actual costs

## Bond rate impact on \$2.8M

Interest Rate	Peak payment	FY 2017 Tax/\$100K	Total 30-year Interest
4.0%	\$ 190,742	\$27.00	\$1,777,738
3.1%	\$170,420	\$24.10	\$ 1,513,787
<b>Differences:</b>	<b>\$20,322</b>	<b>\$2.90</b>	<b>\$263,951</b>

Shows difference between Vermont Municipal Bond Bank rates:

- Last summer: 4.0%
- February: 3.1%

Bond rates are subject to change.



## Current debt payment schedule

Fiscal Year	Tracy Hall, Highway Equipment, Misc.	John-Deere Financial	Tower Lease-Purchase	Tower Bond
2006	\$113,155			
2007	\$143,859			
2008	\$139,450			
2009	\$127,467			
2010	\$121,456			
2011	\$57,746			
2012	\$54,953			
2013	\$52,136	\$19,042		
2014	\$49,297	\$19,042	\$30,071	\$2,190
2015	\$46,436	\$19,042	\$29,429	\$33,904
2016		\$19,042	\$33,632	\$33,632
2017		\$1	\$33,256	\$33,256
2018			\$32,775	\$32,775
2019				\$32,189
2020				\$31,505
2021				\$30,738
2022				\$29,894
2023				\$28,976
2024				\$28,000

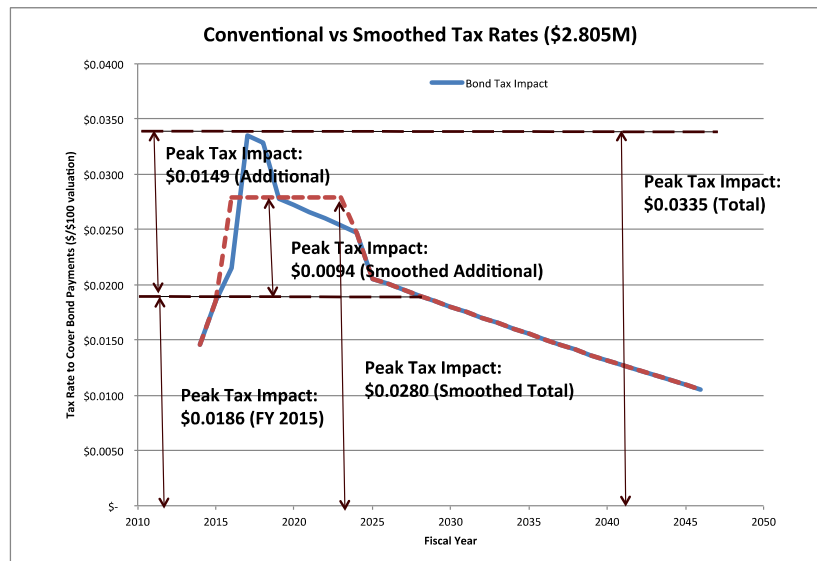
## Proposed debt payment schedule

FY	Tracy Hall	Grader	Tower Lease-Purchase	Tower Bond	Payment on Current Bonds	Tax Rate Impact	Tax Rate Impact Of New Bond	Current and New Total Outstanding Principal	Total Tax Rate Impact of Old and New	Tax Rate Increase of New Bond over FY2015 (\$0.0186)	P&I Scaled to Bonded Amount
2014	49,297	19,042	30,071	2,190	100,600	0.0145	-	100,600	0.0145		
2015	46,436	19,042	29,429	33,904	128,812	0.0186		128,812	0.0186		
2016		19,042	33,632	33,632	86,307	0.0123	0.0092	150,866	0.0216	0.0030	64,559
2017			33,256	33,256	66,511	0.0094	0.0241	236,931	0.0335	0.0149	170,420
2018			32,775	32,775	65,549	0.0092	0.0237	234,785	0.0329	0.0143	169,236
2019				32,189	32,189	0.0045	0.0233	200,078	0.0278	0.0092	167,888
2020				31,505	31,505	0.0043	0.0229	197,882	0.0272	0.0086	166,377
2021				30,738	30,738	0.0042	0.0224	195,443	0.0266	0.0080	164,705
2022				29,894	29,894	0.0040	0.0220	192,776	0.0260	0.0074	162,882
2023				28,976	28,976	0.0039	0.0215	189,888	0.0254	0.0068	160,912
2024				28,000	28,000	0.0037	0.0210	186,797	0.0247	0.0061	158,797

## Impacts of \$2.8-M Bond

	FY 2017 Peak payment	FY 2017 Peak tax impact/\$100K
Bond alone	\$170,420	\$24.10
Plus current obligations	\$236,931	\$33.50
FY 2017 – FY 2015	\$108,119	\$14.90
<b>With smoothing</b>	<b>(same)</b>	<b>\$ 9.40</b>

## Smoothing \$2.8 M



## Board discussion

### Majority

- Preserve bond rate advantage over summer
- Reduced scope of project appropriate
- Should move forward this year
- Achieved further peak tax impact through smoothing

### Minority

- Overall cost too high
  - \$2-M target
- Question \$/SF
- Reduce scope at DPW
- Want stable numbers

## Bond lifetime

### Near Term: If approved

- Vermont Bond Bank sale in July
- Architect to prepare final design documents for the police/fire facility
- Police/fire options:
  - Design-Build
  - Design-Bid-Build
  - Construction Management at Risk (CM@R)
- DPW: design-build

### Long Term: Taxpayer impact

- Time to pay equivalent of principal borrowed: 16 years
- New property purchasers share cost and benefits of facilities
- Property owners present for the entire 30-year period pay equivalent to share of a mortgage at 3.1%

## Project Management

Step	Design-Build (months)	Design-Bid-Build (months)
RFP for A/E	0	1
RFP Response	0	1
Award contract	1	1
Design	4	6
Bid	1	2
Award contract	0	1
Construction	10	12*
<b>Total</b>	<b>16</b>	<b>24</b>

- Design-Build:
  - Assumes Bread Loaf
  - TM monitors subcontractor selection
  - Subs don't know total
- Design-Bid-Build:
  - Separate firms for TM to monitor
  - Contractor knows total
  - Invites low-balling
- CM@R
  - Turnkey
  - Guaranteed price
  - Timeline similar to D-B-B

\*Extra time due to later start with respect to winter

## Options

### Authorization insufficient

- In case bids exceed authorization:
  - Unlikely to occur
  - Most qualified bidder will provide price for reduced scope

### Options for surplus

- In case bids are lower than authorization:
  - Receive bids on options for added insulation, more energy efficient windows, electric heat pump, etc.
  - Use the surplus to reduce bond payments
  - Town Meeting may approve use for a different capital purpose
- Selectboard may choose among options

Questions?

Backup Material

## Why are they needed?

### Police Department

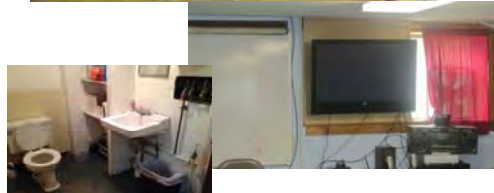
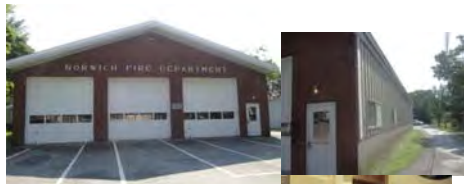
- Housed “temporarily” more than 25 years ago
- 1957 ranch house not designed as a police station
- Building is deteriorated
- Inadequate interview rooms
- Inadequate evidence-handling



## Why are they needed?

### Fire Department

- Inadequate training space
- Inadequate parking
- No showers
- Inadequate decontamination of equipment and gear
- Inadequate storage for equipment



## Why are they needed?

### Public Works

- \$1.2M of equipment sits outdoors
- Cannot keep winter maintenance equipment in heated space
- No space to also maintain town's vehicles
- No office for department head
- No lockers and conference room for crew
- Garage was built in 1976
- Rusted, leaking roof
- Environmental/safety issues

