

CAPITAL IMPROVEMENTS PLAN FOR FISCAL YEARS 2010 - 2014

PRESENTED TO THE
MIDDLETOWN BOROUGH COUNCIL

NOVEMBER 4, 2009

PREPARED BY CINDY L. FOSTER, ACTING BOROUGH MANAGER

WITH RICHARD GROVE, FINANCE DIRECTOR

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OVERVIEW

The enclosed is a five-year plan reflecting the programming and prioritization of capital improvement needs beginning in year 2010. This document is a plan, not a budget. Each year the Borough undertakes a number of capital projects in buildings, facility maintenance, capital infrastructure improvements, technology upgrades, and equipment and vehicle investments.

This plan incorporates projects and proposals that may, in final analysis, not receive funding or be programmed for a future year. It also reflects a multi-year approach to planning, allowing adequate review over time.

A "Capital" project is defined as:

- A project related to a fixed asset per the Borough's Fixed Asset Policy adopted by the Borough Council. A project that adds value or useful life to a fixed asset.
- A project involving buildings, facilities, land or easements, as long as title does not expire in less than 21 years.
- A project involving buildings, facilities, land or easements, as long as the useful life of such is 20 years or greater and the fair market value is greater than \$5,000.
- A project involving technology, vehicles or equipment, as long as the useful life of such is two years or greater and the fair market value is greater than \$5,000.

Projects with a value under \$5,000, or equipment with a useful life less than two years, are programmed in the operating budget of the corresponding department.

Capital improvement needs for the next fiscal year will be budgeted in a variety of accounts due to the complexity of the Borough budget. These budget accounts include:

- Capital Improvements Fund
- The Electric Department Sinking Fund
- The Fire Department Sinking Fund
- The Middletown Borough Authority's Accounts
- The Police Department Sinking Fund

However, regardless of their placement in the budget, projects require the approval of the Middletown Borough Council in scheduling and appropriation.

Capital projects for future years demonstrate the policies and priorities of the Borough government. However, the Borough operates on an annual basis, and this plan shall be revised annually to reflect updated priorities and available funding. As such, the projects may be changed in future years or rescheduled prior to their adoption in a future budget - rather than how they appear in this plan.

Regardless, this plan is important to demonstrate an organized set of principles and their application to project planning.

Finally, this plan details a recommended funding source for each project. Should the project be approved in a future year's budget, the recommended funding source will be set. As such, it is subject to change as Borough Council adjusts spending limits going forward.

The enclosed project list has been preliminarily prioritized by Borough staff based upon the adopted Department Goals in December 2008. Borough Council can amend or edit the list prior to adoption of the Plan in December 2009.

2003, 2004, AND 2007 BOND ISSUES

In December 2003, the Borough Council and the Borough Authority approved the 2003 Sewer and Water Bond Issue. The \$7,150,000 proceeds of this Bond Issue were then refinanced with the balances of previous Borough Authority Bond Issues in late 2004 (the total of that debt issue was \$11,070,000). As a result, the 2004 Sewer and Water Bond Issue serves as the only construction account for all Borough Authority projects. As of July 31, 2009, this account contained a balance of \$1,435,549.

A majority of these proceeds have been spent on a variety of projects that were approved in previous fiscal years. A small amount of prior Borough Authority money is being held as seed money for the upcoming Wastewater Treatment Plant project. In addition, the Borough signed an agreement to maintain positive cash flow in the Water/Sewer Operating Fund through proactive rate increases over the next five years. Should those rate increases be insufficient, the Borough has pledged to use the full weight of its taxation authority to guarantee that all the Bonds will be repaid.

In March 2004 Borough Council approved the 2004 Capital Improvements Bond Issue. The \$3,664,000 proceeds of this bond issue have been spent on a variety of projects. As of July 31, 2009, the account contains a balance of \$348,865. Most of these funds have been earmarked for Electric Department projects.

A majority of the original proceeds have been spent on a variety of Electric Department and general government (non-sewer and non-water) projects. The small balance of this money has been retained for unfinished projects. You will note funded electric projects in this Plan which are earmarked for payment from this balance. As a result of this Bond, the Borough signed an agreement to maintain positive cash flow in the Electric Fund and the General Fund through rate/tax increases (if the wholesale cost of electricity rises for example) and the use of the full weight of our taxation authority in order to guarantee that the Bonds will be repaid.

In April 2007 Borough Council approved the 2007 Capital Improvements Bond Issue. The \$2,233,000 proceeds of this Bond Issue will be spent on a variety of projects. As of July 31, 2009, the account contains a balance of \$838,292. Most of this balance has been earmarked for the Middletown Pool and a variety of Electric Department projects.

The bond agencies, which sold the Borough this debt, anticipate the bulk of the spending to be accomplished by March 2010. In addition, the Borough signed an agreement to maintain positive cash flow in the Electric Fund and the General Fund through rate/tax increases (if the wholesale cost of electricity rises for example) and the use of the full weight of our taxation authority in order to guarantee that the Bonds will be repaid.

It is important to note that borrowing for sewer and water projects must be spent on sewer and water projects. Similarly, borrowing for electric must be spent on electric-related projects. This is because sewer/water and electric are operated as separate businesses (separate enterprise funds), and revenues from those businesses are scheduled to be used to retire their portion of the Bond Issues. The details of such were specified by the Bond agencies in the Trust Indenture, the documents that secure the Bonds.

At the end of 2007 Borough Council authorized establishment of a \$750,000 Line of Credit (LOC) with Mid Penn Bank. The purpose of the LOC was to ease cash flow problems that could arise in conjunction with the Behney Motors renovation project. As the project did not progress as initially proposed, the only drawdown of funds from the LOC was the initial \$50,000 necessary to activate the account. This LOC is earmarked for the Behney renovation project and cannot be used for other purposes. Therefore, it will remain in place but untouched until such time as it may be needed for the Behney project.

There remains only one other small and inconsequential amount of debt that the Borough has been carrying for other projects: The Union Hose Company Fire Pumper (\$78,761), which is being carried through 2011.

DEBT REPORT

	<u>Original</u>	<u>First Payment</u>		<u>Current</u>	<u>Payoff</u>	<u>2010</u>
<u>Loan</u>	<u>Borrowing</u>	<u>Date</u>	<u>Rate</u>	<u>Owed</u>	<u>Date</u>	<u>Payments</u>
2004 Cap Improvements Bond**	\$3,770,000	06/15/2004	4.32%	\$2,560,000	12/14/2024	\$276,766
2007 Cap Improvements Bond**	\$2,340,000	11/15/2007	4.32%	\$2,255,000	05/16/2027	\$177,148
2003 Boro Auth Bond*	\$7,150,000	07/01/2004	5.44%	\$7,095,000	01/01/2032	\$349,645
2004 Boro Auth Bond*	\$11,070,000	01/01/2005		\$10,530,000	07/03/2027	\$923,898
2009 Note	\$750,000	03/15/2009	4.85%	\$50,000	12/15/2015	\$2,425
Union Pumper Loan	\$100,000	06/01/2006	2.00%	\$78,761	05/01/2021	\$7,722
*Lease Rental to Payoff Auth Debt	\$18,220,000			\$17,625,000		\$1,273,543
- The Lease Rental Payment Covers both BA Bonds. Part of the 2003 bond refinanced previous BA bonds.						
Total 2010 Payments						\$1,737,604
Source: Sewer Water Rates						\$1,273,543
Source: Electric Rates						\$182,353
Source: Fire Tax						\$49,582
Source: General Taxes						\$232,126
New Debt Allowed to be Borrowed Under State Law by Middletown 12/31/2008						\$33,426,783
<i>Please note that these numbers are approximate and are summaries of more complex debt service schedules</i>						

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BUDGET WORKSHOP MEETING: OCTOBER 6, 2009

On June 8, 2009, correspondence was sent to the following Community Organizations inviting them to a Budget Workshop to discuss Capital Improvements:

- Boy Scouts' Keystone Area Council
- BPO Elks Post #1092
- Girl Scouts' Hemlock Scout Council
- Greater Middletown Economic Development Corp.
- IBP Elks Middletown
- Interfaith Housing
- IOOF Hall Middletown
- Kiwanis Club
- Lions Club
- Loyal Order of Moose #410
- Middletown Amateur Baseball Association
- Middletown Chapter of the American Red Cross
- Middletown Fire Department
- Middletown Historical Society
- Middletown Swim Team
- Middletown Youth Club
- Olmsted Recreation Board
- Prince Edwin Masonic Lodge
- Rotary Club
- Seven Sorrows Athletic League
- The American Legion
- Veterans of Foreign Wars Post #1620

These organizations were invited to give ideas and feedback on the scheduling of proposed Capital Projects.

In attendance, at the October 6, 2009, meeting, were the following: Borough Council Vice President Rachelle Reid, Finance Committee Chair Scott Sites, Councilors Crawford, Dailey, Drabick, Hoyer, Nagle, Steele and Mayor Robert G. Reid. The Acting Borough Manager briefly reviewed the proposed CIP for the years 2010-2014.

In summary, it was the suggestion of the assembled members of Borough Council that:

- The Borough's priority construction projects are the Wastewater Treatment Plant Upgrade, the Community Pool, and Behney Motors; and
- The Acting Borough Manager's Plan was acceptable to advertise to the public.

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REBUILDING THE MIDDLETOWN WASTEWATER TREATMENT PLANT (WWTP)

The Middletown Borough Authority has continued the process of addressing the nutrient removal standards delivered to the Borough from the Pennsylvania Department of Environmental Protection (DEP) as a part of our National Pollutant Discharge Elimination System (NPDES) permit process while also addressing the hydraulic overloads occurring at the existing WWTP due to rainwater in the system.

The nutrient removal standards alone, promulgated by DEP as a part of the Chesapeake Bay Tributary Strategy, have made rebuilding the Plant and changing the treatment method necessary. These unfunded mandates will impact approximately 65 Phase One treatment facilities that discharge to the Susquehanna River. Middletown, unfortunately, is approximately number 48 in size and, therefore, faces firm deadlines for nutrient removal in order to avoid fines.

This process began in 2006 with negotiations with DEP to secure a reasonable level of nutrient removal. In 2009 DEP issued Middletown's permit which requires that the new technology be in place by October 2010 in order to meet a compliance date of September 30, 2011. This deadline is actually set by the U.S. Environmental Protection Agency, and the Middletown Borough Authority has moved expeditiously with its plans to meet this deadline.

Over the last two years there has been quite a bit of activity on this matter. The Borough joined with other municipalities in Central Pennsylvania to file litigation aimed at forcing DEP to reissue its Chesapeake Bay Tributary Strategy as a Rule rather than as Guidelines. Rules require legislative approval and cost-benefit analysis. Although this seems like a technicality, changing the issue to a Rule would have forced the PA Legislature to act responsibly on this important regional issue, including the need to discuss funding. While being a party to this litigation temporarily threw our permit process into limbo, DEP has since approved our plan. Therefore, October 2010 remains the date the plant should be completed and the beginning of the water discharge monitoring period for our October 2011 deadline for compliance.

Throughout 2008, the Borough Authority's consulting engineer attempted to challenge the NPDES permit, which was issued in 2007. The Authority and DEP have since settled this disagreement with no prejudice pending the outcome of the COG lawsuit.

The upgrade is moving forward at the Middletown WWTP. The Borough Authority has acquired land adjacent to the site (the Teleky property), and bid results for total project cost came in at \$11.725 million. Borough Council has elected to act as the borrowing agent for a Bond Sale to finance the project with a commitment to adjust sewer rates necessary to pay off the new debt.

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PROJECTS

Capital Improvement Plan Project

For Department: Borough Authority

Ann Street Water Main (AWM)

To be completed by Year: 2011

Description: Water main replacement project - replace 1,500 feet of existing water main on Ann Street from Grant to Union Street with new 8" ductile iron pipe.

Total estimated cost of project: \$275,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Biosolids Bagging Machine (BBM)

To be completed by Year: 2011

Description: A bagging machine for the Class A Biosolids. This equipment is for a potential retail operation for the sale of the Biosolids produced at the WWTP. The current Biosolids cannot be sold at retail due to their raw appearance, but we are still saving thousands of dollars per year by placing Biosolids on farms rather than in expensive landfills. This program would not be necessary unless the farm process becomes more challenging.

Total estimated cost of project: \$55,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Connection to United Water (CUW)

To be completed by Year: 2012

Description: In order to provide security to the system it is recommended the neighboring water systems have emergency interconnects. Our neighboring water system is operated by United Water. A connection, in the vicinity of Lawrence Street in Eagle Heights currently exists but is inoperative due to age and general disrepair. Install new valves, flow meter and replace existing vault with a building in order to install a booster pump to allow water to flow in either of two directions.

Total estimated cost of project: \$250,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

High and Vine Streets Water Main (HWM)

To be completed by Year: 2011

Description: Water main replacement project - replace 500 feet of existing transit water main on High Street from the standpipe to Vine Street, and 600 feet on Vine Street from High to Main Street with new 8" ductile iron pipe.

Total estimated cost of project: \$175,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

New Wastewater Treatment Plant (WWTP)

To be completed by Year: 2011

Description: Now that engineering and design is complete and bids have been let, the Middletown Authority will undertake the rebuilding of the Middletown WWTP. This major construction project will include expansion of the plant into the neighboring property (already purchased by the Authority) and switching the WWTP treatment method in order to significantly reduce nutrient discharge pursuant to DEP and EPA nutrient loading regulations mandated as a part of the Chesapeake Bay Strategy. The new plant will also attempt to mitigate hydraulic overloads from rainwater entering the system. This will be the first major rebuilding of the plant since its original construction in 1972. The plant must be operational by October 2010 in order to meet the October 2011 deadline that follows a one-year water discharge monitoring period.

Total estimated cost of project: \$11,000,000

This project is currently funded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Lumber Alley Bottle-Neck (LUM)

To be completed by Year: 2010

Description: As a part of renovating the WWTP, it is likely that the Borough Authority will include a project to eliminate the existing inflow sewer bottle-neck due to the 36" pipe on State Street flowing into an 18" pipe on Lumber Alley. This project eliminates serious backups during hydraulic events due to flow capacity. It was never addressed because the existing WWTP could not handle storm flow in peak events either. The new plant, as

conceived, will do a much better job due to the change in treatment methods. Therefore, the rebuilding of the plant is the opportunity to address this problem. The project should be completed by December 31, 2010; assuming that funds are dedicated for the project.

Total estimated cost of project: \$375,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Oak Hills Bottle-Neck (OAK)

To be completed by Year: 2010

Description: As a part of renovating the WWTP, it is likely that the Borough Authority will include a project to improve an existing sewer main bottle-neck due to pipe sizes in the vicinity of Oak Hills Ball Field. Approximately 1,000 feet of 10" sewer main from Oak Hill Drive to High Street will be replaced with new 12" sewer main. This project eliminates serious backups during hydraulic events due to flow capacity. It had not been addressed because of cost. However, the new plant would provide a serious opportunity to address this problem. The project could be completed soon after the WWTP rebuild, assuming that funds are dedicated for the project.

Total estimated cost of project: \$200,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Mill Street Bottle-Neck (MILL)

To be completed by Year: 2010

Description: As a part of renovating the WWTP, it is likely that the Borough Authority will include a project to improve an existing sewer main bottle-neck due to pipe sizes in the vicinity of the railroad underpass at Mill and South Union Streets. This project eliminates serious backups during hydraulic events due to flow capacity. The project involves reversing a section of sewer main so that flow moves to another main which passes under the railroad line in the vicinity of the AMTRAK bridge rather than crossing under South Union Street. The project would be completed with the WWTP rebuild, assuming that funds are dedicated for the project.

Total estimated cost of project: \$300,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

New Water Well Search (WELL)

To be completed by Year: 2012

Description: The Borough currently has six wells pumping enough water to meet our needs. Some of our wells are older and too near the floodplain. It may be more advantageous to locate a seventh well and secure the site just in case a new well is ever needed. This search would require a series of engineering tests including detailed subsurface examinations. It is recommended the search be done years in advance of needing to drill the well.

Total estimated cost of project: \$75,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Race Street/Hoffman Avenue Water Main (RAWM)

To be completed by Year: 2011

Description: Water main replacement project - replace 500 feet of existing main from a point on Race Street from 150 feet north of Keller Avenue to High Street with 6" ductile iron pipe. Also replace 1,100 feet of water main on Hoffman Avenue from Spruce to Vine Street.

Total estimated cost of project: \$175,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Ridge Street/Briarcliff Water Main (RGWM)

To be completed by Year: 2011

Description: Water main replacement project - replace 1,000 feet of main on Ridge Street from Spruce to Vine Street with new 6" ductile iron pipe. Replace 1,000 feet of main on Briarcliff from Roosevelt Avenue to Cypress Street with new 6" ductile iron pipe.

Total estimated cost of project: \$275,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Water Main Valve Insertions (VAL)

To be completed by Year: 2011

Description: Middletown has a large number of non-functioning water main valves. This is because the system was always so poorly maintained. Further, there is an insufficient number of valves in the system. At this point, it may be more practical to actually insert new valves into the system and abandon the old valves in place. There are approximately 60 valve insertions needed; street repairs will be required following installation.

Total estimated cost of project: \$300,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Water Pressure Project Pine Street (PWP)

To be completed by Year: 2013

Description: The Borough has known for some time that there are some areas of the water distribution system that are worse than others. One such area is around Pine Street up towards Aspen Street and around to several side streets in this section of town. Only a few of the homes in question really have poor water pressure. There is, however, a great expense necessary in proportion to the number of effected homes. This project is necessary but is not being prioritized.

Total estimated cost of project: \$150,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Borough Authority

Main Street Water Main (MSWM)

To be completed by Year: 2014

Description: Water main replacement project - replace 3,300 feet of main on Main Street from Spring to Adelia Street with new 10" ductile iron pipe.

Total estimated cost of project: \$700,000

This project is currently unfunded

Project Manager: Klinepeter

Capital Improvement Plan Project

For Department: Electric

Caravan Court Rebuild (CAR)

To be completed by Year: 2010

Description: Harborton Mobile Home Park is located at the northeastern edge of town along Frey Avenue. The site, commonly referred to as Caravan Court, has a power distribution network built by Met Ed and the Army Corps of Engineers and inherited by the Borough. The system is a patchwork of overhead and below grade lines, some recently replaced, others in need of replacement. It does not meet Code and is, in some cases, dangerous. The Borough and owners reached an agreement in 2007 to repair and replace the system in phases. The work began in 2008, continued in 2009 and will be completed in early 2010. The total cost to the Borough will be \$30,000 (not including labor), and there is the possibility of recouping some of this expense from the Turnpike through its Vine Street Bridge Replacement Project. Still, the project remains controversial in nature as the property owners wish the tenants to participate in the cost.

Total estimated cost of project: \$30,000

This project is currently funded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

East End Warehouse Connection (EEW)

To be completed by Year: 2012

Description: The East End Warehouse is located at the foot of Adelia Street. The site, commonly referred to as Manley Reagan or Univar, receives power from Met Ed. It is the last site within the Borough not connected to our electric distribution network. There would be a significant cost for this conversion. The Borough had proposed splitting the cost with the site owner; however, no agreement has been reached as yet. The advantage of a new industrial customer, such as this, is not enough to warrant the full expense.

Total estimated cost of project: \$300,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Fiber Optic Camera Network (VIDEO)

To be completed by Year: 2012

Description: The Borough has successfully launched a pilot project for the installation of security cameras in key public places; i.e., Hoffer Park, the Mill Street Substation, Oak

Hills Park, and the Police Department entrance. It is envisioned that a fiber optic network of additional cameras would be installed Borough-wide.

Total estimated cost of project: \$500,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Woodland Hills Electrical Installation (WHB)

To be completed by Year: 2010

Description: This project is a cooperative effort between the developer, HT Partners, and the Borough and involves expansion of the electric distribution network throughout the new Woodland Hills subdivision. H-T Partners has agreed to use the Borough's consulting engineer to approve all plans. The Borough's share for these improvements is estimated at \$667,825.

Total estimated cost of project: \$2,385,775

This project is currently partially funded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Electric Shop Building (ELB)

To be completed by Year: 2010

Description: Much controversy has surrounded the proposed renovations at the Behney Motors building for use by the Electric Department. The facility was to be a way for the Electric Department to move out of the cramped service shed behind Borough Hall where it has been housed for way too long. It would also provide a way to bring the Department's stock, estimated at \$1 million, under roof and protect it from the weather. Staff is meeting with the architects to review the plans and cut this project to the bone while still meeting the needs of the Electric Department. Whatever design is finally settled upon will include fencing the yard and installing security lighting. The required construction costs and 10% contingency are included in this budget. This project can be constructed in its entirety from cash on hand without raising rates. This project was originally approved and funded in 2007 for \$1,400,000.

Total revised estimated cost of project: \$1,000,000

This project is currently funded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Historic Downtown Street Lights (DOWN) Part Two of Three

To be completed by Year: 2010

Description: Currently, the Greater Middletown Economic Development Corporation (GMEDC) is operating a Main Street Improvement District focusing on the Union and Emaus Streets downtown neighborhood. One aspect of this program will be planned design improvements for newly-designated downtown streetscapes. Although it is likely that many of these improvements will be paid for through grants and by property owners, it is envisioned that the Borough will pay for the Historic Downtown Lighting and traffic signal.

Total estimated cost of project: \$475,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Spruce Street & Mill Street Substation Rebuild (SMR)

To be completed by Year: 2012

Description: Both of these substations require upgrade in order to prevent a catastrophic failure. The Spruce Street Substation was built in the 1970's using ancient technology. The station is well maintained, but it has exceeded its useful life. New technology is much more reliable and has built-in redundancy that did not yet exist in the 1970's. Due to rapid insulation breakdown in the individual breakers, the time and cost of maintenance has greatly increased. It is becoming more and more difficult to find parts for the Allis Chalmers breakers. The Mill Street Substation was constructed in 1960 and utilizes six oil-filled breakers that are also nearing the end of their lifespan. The technology of today is much safer, more reliable, and cost efficient. Barring no major problems, the current breakers require annual maintenance at an average cost of \$18,000. The new units proposed for this station would be magnetic actuated vacuum breakers with no maintenance until after 10,000 operations.

Total estimated cost of project: \$500,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Handheld Electric Meter Monitors (HEMM)

To be completed by Year: 2010

Description: The Borough is acquiring 300 wireless handheld electric meter monitors so that customers can monitor their electric use from within their homes. This project is part

of the Borough's energy conservation program. By seeing one's electricity consumption while sitting in the comfort of one's own home, customers are more likely to make important conservation decisions. This technology is relatively new and untested, and Middletown will be attempting to be one of the first municipal systems in the country to implement such a program. The devices are made in Canada and work with our Elster Wireless Meters.

Total estimated cost of project: \$45,000

This project is currently funded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Pole Replacement Project (PRP)

To be completed by Year: 2011

Description: A preliminary inspection of the 366 electric poles owned by the Borough indicated decay in varying degrees. Poles are estimated at \$475 bringing the cost to \$173,850, not including material necessary to transfer the lines. The Electric Department has been working on this problem, and of the 84 priority poles that must be replaced, there are 24 left to set. The remainder of problem poles will be replaced as funding permits.

Total estimated cost of project: \$230,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Electric

Street Light Replacement Project (SLR)

To be completed by Year: 2012

Description: New regulations from the Department of Energy ban the sale of replacement ballasts for Mercury Vapor lighting. The Borough currently has over 650 of these street lights. Today's LED lighting technology is far more energy efficient, and by replacing these lights the Borough has the potential to realize huge savings through reduced electricity consumption. Over time these savings would offset costs associated with the project.

Total estimated cost of project: \$390,000

This project is currently unfunded

Project Manager: Wilsbach

Capital Improvement Plan Project

For Department: Police

Replacement of Police Car (1927)

To be completed by Year: 2011

Description: In years past it had been our hope to purchase one police cruiser each year, funding permitting. However, no vehicle will be replaced in 2010; the next planned replacement will not occur until 2011.

Total estimated cost of project: \$40,000

This project is currently funded

Project Manager: Reismiller

Capital Improvement Plan Project

For Department: Fire

Renovated Fire Facility (FIRE)

To be completed by Year: 2012

Description: In December 2005, in the wake of the 2004 consolidation of the three original fire companies, the PA Department of Community and Economic Development completed a Fire Study which evaluated the current Middletown Volunteer Fire Company and made recommendations for its future. That study recommended construction of one new Fire Station for the consolidated Department. It was envisioned that the newly constructed Fire Station would include enough apparatus space for current and future fire needs, extra apparatus space for the contracted EMS service to be co-located in the building, office space for the Middletown Emergency Management Agency and the Middletown Chapter of the American Red Cross, a multi-purpose training/meeting room, and state-of-the-art fire technology. Before being withdrawn due to considerable objection from the community, the total estimated cost for a new Fire Station was \$4.45 million.

A less costly and more viable alternative is the significant renovation of the existing Fire Station on Adelia Street. With this in mind, the Middletown Volunteer Fire Department has contracted with LSC Design of York to prepare a feasibility study for this proposal. In addition to added building space, the project would include a new energy-efficient HVAC system, energy-efficient lighting, and a new roof. The estimate for renovation is around \$1.4 million; the actual scope of construction and renovation will be dictated by the funds available.

The project is partially funded with a matching grant through Representative Payne's office (\$270,000 Borough commitment in 2009 and \$250,000 Payne commitment). The Volunteer Fire Department is fully aware of the amount of debt that must be incurred and

has already started a building fund. Grant awards and any money the Department raises will be deducted from the total cost the Borough is asked to pledge toward the project.

Total estimated cost of project: \$1.4 million less grant awards and donations

This project is currently partially funded

Project Manager: Webb

Capital Improvement Plan Project

For Department: Communications

County Public Safety Radio System (PRS)

To be completed by Year: 2010

Description: As a result of a meeting on October 12, 2007 with officials from Dauphin County Communications, there is a need to invest in new radios above and beyond the County's allocation of free equipment. There are two needs: the Police requirement will result in an additional financial commitment of \$10,000; the Communications Center requires an additional \$15,000. Therefore, the new radio equipment will cost the Borough \$25,000. If the Borough was not operating the Communications Center, the Borough would still need to spend the \$10,000. In the new County system, only Motorola brand Trunking Digital Radios will be available for the Police. Further, the Borough has spent virtually nothing on radio equipment in the last ten years. Now we are completely locked into the County system and County radio supplies. There is no competitive bidding and only a single source for all new equipment.

Total estimated cost of project: \$25,000

This project is currently partially-funded

Project Manager: Webb

Capital Improvement Plan Project

For Department: Borough Manager

Train Station Relocation Project (AMTRAK)

To be completed by Year: 2011

Description: Staff and the Mayor have been meeting with Penn DOT and AMTRAK officials and their respective consultants to develop a viable option for the Borough's train station. There are two choices that will keep the station within Borough limits: upgrade the current station or relocate it to the AP Green site. To renovate the current station, a minimum of 500 feet of platform must be constructed on a straight portion of the track. In the case of the current station, this would mean that the platform would have to extend over Swatara Creek. This would be a costly undertaking. The AP Green site is much more attractive from staff's point of view. To make the best use of this proposed location, a

public-private partnership is envisioned to develop the entire site. Penn DOT seems to support this alternative, but they will not make a public commitment until cost estimates are complete. In the meantime, the developer would like to move forward. A major component of his plan hinges on the extension of Emaus Street to Main Street where infrastructure for the development would be located. The Borough will be responsible for this street extension, and the hope is that grant funds will be available to assist us.

Total estimated cost of project: \$25,000,000

This project is currently unfunded

Project Manager: Foster

Capital Improvement Plan Project

For Department: Borough Manager

Document Management System (DOC)

To be completed by Year: 2010

Description: The amount of paper that passes through a bureaucracy like our Borough is staggering. Middletown has gotten much better at digitizing and using electronic formats for documents. That being said, the Borough should invest in a document management system to store, index, and retrieve all these electronic files. This project was approved in 2006 and funds are available from the 2004 Bond.

Total estimated cost of project: \$35,000

This project is currently funded.

Project Manager: Foster

Capital Improvement Plan Project

For Department: Communications Center

Renovation of Comm Center & Holding Cells (CELL)

To be completed by Year: 2012

Description: The last major renovation to the Communications Center occurred in 1988, and with increased Comm Center manpower and the presence of police officers, an upgrade to furniture, floors, walls, and ceilings is long overdue. In an attempt to increase productivity and customer service, Telecommunicator stations should be more user-friendly. The Supervisor does not have a private office, a necessity for discipline and personnel matters. In addition a kitchen/break area and ADA-compliant bathrooms are necessary to accommodate Comm Center for the duration of their shift (they do not take breaks or leave their desks when working solo). The three holding cells are original from 1971; the door on Cell #1 was updated in 1990 to meet ADA requirements. The cells are currently securing

prisoners in a safe manner, but they are showing their age. Renovations would include replacement of the original prisoner beds and toilets/sinks.

Total estimated cost of project: \$75,000

This project is currently unfunded.

Project Manager: Webb

Capital Improvement Plan Project

For Department: Communications Center

Replacement of Borough Hall Generator (BHGEN)

To be completed by Year: 2014

Description: There are currently two emergency generators handling the needs of the Communications Center, the MCSO, and providing emergency lighting for the remainder of Borough Hall. Both generators are located in the basement under the Police Department, and at one point in 1977 the exhaust system on the smaller unit leaked, filling Borough Hall with carbon monoxide and causing evacuation of the entire building. In light of the increasing costs for repairs and maintenance, and due to the important emergency shelter function the MCSO provides, it is recommended that a natural gas generator be purchased and placed on the exterior grounds of Borough Hall to provide back-up power in cases of emergency.

Total estimated cost of project: \$150,000

This project is currently unfunded.

Project Manager: Webb

Capital Improvement Plan Project

For Department: Highway/Property

Library Elevator Replacement (LIBE)

To be completed by Year: 2012

Description: This project involves replacing the existing elevator in the Library that has been in place since 1985. The elevator recently passed the PA Labor & Industry mandatory inspection. However, due to its age, concern arose that it will not pass inspection in July 2012.

Total estimated cost of project: \$75,000

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Dog Park (DOG)

To be completed by Year: 2011

Description: This project would acquire, through rental or purchase, a site for installation of a dog-friendly passive recreation environment. In Year One, the site would be installed and outlined, signed, and a parking area built. In Year Two, dog-friendly recreational equipment would be installed. The site would add to the value of the community.

Total estimated cost of project: \$16,500

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Departments: Highway/Property and Communications

Borough Hall Space Study Recommendations Implementation (BHI)

To be completed by Year: 2011

Description: Within the last two years, the renowned municipal engineering firm Buchart-Horn studied the space allocation and space needs of the Borough. Remarkably, the study showed that most of the Borough's offices and facilities are fine. The glaring exception is the Police Station at the rear of 60 West Emaus Street. The station is dank, overcrowded, poorly laid out, poorly ventilated, and wholly inadequate for a modern, busy police department. Other deficiencies include public bathrooms, meeting spaces, and the lack of multimedia meeting space. There is a plan to use some of the space vacated by moving the Electric Department to the Behney Motors site in order to address these needs; specifically, the design of a two- or three-story addition at the rear of the existing Borough Hall. The working plan is subject to public input, Council input, and budget constraints. However, an addition of this size should address Borough Hall's needs for the next 50 years.

Total estimated cost of design: \$150,000 plus a new addition for \$3,150,000

This project is currently partially funded

Project Manager: Foster

Capital Improvement Plan Project

For Department: Highway/Property

Creek Promenade at Hoffer Park (CRK)

To be completed by Year: 2011

Description: This project would create a new promenade along the Swatara Creek from Race Street to Hoffer Park. The promenade would expand the use of the park by providing

pedestrian access to the creek and help develop the Borough into a recreation destination. Originally scheduled for 2005, this project was delayed due to prioritization.

Total estimated cost of project: \$54,000

This project is currently funded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Downtown Streetscape (Streets, Sidewalks, Drainage) (DOWN) Part Three of Three

To be completed by Year: 2013

Description: Currently, the Greater Middletown Economic Development Corporation (GMEDC) is operating a Main Street Improvement District focusing on the Union and Emaus Streets downtown neighborhood. One aspect of this program will be planned design improvements for newly-designated downtown streetscapes. The total cost of these improvements, including new streets, sidewalks, curbs, crosswalks, benches, trees, signs, and traffic signals is estimated at \$1.12 million. Many of these improvements will be paid for through grants and by property owners. These Part Three improvements are in addition to sewer, water, and electric improvements addressed in Parts One and Two.

Total estimated cost of project: \$1,000,000

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Fishing Pier (PIER)

To be completed by Year: 2011

Description: This proposed project would construct a fishing pier along the Susquehanna River at Duck Island, adjacent to the existing and very successful boat launch, owned by the Fish and Boat Commission and maintained by the Borough. Council has authorized staff to try to lobby the State to transfer this site to the Borough for expansion. The new facilities would provide additional access to the river and help develop the Borough into a recreation destination. The project envisions construction of a franchise retail business adjacent to the pier. Revenues from rental of the space would offset maintenance of the facility. In addition, grant funding of approximately \$50,000 is envisioned for a total project cost of \$425,000. This project cannot move forward until ownership of the land is addressed.

Total estimated cost of project: \$425,000

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Kidzilla (Kids Kastle Replacement Project)

To be completed by Year: 2011

Description: Without major improvements, the Kids Kastle will be beyond use in five to ten years; as such it may become a liability. These renovations would be costly and will only delay the inevitable need for replacement. Replacing Kids Kastle with a Kidzilla Dreams Playstructure would be preferable. This play structure is handicap accessible, has 32 active play components, a 125-child capacity and is geared toward 5- to 12-year-old children. It is made with plastic and steel tubing which requires much less maintenance. The play structure would not take up the entire area that Kids Kastle does, so there would be room for a sandbox and smaller play structure for children under 5 years old. Again, this toddler play structure would be made of steel tubing and plastic. Today's price for Kidzilla is \$91,472; the price for the play structure and sandbox for toddlers is approximately \$12,000.

Total estimated cost of project: \$103,500

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Library Entryway (LEW)

To be completed by Year: 2010

Description: Both the Library Director and Mayor have commented on the deteriorating state of the interior and exterior doors to the Library. Both doors are to the point of needing to be replaced, along with the vinyl siding on the front exterior soffit and the decorative wood trim. It is important to secure the entrance to the building, regardless of future plans for the site.

Total estimated cost of project: \$20,000

This project is currently funded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

New Library Building (LIB)

To be completed by Year: 2014

Description: The Library Board of Directors has recommended replacing the Liberty House as the home of the Library. The Liberty House is, at least, the third permanent site of the

Library. Originally built over 100 years ago as the Liberty Hose Company, the Liberty House was renovated 40 years ago to become the home of the Library. The space is no longer adequate for a modern library facility, which is as much a community center and technology/education center as it is a lending library. There is not yet a newly proposed location. The total cost of land acquisition and development is estimated at \$3.15 million.

Total estimated cost of project: \$3,150,000

This project is currently unfunded

Project Manager: Foster

Capital Improvement Plan Project

For Department: Highway/Property

Library Parking Lot (LPK)

To be completed by Year: 2014

Description: Should a new library not be constructed, the existing site at the Liberty House does not have sufficient parking. This project envisions the construction of off-street parking at a yet-to-be-determined site near the Library. The new municipal parking lot could also benefit the downtown as businesses and patrons demand additional parking for the Elks Theatre and restaurants.

Total estimated cost of project: \$750,000

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Booser Reservoir Park Improvements (RES)

To be completed by Year: 2012

Description: This project is based upon the development of Grubb Lake Park in East Hempfield Township and would improve upon and expand the recreation opportunities at the Borough's Nature Center at the Middletown Reservoir in Londonderry Township. This park, owned by the Middletown Borough Authority, is currently the home to Sportsmen Unlimited, the fishing club, and is licensed by the Fish and Boat Commission as a fishing lake. The project envisions the reconstruction and expansion of the trail system, new picnic shelters, two new fishing piers, and bathrooms. In addition, grant funding of approximately \$10,000 and donations of approximately \$10,000 are envisioned for a total project cost of \$420,000. It is hoped that Londonderry Township may decide to support this project through a municipal contribution in exchange for shared-ownership.

Total estimated cost of project: \$425,000

This project is currently unfunded

Project Manager: Swartz

Capital Improvement Plan Project

For Department: Highway/Property

Community Pool Rehab (POOL)

To be completed by Year: 2010

Description: Already underway, the pool is an important program to the Borough, especially the Borough's underprivileged. It provides a safe, cool, environment and keeps young people off the streets when school is out. The Middletown Area School District pays a large share of the pool's staff costs and the Borough pays maintenance on the facility. The neighboring communities of Royaltown and Lower Swatara help share in the expenses by reimbursing some of MASD's expenses. The snack bar makes some money too, but the pool could rely less on tax money and be a bigger success. The time has come for a series of improvements to upgrade basic parts of the facility (concrete patio, bathrooms, adding a new surface to the pool, replacing the kiddie pool with a splash pad, and removal of the dangerous diving board) plus a planned expansion of the food service kitchen and a new picnic shelter (to improve food revenues and provide tax payer relief). This is a good investment and it is being mostly matched by the Pennsylvania DCNR and Federal Land/Water Conservation funds. Public pools do not make money but, with updated amenities and proper management, the pool does not need to be a drain on resources. The renovated pool, tentatively renamed the Union Canal Swim Park, is fully funded from the following sources:

- PA DCNR/Federal Land/Water Conservation Funds \$468,350
- Middletown Borough 2004/2007 Bond Issues \$388,955
- Private Donation \$75,000

It is expected that the pool will be open by Memorial Day 2010.

Total estimated cost of project: \$932,305

This project is currently funded

Project Manager: Foster

Capital Improvement Plan Project

For Department: Highway/Property

Susquehanna Fields (SUSQ)

To be completed by Year: 2011

Description: This project would re-align and expand the fields at Susquehanna Street to allow for the permanent home of the Middletown Youth Club, Seven Sorrows Athletic Club and Middletown Amateur Baseball Association. The project recommends the removal of Susquehanna Street, not yet approved, and the potential acquisition of one or two adjacent houses. There would be two full football fields, one regulation baseball diamond and one junior baseball diamond, along with bleachers and relocation of the lighting. It is possible the three associations may contribute to this project by building new concession stands, new equipment storage sheds, and assisting with the cost to maintain the bathroom/locker rooms. In addition, grant funding of approximately 50% (\$2.1 million) and donations of

approximately \$40,000 are envisioned for a total project cost of \$4,240,000. The project cannot move forward until ownership of the adjacent Fish and Boat Commission land is addressed.

Total estimated cost of project: \$2,100,000

This project is currently unfunded

Project Manager: Swartz

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ANNUAL STREET REPLACEMENT PROGRAM

<u>Step</u>	<u>Location</u>	<u>Type of Rehab</u>	<u>Estimated Cost</u>
1	Hickory Ave.-E. Roosevelt to Ridge	Recycle/Reclaim	\$40,000
1	Plane St.-Chestnut to Briarcliff	Recycle/Reclaim	\$45,000
1	Keystone Ave.-Catherine to Wood	Recycle/Reclaim	\$30,000
2	S. Pine St.-Emaus to Brown	Micro-Surface	\$3,500
2	Emaus St.-Wood to Race	Micro-Surface	\$35,000
2	Pike St.-Fisher to Union	Recycle/Reclaim	\$90,000
2	Spruce St.-Emaus to Water	Micro-Surface	\$20,000
3	State St.-Catherine to Union	Recycle/Reclaim	\$60,000
4	S. Catherine St.-Railroad to Susquehanna	Recycle/Reclaim	\$300,000
5	Ridge Ave.-Vine to Spruce	Recycle/Reclaim	\$120,000
5	Roosevelt Ave.-Catherine to Pine	Micro-Surface	\$16,000
5	W. Water St.-Union to Spring	Micro-Surface	\$6,500
5	High St.-Spring to Pine	Micro-Surface	\$11,000
6	Swatara Ave.-Catherine to Wood	Recycle/Reclaim	\$72,000
6	Spring St.-Grandview to Main	Micro-Surface	\$35,000
6	N. Pine St.-Emaus to Main	Micro-Surface	\$30,500
7	Wilson St.-Grant to Union	Recycle/Reclaim	\$220,000
8	Grant St.-Wilson to Fisher	Recycle/Reclaim	\$100,000
8	E. Water St.-Union to Vine	Micro-Surface	\$32,000
9	Woodland Ave.-Vine to Union	Recycle/Reclaim	\$100,000
9	Laurel Ave.-Adelia to Deatrich	Micro-Surface	\$8,000
9	Brown St.-Union to Clinton	Micro-Surface	\$22,000
9	Race St.-Emaus to Main	Micro-Surface	\$40,000
10	Linden St.-Race to Adelia	Micro/Surface	\$22,000
10	Hoffer St.-Main to Adelia	Micro-Surface	\$24,000
10	Adelia St.-Top of Hill to Maple	Recycle/Reclaim	\$128,000
10	Maple Rd.-Adelia to Vine	Recycle/Reclaim	\$90,000
10	Rupp St.-Linden to Emaus	Micro/Surface	\$18,000
11	Nissley St.-Catherine to Main	Recycle/Reclaim	\$140,000
12	Ann St.-Union to Grant	Recycle/Reclaim	\$240,000
13	Beechwood Dr.-Spruce to Union	Micro-Surface	\$18,000
13	Wharton Ave.-Union to Campus	Micro-Surface	\$32,000
13	N. Catherine St.-Emaus to Main	Recycle/Reclaim	\$160,000
14	Spruce St.-Main to Aspen	Recycle/Reclaim	\$440,000
15	N. Pine St.-Oak Hill to Main	Recycle/Reclaim	\$230,000
16	Elm Court-Vine to Cul-de-Sac	Recycle/Reclaim	\$84,000
16	Oak Hill Dr.-Briarcliff to Elm Ct.	Recycle/Reclaim	\$180,000
17	Briarcliff Rd.-High to Oak Hill	Recycle/Reclaim	\$180,000
17	Susquehanna St.-Union to Wood	Micro-Surface	\$36,000
17	Columbia St.-Pine to Race	Micro-Surface	\$30,000
17	Oak Hill Dr.-Union to Briarcliff	Micro-Surface	\$26,500
17	Hillside Rd.-Union to Spruce	Micro-Surface	\$22,000
17	Conewago St.-Hoffer to Spruce	Micro-Surface	\$54,000
18	E. High St.-Pine to Vine	Micro-Surface	\$42,000
18	Chestnut St.-Aspen to Maple	Recycle/Reclaim	\$160,000

<u>Step</u>	<u>Location</u>	<u>Type of Rehab</u>	<u>Estimated Cost</u>
19	Cypress St.-Chestnut to Aspen	Recycle/Reclaim	\$150,000
19	Raymond St.-Clinton to Spruce	Micro-Surface	\$4,000
19	Lawrence St.-Mud Pike to Railroad	Micro-Surface	\$60,000
20	Pike St.-Fisher to Union	Micro-Surface	\$54,000
20	Keystone Ave.-Catherine to Wood	Micro-Surface	\$12,500
20	Woodland Ave.-Vine to Union	Micro-Surface	\$40,000
20	Highland Ave.-Deatrich to Adelia	Micro-Surface	\$14,000
20	Adelia St.-Top of Hill to Maple	Micro-Surface	\$14,000
20	Maple Rd.-Adelia to Vine	Micro-Surface	\$34,500
21	Ann St.-Union to Grant	Micro-Surface	\$100,000
21	N. Catherine St.-Emaus to Main	Micro-Surface	\$62,000
21	Nissley St.-Catherine to Main	Micro-Surface	\$50,000
22	Aspen St.-Vine to Pine	Recycle/Reclaim	\$350,000

Vehicle Replacement Guide

AN APPENDIX TO THE CAPITAL IMPROVEMENT PLAN OF THE BOROUGH OF MIDDLETOWN, PENNSYLVANIA

PURPOSE

This report presents a vehicle replacement guide as a first step in establishing a Capital Improvements Plan (CIP) for the Borough of Middletown. The practice of replacing vehicles varies dramatically between jurisdictions, from no planning on the one hand where replacements are made unsystematically usually following a major repair or breakdown, to a complex planning model that is designed to minimize the cost of fleet operations over the service life of vehicles and equipment. Until recently Middletown relied on an ad hoc approach of replacing vehicles and, as a result, has experienced erratic repair costs and breakdowns causing occasional interruption of services. The Borough also owns and operates some vehicles that are functionally obsolete or simply were not designed to perform the necessary tasks.

Fleet planning in other jurisdictions is typically based on either age or usage (mileage for vehicles, use hours for equipment) or a combination of both. Which of those factors is used for replacement planning depends on the jurisdiction; usage-based replacement planning is appropriate when vehicles accumulate high mileage and equipment receives heavy use. Age-based standards are effective when vehicles and equipment receive light use and become outdated and unreliable over time. The latter is true in Middletown. In developing replacement standards appropriate to our municipality, age-based standards typical in the industry were used as a starting point, but were further modified to reflect the exceptionally heavy or light usage that vehicles and equipment receive in Middletown. The standards recommended to the Borough as part of this Guide are: ten years for equipment, 12 years for heavy-duty vehicles, and seven years for light-duty vehicles.

INVENTORY

The first step in developing a vehicle replacement plan for the Borough of Middletown was to conduct an inventory of all existing vehicles. At the same time, in addition to the existing inventory, the Borough conducted an assessment of vehicle standards. The study team conducted site inspections and staff interviews. Vehicle data was compiled by computer and age/mileage specifications were obtained. The Finance Director assisted with identifying potential funding sources associated with vehicle replacement.

REPLACEMENT STANDARDS

The practices used for vehicle replacement planning vary considerably among jurisdictions and range from a reliance on complex formulas designed to optimize

performance and minimize costs, to no planning at all, where items are replaced on an ad hoc basis, usually after a major breakdown.

The problem with complex formula-based approaches is that they require considerable expertise to design and data on many aspects of vehicles. For example, to determine the total cost of owning a particular vehicle, operating costs, maintenance costs, and depreciation for that vehicle must be tracked. Each cost component requires many different pieces of information. Operating costs comprise the cost for fuel, training, materials, insurance, operator salary, and downtime. Typically, complex formula-based systems are most appropriate for large jurisdictions with fleets of several hundred or more vehicles and pieces of equipment.

Waiting until something breaks before considering replacement has problems associated with it as well. Most importantly, operating without a replacement plan means that costs are incurred as a lump sum in a single year, usually after a vehicle experiences a major breakdown, rather than being spread over the expected life cycle of the vehicle. Another problem associated with a lack of replacement planning is that when vehicles are kept in service beyond their useful life, breakdowns may become more frequent, causing service interruptions and unanticipated costs in the form of manpower charges and repair costs.

A simple and effective way to plan for vehicle replacements is to base replacement decisions on either age or wage (e.g., mileage for vehicles and use hours for equipment) or a combination of the two factors. A survey of several municipalities showed that other jurisdictions successfully use this approach because it is easy to design and to understand. While replacement standards vary between jurisdictions, reflecting unique circumstances and replacement philosophies, average replacement criteria for vehicles, based on age, are five to seven years for light-duty and eight to 12 years for medium- and heavy-duty vehicles. Some jurisdictions also take usage into account (e.g., mileage or use hours). Typical usage-based criteria are 50,000-75,000 miles for light-duty and 75,000-95,000 miles for medium- and heavy-duty vehicles.

A survey of municipalities throughout the country conducted by the American Public Works Association in 1988 reported the following replacement standards:

Vehicle Type	Replacement
Sedan	5-10 years OR 65k-100k miles
Light Truck	6-10 years OR 60k-100k miles
Large Dump Trucks	6-12 years
Sweepers, Vacuums, etc.	5-10 years
Backhoes and Tractors	5-24 years
Graders	5-30 years

While replacement standards are typically expressed in age or usage terms, most jurisdictions tend to design their replacement policies around the most critical criteria; that is, the criteria that will most likely affect the efficient operation of a vehicle in their jurisdiction and thus is the most important consideration for replacement planning. Therefore, if usage is low, replacement standards will most likely be based on age because the vehicle or equipment becomes old, outdated, and unreliable before it exceeds the mileage or time standard. For example, a municipality with an age-based replacement standard for cars may replace a vehicle after seven years although it has relatively low mileage, well below the replacement standard of 75,000 miles. Conversely, in fleets where usage tends to be high, replacement standards tend to be based on mileage rather than age, because vehicles will likely wear out before reaching replacement age. For example, usage based replacement standards may be appropriate for police cruisers, which typically reach the mileage threshold (i.e., 75,000 miles) well before the age threshold (i.e., 5 years).

The Borough of Middletown operates a relatively small vehicle and equipment fleet that is characterized by very low mileage and usage hours. At the same time, a number of vehicles are relatively old. Because of the small size of the Borough's vehicle fleet, it is a challenge to find opportunity for turndown, which refers to the public works practice of reassigning a vehicle or piece of equipment from one use to another, usually one of lesser intensity. The purpose of this practice is to maximize the utility of each item in the fleet by keeping the item in service as long as feasible. A typical example of turning down vehicles is to reassign a police cruiser to another department when the vehicle is no longer deemed suitable for police use but is still reliable and able to provide service elsewhere. Thus, the method of turndown is intended to reduce overall fleet cost by keeping an item in service longer.

FIRE DEPARTMENT CONSOLIDATION & VEHICLES

In 2005, the three volunteer fire departments within the Borough completed the process of consolidation. The goal of consolidation was to unify the companies as one legal entity in the same manner that they currently have unified command. As a part of this consolidation the Borough has stated that all vehicles currently operated by the three companies will be owned outright by the new consolidated fire company. This will not affect the Borough's assistance in helping to maintain these existing vehicles. Their continued maintenance will increasingly strain the Borough's resources. As a result, it may be advisable to re-designate a staff person in the Highway Department from an Equipment Operator to a Diesel Mechanic. Fire Vehicles and diesel engines require additional knowledge and certification not currently maintained by our fleet mechanic. This additional staff person has been proposed for the past several years but has not been approved during the budget cycle.

All new vehicles purchased after consolidation (with the exception of the 2006 KME Pumper, which, for grant reasons, was titled to the Union Hose Company) will be owned either by the new entity or the Borough itself based upon financing. As a result, for planning purposes, fire vehicles are included in this plan; with the exception of the Chiefs'

vehicles. However, given the fluid nature of the Fire Department finances and the potential impact consolidation's future may have on future capital need, references to the replacement of fire vehicles in this plan are conceptual in nature only.

In 1998 the Middletown Fire Department issued an independent Fleet Replacement Program. That report dealt with financing in great part and should be updated.

FINANCING AND PLANNING

The Vehicle Replacement Guide is a plan and not a budget. Although adopted by Borough Council in appendix to the Capital Improvement Plan, the Guide establishes priorities and goals. The Guide does not commit the Borough's resources to any particular acquisitions. The commitment of funds is made as a part of the Borough's budget cycle.

Funding sources vary. In Middletown we have historically used cash-on-hand in the form of Capital Fund Balance, Police Sinking Fund, Electric Sinking Fund, Fire Equipment Sinking Fund or fund balance from operating accounts. In addition, debt is available and advisable for some types of acquisition. The Guide refers to proposed funding sources only. This was done for planning purposes. As Borough Council authorizes vehicle acquisition, it will set the funding source.

VEHICLE	YEAR IN SERVICE	BORO ID	PRESENT CONDITION	MILEAGE	ESTIMATED USEFUL LIFE	RECOMMENDED REPLACEMENT YEAR	ESTIMATED REPLACEMENT COST	PAYMENT SOURCE
1980 MACK SQUAD	1993	E-88-1	EXC	20,258	20 YEARS	2026	\$500,000	FIRE SINKING/BOND ISSUE
1988 CHEVROLET S10 PICKUP (HIGHWAY)	1988	FUEL	POOR	114,250	12 YEARS	2004	\$17,680	OPERATING BUDGET
2004 Ford F-250 PICKUP TRUCK (ELECTRIC)	2004	E-20	FAIR	14,940	7 YEARS	2011	\$22,000	ELECTRIC CAPITAL
1992 FORD DOUBLE BUCKET TRUCK (ELECTRIC)	1992	E-24	FAIR	6,487	15 YEARS	2007	\$210,000	ELECTRIC CAPITAL
1993 FORD F150 PICKUP (HIGHWAY)	1993	H-3	POOR	88,452	12 YEARS	2005	\$27,500	OPERATING BUDGET
1988 CHEVROLET DUMP TRUCK (HIGHWAY)	1988	H-37	OOS	61,020	15 YEARS	2005	\$90,000	CAPITAL
2000 JEEP CHEROKEE (POLICE)	2000	1901	GOOD	82,840	7 YEARS	2011	\$29,120	GENERAL/SINKING
1995 CHEVROLET SMALL DUMP TRUCK (HIGHWAY)	1995	H-5	POOR	49,993	12 YEARS	2011	\$41,000	CAPITAL
1995 INTERNATIONAL DUMP TRUCK (HIGHWAY)	1995	H-32	POOR	32,880	15 YEARS	2010	\$100,000	CAPITAL
1984 FORD DUMP TRUCK (WASTEWATER)	1984	W-53	FAIR	49,124	15 YEARS	2010	\$87,000	AUTHORITY
1998 CHEV. CREW CAB 4X4 PICKUP (HIGHWAY)	1998	H-7	POOR	72,007	12 YEARS	2010	\$42,000	CAPITAL
1995 CHEVY PICKUP 3/4 TON (WASTEWATER)	1995	W-57	FAIR	37,924	10 YEARS	2010	\$36,000	OPERATING BUDGET
1995 CHEVY ASTRO VAN (WASTEWATER)	1995	W-44	FAIR	86,670	10 YEARS	2010	\$26,000	OPERATING BUDGET
1997 FORD DUMP TRUCK (HIGHWAY)	1997	H-34	GOOD	39,388	15 YEARS	2012	\$102,000	CAPITAL
1991 INTERNATIONAL DUMP TRUCK (WASTEWATER)	1991	W-45	GOOD	43,893	15 YEARS	2011	\$72,000	AUTHORITY
1987 FORD TANKER LT 8000 (WASTEWATER)	1987	W-54	GOOD	12,461	15 YEARS	2012	\$109,000	AUTHORITY
BUCKET TRUCK (ELECTRIC)	2003	E-26	FAIR	10,681	13 YEARS	2016	\$150,000	ELECTRIC CAPITAL
1993 SAULSBURY PUMPER (FIRE DEPT)	1993	E-88-1	GOOD	25,810	20 YEARS	2013	\$350,000	FIRE SINKING/BOND ISSUE
1999 JOHNSTON SWEEPER (HIGHWAY)	2002	H-35	GOOD	27,540	15 YEARS	2017	\$210,000	CAPITAL
1995 CHEVROLET 3500 SPECIAL UNIT (FIRE DEPT)	1995	SU-88	EXC	17,821	20 YEARS	2015	\$80,000	FIRE SINKING/BOND ISSUE

VEHICLE	YEAR IN SERVICE	BORO ID	PRESENT CONDITION	MILEAGE	ESTIMATED USEFUL LIFE	RECOMMENDED REPLACEMENT YEAR	ESTIMATED REPLACEMENT COST	PAYMENT SOURCE
1995 FORD DUMP TRUCK (WASTEWATER)	1995	W-52	GOOD	23,295	15 YEARS	2015	\$79,000	AUTHORITY
2001 FORD PICKUP (WASTEWATER)	2001	W-51	GOOD	37,582	10 YEARS	2016	\$ 24,050	OPERATING BUDGET
2002 INTERNATIONAL DUMP TRUCK (HIGHWAY)	2002	H-36	GOOD	13,355	15 YEARS	2017	\$120,000	CAPITAL
2001 KME PUMPER (FIRE DEPT)	2001	E88	EXC	14,904	20 YEARS	2020	\$400,000	FIRE SINKING/BOND ISSUE
2001 FORD CROWN VICTORIAN (POLICE)	2002	1905	FAIR	108,030	7 YEARS	2009	\$33,000	GENERAL/SINKING
2003 INTERNATIONAL DUMP TRUCK (HIGHWAY)	2003	H-33	EXC.	7,400	15 YEARS	2018	\$122,000	CAPITAL
2003 FORD F-250 VAN (WASTEWATER)	2003	W-42	EXC.	26,846	10 YEARS	2013	\$45,000	AUTHORITY
2003 FORD CROWN VICTORIAN (POLICE)	2003	1927	GOOD	79,976	7 YEARS	2010	\$33,500	GENERAL/SINKING
2004 FORD EXPEDITION (POLICE)	2004	1921	GOOD	73,550	9 YEARS	2013	\$44,000	GENERAL/SINKING
2005 CHEVY 1500 PICKUP (HIGHWAY)	2005	H-2	GOOD	36,630	12 YEARS	2017	\$28,000	CAPITAL
2005 CHEVY 2500 PICKUP (HIGHWAY)	2005	H-6	GOOD	32,100	12 YEARS	2017	\$28,000	CAPITAL
2005 CHEVY 1500 PICKUP (HIGHWAY)	2005	G-2	EXC.	44,250	15 YEARS	2020	\$28,000	CAPITAL
2005 CHEVY COLORADO PICKUP (WASTEWATER)	2005	W-40	EXC.	25,576	10 YEARS	2015	\$16,000	AUTHORITY
2005 FORD F-250 PICKUP TRUCK (ELECTRIC)	2005	E-23	GOOD	13,797	8 YEARS	2013	\$22,000	ELECTRIC CAPITAL
2005 CHEVY SILVERADO PICKUP (WASTEWATER)	2005	W-50	EXC.	23,199	10 YEARS	2015	\$16,000	AUTHORITY
2006 INTERNATIONAL STEP VAN (WASTEWATER)	2005	W-46	EXC.	4,190	15 YEARS	2020	\$100,000	AUTHORITY
DIGGER DERRICK (ELECTRIC)	2005	E-21	GOOD	1,708	15 YEARS	2020	\$200,000	ELECTRIC CAPITAL
2006 FORD F-550 SMALL DUMP TRUCK (HIGHWAY)	2006	H-4	EXC.	19,100	12 YEARS	2018	\$65,000	CAPITAL
2006 INTERNATIONAL STEP VAN (WASTEWATER)	2005	W-46	EXC.	4,190	15 YEARS	2020	\$100,000	AUTHORITY
2006 INTERNATIONAL FLUSH TRUCK (WWTP)	2006	W-48	EXC.	2,903	15 YEARS	2021	\$250,000	AUTHORITY
2006 FORD CROWN VICTORIAN (POLICE)	2006	1925	EXC	41,167	7 YEARS	2013	\$34,000	GENERAL/SINKING
2006 FORD CROWN VICTORIAN (POLICE)	2006	1922	EXC	41,939	7 YEARS	2013	\$34,000	GENERAL/SINKING

VEHICLE	YEAR IN SERVICE	BORO ID	PRESENT CONDITION	MILEAGE	ESTIMATED USEFUL LIFE	RECOMMENDED REPLACEMENT YEAR	ESTIMATED REPLACEMENT COST	PAYMENT SOURCE
2006 HARLEY DAVIDSON (POLICE)	2006	1929	EXC	6,130				
2006 HARLEY DAVIDSON (POLICE)	2006	1930	EXC	5,220				
2006 KME ENGINE/RESCUE (FIRE DEPT)	2006	R-88	EXC	825	20 YEARS	2026	\$450,000	FIRE SINKING/BOND ISSUE
1996 FORD EXPLORER (HIGHWAY)	2008	H-1	FAIR	93,650	5 YEARS	2013	\$34,500	GENERAL/SINKING
2008 DODGE DURANGO (POLICE)	2008	1924	EXC	26,241	7 YEARS	2015	\$41,000	GENERAL/SINKING
2009 SEAGRAVE LADDER TRUCK (FIRE DEPT)	2009	T-88	NEW	0	25 YEARS	2034	\$2,000,000	FIRE SINKING/BOND ISSUE
2009 CHEVROLET 3500 WORK TRUCK (ELECTRIC)	2009	E-22	EXC	526	7 YEARS	2016	\$150,000	ELECTRIC CAPITAL
2009 DODGE CHARGER (POLICE)	2009	1923	EXC	12,051	7 YEARS	2016	\$48,000	GENERAL/SINKING
*BEING REFURBISHED IN 2009								

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