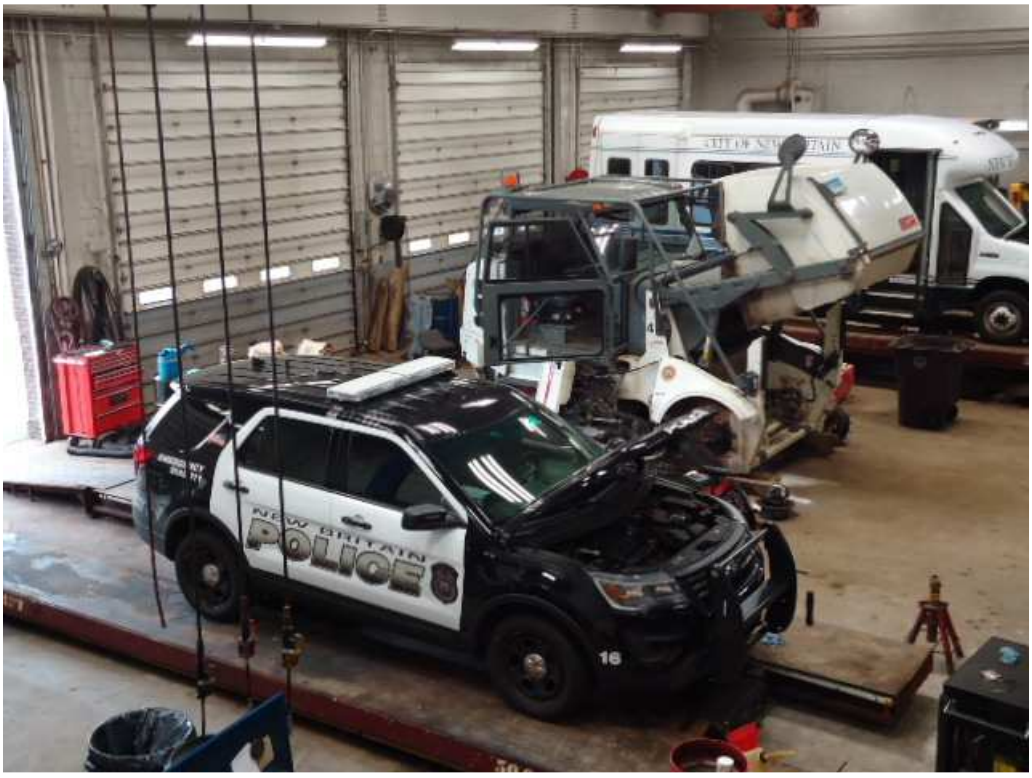
City of New Britain

Department of Public Works

2019 BIENNIAL FLEET REPORT



January 2019

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NEW BRITAIN PUBLIC WORKS - FLEET OPERATIONS

1. FLEET UPDATE

This report is the third Fleet Report prepared by New Britain Public Works since 2016. It provides a comprehensive update about what's involved with the City's Fleet Operations, the status of these operations, and progress made in many areas with some of the highlights being:

1. Since the last Fleet Report was prepared in January of 2017, the City further reduced it's the size of its fleet by 10 vehicles (2.9%) to 349 vehicles, and since FY-16 the number of fleet vehicles has been reduced by 35 vehicles which is over a 10% reduction.

2. The City continues to see a drop in its annual fuel costs, and dating back to FY-13 fuel consumption by the City's fleet has decreased 25.44%, and fuel consumption has decreased every fiscal year except for one since FY-13. Similarly as fuel prices have also decreased in recent fiscal years the City's fuel cost are down over 50% since FY-13.

3. In fall of 2018 Mayor Stewart and the New Britain City Council passed a resolution for a new Capital Equipment Bond for $1,969,188 to fund the purchase of 38 critical vehicles and equipment for various City departments. Each vehicle and piece of equipment being purchased is scheduled to replace an existing vehicle or piece of equipment that is being taken off line and auctioned off so these purchases will not increase the number of units in the City's fleet.

4. The City had established a goal of having real-time, GPS tracking on all its vehicles. Related to this in the fall of 2017 the City implemented Verizon's Network Fleet Vehicle Tracking System on all non-Police, Fire, and EMS vehicles. Installing this GPS tracking system has resulted in level of service improvements for snow plowing, city-wide leaf collection, and also helped reduce wasteful vehicle usage and fuel consumption.

5. A strict "No Idling Policy" was implemented and is being enforced in the City's Public Works Department. Unnecessary vehicle idling is a significant issue in Public Works departments, governments agencies, public utilities, and the construction trades, and eliminating it involves a change of culture. NBPW has made major strides and has greatly reduced vehicle idling since this policy was put in place in December of 2017.

6. To better control the use of city vehicles which are often shared by several employees, "Key Keeper" systems are being utilized, and have been installed at the City Yard and in City Hall so far. When using a Key Keeper system an employee gets access to a vehicle's keys from a digital lock box using their City Employee number, and keys are required to be turned back by the end of the work day.

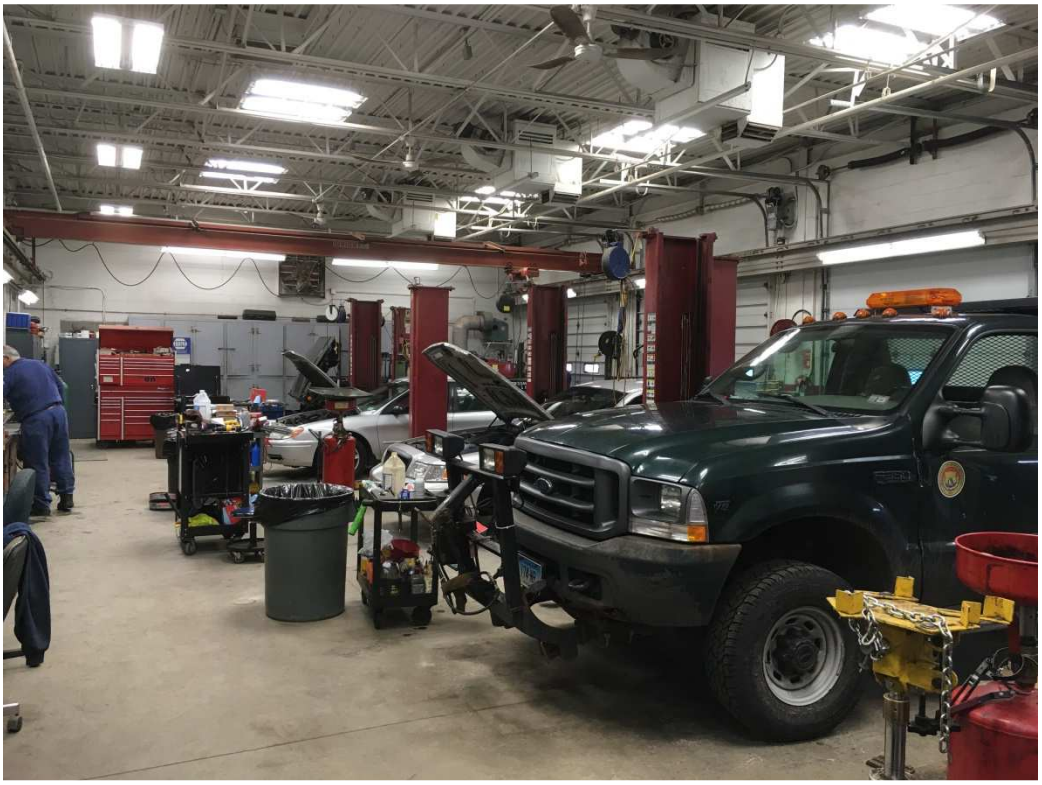
7. As part of the City's effort to minimize the size of the fleet, in the fall of 2018 "Pooled" vehicles were implemented in New Britain City Hall for use by City Hall employees. This effort involved repurposing some vehicles that were assigned to specific City departments, but were being underutilized.

8. The front-line vehicle used for NBPD operations was changed from a V-8 powered Crown Victoria to a V-6 powered Ford Explorer. Among other benefits this change resulted in increasing the fuel efficiency of front line police cruises by over 10 miles per gallon.

9. Public Works Fleet Operations are working on a new initiative with the Mayor's office that looks to generate revenue by allowing advertising on some, non-emergency, city vehicles. A pilot for this program is planned for 2019 that will utilize approximately 20 vehicles.

Moving forward Public Works Fleet Report will be prepared on a biennial basis (every two years).

2. FLEET OVERVIEW



Picture shows a "Car" side of the City's Fleet Operations at the City Yard located on Harvard Street

Like all cities, the City of New Britain maintains a large fleet of vehicles and equipment that is needed for everything from routine maintenance activities to emergency response, and the City's fleet itself is one of the most important and costly assets to manage. The proper management of the City's fleet assets is critical. Hundreds of thousands of dollars can be saved each year through the proper management of the City's fleet by efforts to maximize fuel efficiency, minimize fuel consumption, maximize vehicle and equipment life cycles, and minimizing the overall size of the fleet.

With the exception of the NBFD, the City of New Britain's Fleet Operations are managed by the City's Public Works Department, and are based out of two primary locations: the Public Works City

Yard on Harvard Street which primarily manages passenger and larger fleet vehicles, and the maintenance garage at Stanley Quarter Park which primarily handles fleet equipment.

The management, maintenance, and repair for the City's fleet of vehicles and equipment includes the following responsibilities:

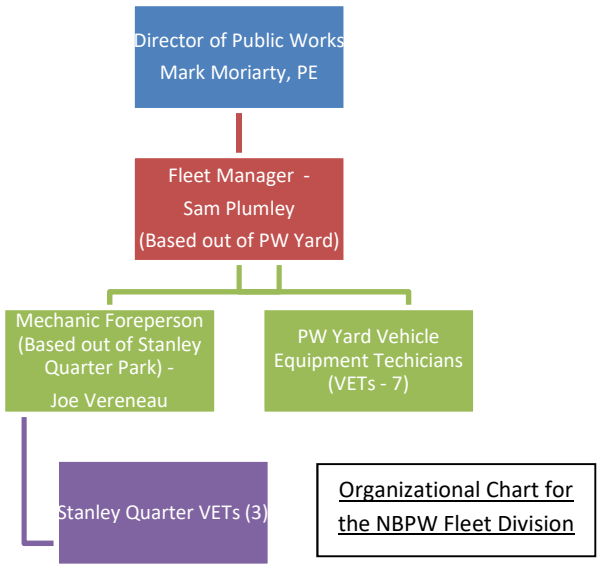
- Managing and overseeing the City's capital equipment replacement program
- Establishing procedures to extend vehicle service life
- Scheduling and performing daily repairs and maintenance
- Maintaining computerized records for all maintenance and repair activities performed on every vehicle and piece of equipment in the City's fleet
- Tracking accidents that involved City fleet vehicles and equipment and establishing procedures and best practices for the reduction of vehicle accidents
- The ordering and management of the City's fuel for vehicles and equipment
- Performing the maintenance repair work for the New Britain Housing Authority and the Board of Education vehicles and equipment
- Preparing an annual report that documents the current status of the City's fleet, the City's fuel consumption, and any relevant changes

While not discussed in great detail in this report, Public Works Fleet Division is also responsible for the operation and maintenance of the City's Park pools and splash pads.

3. STAFFING

Public Works Fleet Operations are managed by the City's Fleet Manager who is one of 5 direct reports to the Director of Public Works. Overall staffing for Public Works' Fleet Operations currently consists of a Fleet Manager, a Mechanic Foreperson, a Lead Mechanic, and 9 Vehicle

Equipment Technicians (V.E.T.). These staffing levels, and even the specific employees, have not changed since the last Fleet Report was prepared in January of 2017. A few retirements by fleet staff are anticipated though within the next few fiscal years.



Organizational Chart for the NBPW Fleet Division

Public Works Fleet Operations - Vehicle Equipment Technicians

Donald Woitowitz *
Charles Ebrahimi
Mark Corrigan
William Raineault
Willam LaForest
Patrick Lamantini
Brian Crespan
Ryan Cote
Miguel Aldea
Scott Bernabucci

*Acting as Lead Mechanic

The City's Fleet Operations continue to flourish since the promotion of Sam Plumley to the City's Fleet Manager in January of 2016. Prior to Sam's promotion in 2016, the City had been operating without a full time permanent Fleet Manager since 2007. Related to this Public Works Fleet Operations had been making minimal progress bettering its operations and achieving goals like increasing vehicle and equipment life cycles, improving fuel efficiency, and increasing fleet safety. The staff supporting Sam Plumley are also very talented, and each play critical roles in recent improvements made in the City's Fleet Operations.

4. VEHICLES AND EQUIPMENT (BY DEPARTMENT)

Efforts to reduce the overall size of the City's Fleet remains a high priority, and the City has again been successful in reducing the number of vehicles it owns and maintains by ten vehicles since the Fleet Report was last completed in January of 2017 for a 2.9% reduction.

The following are tables listing numbers of fleet vehicles and equipment by City department.

City Department	Number of Vehicles		
	FY-16	FY-17	FY-19
Mayor	1	1	2
Assessor	1	1	1
Building Dept.	6	7	7
DMD & City Plan	2	2	2
Police Dept. (reflects no. of license plates issued)	111	104	107
Facilities (New Department in FY-18)			8
EMS	12	12	12

Fire Dept./ OEM	39	39	37
Health Dept.	6	5	6
PW-Engineering	6	5	6
PW-Field Services (Streets, Parks, Sanitation, and Traffic)	101	90	80
PW-Utilities (Water & Sewer)	60	51	51
PW-Fleet and Facilities (No longer a combined Department in FY-18)	19	17	
PW - Cemetery	2	2	2
PW - Fleet			7
PW – Pool Cars		5	5
Recreation	7	7	5
Senior Center	5	5	5
Stanley Golf	2	2	2
Youth Services	4	4	4
Totals	**384**	**359**	**349**

2019 Large and Small Equipment Totals

Public Works Department		
PW Field Service Division	**Large Equipment**	**Small Equipment**
Streets and Traffic	12	23
Sanitation	4	10
Walnut Hill Park	9	19
Stanley Quarter Park	10	21
Stanley Quarter Maint. Bld.	6	21
AW Stanley Park	8	21
Chesley Park	2	4
Willow Brook Park	11	25
Forestry Operations	3	14
Horticultural Operations	10	24
	75	**180**
PW Utilities Division		
Water & Sewer (all operations)	13	70
Parks & Rec. Department		
Fairview Cemetery	17	19
Stanley Golf Course	32	24
Facilities and Energy	6	27
Totals:	**143**	**320**

FLEET MAINTENANCE

There are no major changes to on Fleet Maintenance since the previous Fleet Report was prepared in January of 2017. Performing routine preventative maintenance continues to be the most critical element for optimizing the life span of City vehicles and equipment though. It is also critical for avoiding the repair or replacement of costly major vehicle components such as engines, transmissions and drive trains. As with any preventative maintenance program the goal for New Britain Public Works' preventative maintenance practices is to keep vehicles and equipment in sound operating condition, but to perform preventative maintenance at the appropriate intervals because both overly frequent and delinquent preventive maintenance intervals are counterproductive to controlling fleet costs.

The preventive maintenance practices our mechanics follow are typically based on manufacturer's recommendations for each type of vehicle or equipment, the use of that vehicle, and on local driving conditions which vary throughout the year. Our mechanics may make adjustments to the manufacturer's recommendations if warranted.

Computerized maintenance and repair records are kept for each City vehicle and large equipment utilizing RTA Fleet Management Software which is a commonly widely used Fleet Management software. Each Fleet Division Vehicle and Equipment Technician (V.E.T.) inputs the maintenance and repair work they perform into the RTA program, and these records are a key tool for making fleet management decisions.

Overall maintenance and repair costs represent a significant portion of the total cost to own and operate a vehicle or piece of equipment, and these costs tend to increase as the vehicle or equipment ages. Once a vehicle or equipment's maintenance and repair costs become too high, and the vehicle has too much downtime, the City typically looks towards replacement.

The City's regular maintenance program for fleet vehicles and equipment involves the following:

Type of Vehicle or Equipment	**Preventative Maintenance Program Guidelines** Involves: Lube, oil, & filter replacement & safety inspection of tires, brakes, suspension, steering components, lights, & electrical systems
Police Cruisers, Passenger Vehicles, Pickup Trucks	Performed every 6 months or 3,000 miles
Medium Size Trucks (Lowboys, F350's)	▪ Performed every 6 months or 5,000 miles ▪ Additional maintenance occurs after every winter snow operation including vehicle wash
Large Dump Trucks	▪ Performed once per year (prior to snow season) or every 5,000 miles ▪ Additional maintenance occurs after every winter snow operation including vehicle wash
Heavy Equipment (backhoes, loaders, etc…)	▪ Performed every 6 months or 300 hours ▪ Additional maintenance occurs after every winter snow operation including vehicle wash
Street Sweepers	Performed once per year or 300 hours
Smaller Equipment (Mowers, Snow Blowers)	▪ Routine maintenance and fluid and filter replacement performed 2 or 3 times per year ▪ Full safety check performed each winter

FLEET LIFECYCLE MANAGEMENT

There are many factors involved in managing the lifecycle of the City's fleet of vehicles and equipment, and public sector entities often manage vehicle lifecycle using a different approach than many private sector entities. Many private sector entities replace vehicles frequently, strive to optimize their fleet's salvage value, place a high value on the image associated with having a fleet of newer vehicles, and have minimal to no tolerance for vehicle downtime. While these factors are also important in the public sector, New Britain's, like most municipalities, overall approach is to minimize the capital cost associated with maintaining our fleet.

Using this approach fleet vehicles and equipment are typically run to the end of their useful service life. Vehicles are typically not retired or replaced until the end of their lifecycle is achieved which is determined based on on-going repair costs, vehicle downtime, and/or safety considerations. Exceptions to this approach primarily involve vehicles critical to emergency response. In these cases high reliability and minimizing downtime are more important, and these vehicles are typically replaced more frequently. An example of this is front line police cars which are typically planned for replacement after four years.

There are some factors that can affect the lifecycle of municipal fleet vehicles is substantially when compared to some other types of fleets. City fleet vehicles are primarily used for city driving that involves frequent stopping. This frequent stopping and starting causes more engine, transmission, brake, and tire wear along with reducing a vehicle's fuel efficiency. City driving also subjects a vehicle's suspension to a wider variety of road conditions from rough roads, changing grades, and potholes which increase the wear and tear on a vehicle's suspension system.

The lifecycle of a municipal fleet vehicle or piece of equipment is also reduced in northern climates subject to winter snow and ice storms. Fleet vehicles and equipment in these areas are subject to heavy wear and tear from snow clearing, and also the impact of salt on the vehicles which is commonly used for anti-icing. For this reason in addition to routine maintenance regularly washing fleet vehicles is particularly important in northern climates, and especially the vehicles and equipment involved in winter storm operations.

Picture shows the impact of salt on a Public Works dump truck used in Winter Storm Operations.
Salt corrosion continues to be one biggest factor related to decreasing vehicle lifecycles.

Formally preparing an Annual Fleet Report has been useful to our Lifecycle planning efforts. The lifecycles below are largely unchanged from the last Fleet Report issued in January of 2017, and are primarily based on the lifecycles we're achieved rather than industry standards. On average our vehicles and equipment continues to last significantly longer than industry standards.

The following table shows the planned life for the more common vehicle and equipment categories in the City's fleet:

PRIMARY VEHICLE & EQUIPMENT CATEGORIES	INCLUDES	PLANNED LIFECYCLE (YEARS)
Passenger Vehicles	Sedans, vans, and similar	12-15 years *(was at 10-12 in last year's report)*
Four Wheel Drive Sports Utility Vehicles	Supervisor, inspector, administration vehicles and similar	12-15 years *(was at 10-12 in last year's report)*
Pickup Trucks	Primarily used for Field Operations SV Vehicles	10-12 years *(was at 8-10 years in last year's report)*
Field Equipment	Tractors, motorized mowing equipment, and similar	12-20 years
Police Primary Vehicles	Front line police cruisers	4-6 years
Heavy Duty Dump Trucks	GVW of 33,000 lbs and load carrying capacity of 5 tons	10-12 years *(was at 8-10 years in last year's report)*
Light Duty Dump Trucks	GVW of 17,000 lbs and equipped with 4WD	8-10 years
Utility Trucks	Forestry and traffic bucket trucks, and other similar vehicles	12-15 years *(was at 10-15 years in last year's report)*
Specialty Trucks	Forestry Lift Truck, Traffic Lift Truck, and similar	10-15 years
Heavy Equipment	Backhoes, front end loaders, sweepers, and similar equipment	12-15 years *(was at 15 years in last year's report)*

5. FUEL RELATED

Picture shows primary fueling stations at the New Britain City Yard on Harvard Street

Managing fuel consumption, fuel efficiency, and fuel costs are all vital components in the management of the City's fleet. Historically the City of New Britain has in excess of $500,000 per year purchasing gasoline and diesel fuel, but there's been a focused effort to reduce fuel consumption and improve vehicle fuel efficiency to help lower the City's costs.

These efforts have been paying off, and dating back to FY-13 fuel consumption by the City's fleet has decreased 25.44%, and fuel consumption has decreased every fiscal year except for one since FY-13. Similarly as fuel prices have also decreased in recent fiscal years the City's fuel cost are down over 50% since FY-13.

We continue try and further reduce the City's fuel related costs through our efforts to increase the fuel efficiency of the City's fleet. This is important because while looking at the City's annual fuel consumption is an important for budgeting fuel consumption is not a good indicator about fuel conservation efforts. This is because fuel consumption is influenced by several outside factors such as staffing level changes and the weather. This is especially true during years where there are severe winters, and multiple snow and ice storms.

Fuel efficiency is also weather dependent, but to a lesser degree than fuel consumption. When compared annually fuel efficiency provides a more accurate measure for fuel conservation efforts, and improving the fuel efficiency of the City's fleet has been a major area of focus for Public Work's Fleet Division, and some significant progress has been made in this area.

Some of recent efforts made to improve the fuel efficiency and lower fuel consumption include:

1. Implementation of Verizon Network Fleet's real-time GPS tracking system in the fall of 2017. Studies have shown that vehicles tracked by these type of system reduce miles driven by up to 20% which translates to lowering fuel consumption.

2. A strict "No Idling Policy" was implemented and is being enforced in the City's Public Works Department. Unnecessary vehicle idling is a significant issue in Public Works departments, governments agencies, public utilities, and the construction trades, and eliminating it involves a change of culture. NBPW has made major strides and has greatly reduced vehicle idling since this policy was put in place in December of 2017.

3. The front-line vehicle used for NBPD operations was changed from a V-8 powered Crown Victoria to a V-6 powered Ford Explorer. Among other benefits this change resulted in increasing the fuel efficiency of front line police cruises by over 10 miles per gallon.

Related to measuring the fuel efficiency of the fleet the City's fuel system, Fuel Master, was upgraded in 2016. Fuel Master measures fuel consumption and efficiency for various vehicles and City departments is tracked using the fuel management software, and is used by agencies like CT DOT and the US Department of Defense. Currently Fuel Master is only installed at the fuel stations at the Public Works City Yard on Harvard Street, and not the several smaller fuel stations located around the City. Reports on fuel use for the smaller fuel stations are manually tracked and submitted monthly to the Public Works Fleet Manager.

The following tables provide historical data related to the City's Fleet Operations:

Table 11-1: The table below shows the City's fuel tanks locations and sizes:

Fueling Stations	Gals.	Fuel Tank Information	Gas	Diesel
Public Works Yard (55 Harvard Street)	15,000	U/G - outdoors	**x**	
	15,000	U/G - outdoors		**x**
NB Water Department Bld. (1000 Shuttle Meadow Ave.)	2,000	Outdoors / above ground	**x**	
	1,000	Outdoors / above ground		**x**
Stanley Golf Course (254 Hartford Road)	1,000	Outdoors / above ground	**x**	
	2,000	Outdoors / above ground		**x**
Stanley Quarter Park (451 Blake Rd.)	500	Outdoors / above ground	**x**	
	500	Outdoors / above ground		**x**
AW Stanley Park (2159 Stanley Street)	250	Inside		**x**
Hungerford Park (1000 Shuttle Meadow Ave.)	250	Outdoors / above ground	**x**	
	250	Outdoors / above ground		**x**

Willow Brook Park	250	Outdoors / above ground	**x**	
	250	Outdoors / above ground		**x**
Walnut Hill Park	250	Outdoors / above ground	**x**	
	250	Outdoors / above ground		**x**
Fairview Cemetery (120 Smalley Street)	500	Outdoors / above ground	**x**	
	500	Outdoors / above ground		**x**

Public Works does public bids annually for the purchase of both gas and diesel fuels, and typically awards these bids based on a fixed priced. It's worth noting that the City's cost per gallon for fuel is substantially lower than retail pricing because the City is not subject to sales tax for fuel and other purchases, and also because the City fuel purchases are based on large quantities.

Table 11-2: Pricing for diesel and gas fuel several recent fiscal years:

FISCAL YEAR	GAS PRICE PER GAL. ($/Gal.)	DIESEL PRICE PER GAL. ($/Gal.)
FY 13	$3.166	$2.8321
FY 14	$3.166	$3.036 - $3.304 (variable pricing)
FY 15	$3.051	$3.025
FY 16	$2.135	$1.822
FY 17	$1.645	$1.884
FY-18	$1.9737	$2.1627
FY-19	Going out to bid in May 2019	Going out to bid in March 2019

Table 11-3: The tables below shows gas and diesel costs covered under the Public Works General Fund Budgets which covers all GF City Departments, Water, Sewer, all BOE vehicles and equipment, EMS, and Housing Authority:

FUELING PUMPS AT THE PUBLIC WORKS CITY YARD ON HAVARD STREET			
FISCAL YEAR	**GAS COST ($)**	**DIESEL COST ($)**	**TOTAL COST ($)**
FY 13	$443,135	$267,364	$710,499
FY 14	$436,442	$225,254	$661,696
FY 15	$396,910	$224,459	$594,369
FY 16	$291,885	$143,753	$435,638
FY 17	$258,981	$120,696	$379,677
FY-18	$272,304	$105,893	$378,197
FY-19	TBD	TBD	TBD

FUELING PUMPS AT THE WATER TREATMENT PLANT			
FISCAL YEAR	**GAS COST ($)**	**DIESEL COST ($)**	**TOTAL COST ($)**
FY 13	$11,713	$37,071	$48,784
FY 14	$13,012	$41,731	$54,743
FY 15	$14,872	$45,371	$60,243
FY 16	$28,969	$26,291	$55,260
FY 17	$26,677	$33,186	$59,863
FY-18	$27,234	$14,029	$41,263
FY-19	TBD	TBD	TBD

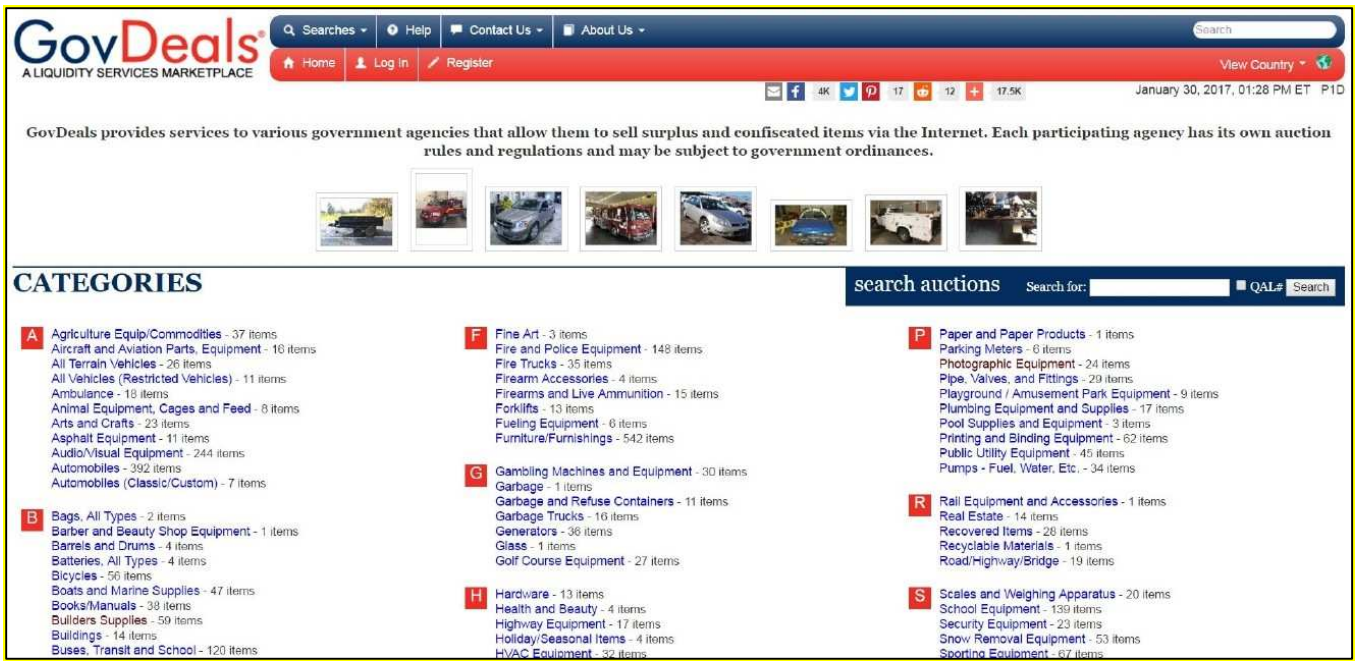
FUELING PUMPS AT THE VARIOUS PARKS GAS PUMPS			
FISCAL YEAR	**GAS COST ($)**	**DIESEL COST ($)**	**TOTAL GAS & DIESEL COST ($)**
FY 13	$5,661	$14,221	$19,882
FY 14	$4,935	$12,066	$17,001
FY 15	$8,351	$15,903	$24,254
FY 16	$1,830	$7,034	$8,864
FY 17	$1,845	$6,682	$8,527
FY-18	$3,781	$7,252	$11,033
FY-19	TBD	TBD	TBD

6. VEHICLE AND EQUIPMENT REPLACEMENT AND SALVAGE

The number of fleet vehicles and equipment the City maintains is sized to meet the current needs of the City, and overall the Fleet Division's goal is to minimize the number of vehicles and equipment it maintains. For vehicles and equipment deemed essential once the maintenance and repair costs for a vehicle or equipment become too high the City typically looks towards the replacement and sale of that item. The amount of downtime of a vehicle due to frequent repairs, and its impact on services is also a major consideration on vehicle and equipment replacement decisions.

New Britain still does not currently have an annual fleet replacement program or budget for these costs. Instead the City typically bonds for the purchase of vehicles and equipment when the need becomes great enough. This occurred in fall of 2018 when the Mayor and the New Britain City Council appropriated $1,969,188 Mil. for the City to bond for the purchase of 38 vehicles and equipment primarily for the Public Works, Police, and Fire Department. Developing a comprehensive 5-Year Capital Equipment Replacement plan to more proactively manage the City's fleet remains a goal for Public Works, but the current approach is probably the best approach for minimizing costs and maximizing lifecycles.

A copy of the 2018 approved Capital Equipment purchase list is included in an appendix to this report.



The City continues to benefit from its change to the GovDeals on-line auction website for selling "salvage" vehicles and equipment since this change was made in 2016. Since the City started using GovDeals salvage vehicles and equipment are being sold quicker and often for more money, and some of the buyers have come from as far away as Tennessee, Texas, and Ohio.

7. PARTS ORDERING AND SUPPLY

There were no major changes again related to the ordering of parts and supplies since the previous Fleet Report was prepared in 2017. Parts and supplies used for vehicle and equipment repair and maintenance do continue to be organized at a much higher level than had been done historically. Parts ordering and supply for New Britain's fleet faces a similar challenge as most other municipal fleets. Most fleet purchases are based on a public, low bid process meaning municipal fleets tend to involve a wide variety of types, makes and models of vehicles and equipment making parts ordering and maintaining inventory more difficult. On-going efforts to standardize some of the City's emergency response vehicles are occurring such as front line snow plows and police cruisers to help address this.

Many private companies standardize their fleet vehicles so it is easier for them to have more replacement parts readily in stock, and also so their fleet mechanics have more familiarity and expertise with the makes and models of the fleet vehicles and equipment they are required to service. It is also not practical to carry a large inventory of parts so the City relies on a large number of vendors to supply parts with some of the largest suppliers being NAPA, Crowley Ford, and Fleet Pride.

The City does keep windshield wiper parts, brakes, filters, common electrical parts, gaskets, seals, and tires in stock with an emphasis on quick repairs that may need to be made during an emergency operation like winter storm operations.

8. FLEET POLICIES

The City has several policies, procedures, and work rules governing the use of its fleet vehicles and equipment, and updates to these were included in Public Works "Standards of Conduct" which was issued in January of 2017 along with Mayor Erin Stewart's new Employee Handbook.

Specific to Public Works Fleet Policies the following language was included in PW's Standards of Conduct:

The City's vehicles and equipment are some of the most costly assets the City owns, and their proper use, care and maintenance is a shared responsibility of all users. The following are Public Works rules and requirements regarding the use of City owned vehicles and larger equipment:

1. *City vehicles and equipment are to be treated with proper care, and drivers must obey all applicable driving laws (i.e. cell phone use, seat belts, etc.);*
2. *Aggressive and reckless driving shall not be tolerated;*
3. *City vehicles and equipment are to be used for work related activities only;*
4. *Employees are required to do a thorough pre-trip check prior to using any City vehicle and/or equipment, and any issues shall be immediately reported to your supervisor and/or the Fleet Manager;*
5. *Vehicle trips shall follow the most direct route practical to minimize vehicle mileage, wear, and fuel consumption;*
6. *At the end of a shift or work day remove any trash and/or personal items from the vehicle, make sure the vehicle has a minimum of a ¼ tank of fuel, and return the keys to the key board or applicable location;*
7. *Smoking is not allowed in Public Works vehicles;*
8. *Properly secure tools, equipment, and/or materials you are transporting;*
9. *Work assignments shall strive to minimize the number of vehicles needed to perform an assignment while still maintaining efficiency of operations;*
10. *The idling of vehicles is illegal under CT State statues, and the City has a no idling policy. Only in cases of temperature extremes will idling be allowed, and then only with your supervisor's approval.*

CDL drivers should note that violations of cell phone laws qualify as "serious traffic violations" under FMCSA regulations, and drivers that violate these restrictions will face penalties up to $2,750 for each offense.

In addition to this New Britain Public Works implemented a specific "No Idling Policy" in December of 2017 that strived to eliminate discretionary vehicle idling. A copy of this policy is included in an appendix to this report.

9. FLEET SAFETY

Safety is an essential component of every fleet operation, and our Fleet Safety Program's primary objective is to prevent motor vehicle accidents. The US National Safety Council defines a preventable accident as "one in which the driver failed to do everything that they reasonably could have done to avoid it". The City is committed to minimizing the number of preventable accidents involving City employees, and stresses that City employees operating City-owned vehicles and pieces of equipment shall do so in a safe manner, and shall follow all applicable laws.

Overall, New Britain Public Works is committed to further developing and maintaining a culture of safety, and fleet safety is a major component of this. Fleet Safety Programs typically include four main components:

1. Fleet safety training on issues including:

   - preventable accidents
   - backing accidents
   - avoiding rear end collisions
   - defensive driving
   - effective vehicle pre-trips
   - winter driving & black ice
   - trailer use & properly securing materials
   - driver awareness & distracted driving
   - work zone safety

2. The development and enforcement of fleet safety policies and procedures

3. Monitoring driver behavior and modifying driver behavior as needed

4. Comprehensive accident tracking and investigation

The Public Works Department has maintained an Accident Review Committee (ARC) since 2008 which reviews all vehicle and equipment related accidents within the department. The purpose of this committee is to jointly determine whether or not an accident was preventable along with if the Public Works driver was at fault. Additionally the ARC is charged with identifying patterns in driver behavior, and in some cases identifying drivers that may need retraining or have other corrective action taken. The current Accident Review Committee members include:

1. Sam Plumley, Fleet Manager
2. Mark Moriarty, Director of Public Works
3. Mike Thompson, Field Services Division Superintendent
4. Chris Polkowski, Superintendent of Public Works Utilities (Acting)
5. Dominic Mutone, Public Works Foreperson

The table below shows a listing of Public Works Accidents by year for the past 6 years:

Year	City Driver at Fault by ARC	City Driver Not at Fault by ARC	Totals by Year
2013	3 – Significant 1 – Minor 4 – Total	4 – Significant 6 – Minor 10 – Total	14
2014	2 – Significant 3 – Minor 5 – Total	3 – Significant 4 – Minor 7 – Total	12
2015	5 – Significant 5 – Minor 10 – Total	2 – Significant 0 – Minor 2 – Total	12
2016	5 – Significant 5 – Minor 10 – Total	2 – Significant 3 – Minor 5 – Total	15
2017	3 – Significant 8 – Minor 11 – Total	2 – Significant 9 – Minor 11 – Total	22
2018	4 – Significant 8 – Minor 12 – Total	1 – Significant 1 – Minor 2 – Total	14

Despite a spike in the total number of vehicle accidents in 2017, the number of total vehicle accidents where a city employee was found at fault remained fairly flat for the past four years, and the number of significant accidents where a city employee was found at fault also remained fairly flat for the past five years. The continues to have a goal of eliminating all preventable accidents, but recognizes that given the number of employees involved, the number of miles driven, and the number of operations performed in adverse weather conditions some accidents will occur.

Efforts to increase driver safety and eliminate distracting driving continue though, and are a part of the City's annual safety training program.

10. ALTERNATIVE FUEL VEHICLES

Picture shows 2020 Ford Police Interceptor Utility Vehicle which will come standard with a hybrid AWD drive train. .

As it relates to our goal of improving fuel efficiency and "greening our fleet", Public Works continues to consider Alternative Fuel Vehicles (AFV) for its purchases where applicable, but hasn't pursued the purchase of many of these vehicles with the exception of a few hybrid cars. The primary reason for this is that a relatively small percentage of the City's fleet involves passenger vehicles which up to this point have been the primary market for AFVs. The City typically keeps passenger vehicles for 12 to15 year, and sometime even longer. This being the case there hasn't been much opportunity for replacement of passenger vehicles with AFV vehicles, and when passenger vehicles have been replaced it often hasn't made sense economically.

This is expected to change though within the next few year at least with the New Police Department's fleet which now utilizes Ford's Interceptor Utility Vehicle as its front line police cruiser. Beginning with its 2020 models Ford's Police Interceptor Utility Vehicle will come standard with a hybrid AWD drive train.

11. FLEET GOALS AND ACCOMPLISHMENTS

Every year the Fleet Management Division, like all divisions in Public Works establishes goals and reviews their past year's accomplishments. This is an important task, and critical to help ensure that the Fleet Division is making good progress, and staying current with the best management practices of a properly managed Fleet Operation.

Below are listed Public Works' Fleet Divisions' Goals and Accomplishments as they relate to this report:

1. Fleet Division Accomplishments:

1. Since the last Fleet Report was prepared in January of 2017, the City further reduced it's the size of its fleet by 10 vehicles (2.9%) to 349 vehicles, and since FY-16 the number of fleet vehicles has been reduced by 35 vehicles which is over a 10% reduction.

2. The City continues to see a drop in its annual fuel costs, and dating back to FY-13 fuel consumption by the City's fleet has decreased 25.44%, and fuel consumption has decreased every fiscal year except for one. Similarly as fuel prices have also decreased in recent fiscal years the City's fuel cost are down well over 50% since FY-13.

3. In fall of 2018 Mayor Stewart and the New Britain City Council passed a resolution that re-appropriated capital equipment funds from old bonds to fund $1,969,188 for the purchase of 38 critical vehicles and equipment for various City departments. Each vehicle and piece of equipment being purchased is scheduled to replace an existing vehicle or piece of equipment that being taken off line and auctioned off so these purchases will not increase the number of units in the City's fleet.

4. The City had established a goal of having real-time, GPS tracking on all its vehicles. Related to this in the fall of 2017 the City implemented Verizon's Network Fleet Vehicle Tracking System on all non-Police, Fire, and EMS vehicles. Installing this GPS tracking system has resulted in level of service improvements for snow plowing and city-wide leaf collection, and also helped reduce wasteful vehicle usage and fuel consumption.

5. A strict "No Idling Policy" was implemented and is being enforced in the City's Public Works Department. Unnecessary vehicle idling is a significant issue in Public Works departments, governments agencies, public utilities, and the construction trades, and eliminating it involves a change of culture. NBPW has made major strides and has greatly reduced vehicle idling since this policy was put in place in December of 2017.

6. "Key Keeper" systems are being utilized to better control the use of city vehicles which are often shared by several employees. So far Key Keeper systems have been installed at the City Yard and in City Hall. When using a Key Keeper system an employee gets access to a vehicle's keys from a digital lock box using their City Employee number, and keys are required to be turned back by the end of the work day. One of the most prevalent issues this helped address was eliminating the losing of vehicle keys which had been happening all

too frequently, and was expensive due to key replacement costs ranging between $200 and $500 dollars.

7. As part of the City's effort to minimize the size of the fleet, in the fall of 2018 "Pooled" vehicles were implemented in New Britain City Hall for use by City Hall employees. This effort involved repurposing some vehicles that were assigned to specific City departments, but that were being underutilized.

8. The front-line vehicle used for NBPD operations was changed from a V-8 powered Crown Victoria to a V-6 powered Ford Explorer. Among other benefits this change resulted in increasing the fuel efficiency of front line police cruises by over 10 miles per gallon.

2. Fleet Division Goals:

1. Maintain the high level of service and performance currently in place by Public Works' Fleet Division

2. Continue to reduce the overall size of the City Fleet where possible and practical

3. Continue to improve the fuel efficiency of the City's fleet

4. Prepare for the expected retirements of a few of the veteran fleet mechanics (V.E.T.'s), and to replace them with highly qualified candidates

5. To more fully utilize the RTA Fleet Software to benchmark, track, and measure progress

6. Continued cross training of Fleet Division staff on all fleet duties (large equipment and vehicles, small equipment, passenger vehicles, pools and splash pads)

7. Implement more fleet and driver safety training

8. Expand on the implementation of Key Keeper Systems at all work sites to better manage, track, and control, the use of city vehicle and equipment use.

9. Continued improvement on PW's Lock-out Tag-out program for vehicles and equipment in need of repair

12. SUMMARY

A City's fleet of vehicles and equipment are critical for everything from providing regular daily maintenance and services for residents and businesses to providing critical emergency response for police, fire, and emergency winter storm operations. As such there is no more important task performed in a Public Works Department than maintaining its fleet. The proper management of a City's fleet is crucial, and decisions made about managing a fleet can either save or cost a municipality hundreds of thousands of dollars a year.

Since the last Fleet Report was prepared in January of 2017 New Britain Public Works' Fleet Division has continued to make very good strides improving its Fleet Management efforts, and the contents of this report are a testament to this.

This year, and moving forward the Biennial Fleet Report will continue to provide detailed information about the status of the City's fleet operations and the fleet itself, and will serve as a valuable benchmark for measuring annual progress. New Britain Public Works is committed to making sure the City's Fleet Division serves as a role model for other organizations, and that the dollars the City spends investing in its fleet are optimized to their highest potential.

APPENDIX A

2018 FLEET VEHICLE LIST

VEHICLES AND EQUIPMENT LIST

Plate #	Department	Year	Make	Model
0187-NB	ASSESSOR	2001	CHEVROLET	CAVALIER
0001-NB	MAYOR'S OFFICE	2016	JEEP	GRAND CHEROKEE
0002-NB	MAYOR'S OFFICE	2006	JEEP	LIBERTY
0156-NB	BUILDING DEPT.	2001	FORD	TAURUS XL
0163-NB	BUILDING DEPT.	2004	FORD	TAURUS SE
0169-NB	BUILDING DEPT.	2014	JEEP	SPORT UTILITY
0172-NB	BUILDING DEPT.	2017	FORD	FOCUS SE
0176-NB	BUILDING DEPT.	2014	FORD	FOCUS
0189-NB	BUILDING DEPT.	2001	DODGE	STRATUS
0214-NB	BUILDING DEPT.	2016	JEEP	PATRIOT
0003-NB	ENGINEERING	2008	FORD	EXPLORER XLT
0033-NB	ENGINEERING	2003	DODGE	DURANGO
0061-NB	ENGINEERING	2008	FORD	EXPLORER XLT
0063-NB	ENGINEERING	2007	FORD	4WD PICKUP - F150
0133-NB	ENGINEERING	2003	DODGE	DURANGO
0151-NB	ENGINEERING	2003	DODGE	DURANGO
0272-NB	CITY PLAN	2001	CHEVROLET	CAVALIER
0200-NB	DMD	2003	JEEP	GRAND CHEROKEE
0000493	EMER MED SERVICES	2015	FORD	AMBULANCE
0002023	EMER MED SERVICES	2016	FORD	AMBULANCE
0002362	EMER MED SERVICES	2016	FORD	AMBULANCE

0002363	EMER MED SERVICES	2012	FORD	AMBULANCE
2379	EMER MED SERVICES	2014	FORD	F450 AMBULANCE
0002693	EMER MED SERVICES	2012	FORD	AMBULANCE F450
01C-P86	EMER MED SERVICES	2011	FORD	EXPEDITION
116-XVE	EMER MED SERVICES	2016	FORD	EXPLORER
365ZRV	EMER MED SERVICES	2013	FORD	EXPLORER
388-XKP	EMER MED SERVICES	2009	FORD	EXPEDITION
8CM-337	EMER MED SERVICES	2012	FORD	F 350 P/UP
9CM-853	EMER MED SERVICES	2014	FORD	EXPLORER
0001831	FIRE DEPT.	2009	FORD	E-350
0002253	FIRE DEPT.	2002	ACSI MASS	DECONTAMINATION
0002345	FIRE DEPT.	2006	FREIGHTLINER M-2	CONTENDE
0004294	FIRE DEPT.	2006	FORD	EXPEDITION
12172	FIRE DEPT.	1993	EMERGENCY ONE	CYCLONE
0000L-3	FIRE DEPT.	1990	FEDERAL MOTORS	HURRICANE
000L-1	FIRE DEPT.	2015	SMEAL	MID MOUNT LADDER
00ENG-1	FIRE DEPT.	1999	E-ONE	PUMPER
00ENG-9	FIRE DEPT.	1993	EMERGENCY ONE	CYCLONE
00ENG-8	FIRE DEPT.	1999	E-ONE	PUMPER

00ENG-5	FIRE DEPT.	2008	E-ONE	PUMPER
0235-NB	FIRE DEPT.	2000	CHEVROLET	MALIBU
0236-NB	FIRE DEPT.	2000	CHEVROLET	MALIBU
0248-NB	FIRE DEPT.	2000	CHEVROLET	MALIBU
0249-NB	FIRE DEPT.	2007	FORD	FUSION SE
0250-NB	FIRE DEPT.	2011	FORD	F-350 4X4
0251-NB	FIRE DEPT.	1992	FORD	E-350 AMBULANCE
0253-NB	FIRE DEPT.	2006	FORD	EXPEDITION
0262-NB	FIRE DEPT.	2006	FORD	EXPEDITION
0265-NB	FIRE DEPT.	2015	BRAVO TRAILER	TRAILER
0269-NB	FIRE DEPT.	2005	FREIGHTLINER	AMBULANCE
0299-NB	FIRE DEPT.	2006	SURREY FIRE	SAFETY HOUSE
0327-NB	FIRE DEPT.	1997	FORD	CROWN VIC.
0350-NB	FIRE DEPT.	2007	FORD	FUSION SE
0351-NB	FIRE DEPT.	2008	CHEVROLET	IMPALA
0352-NB	FIRE DEPT.	2008	CHEVROLET	IMPALA
0357-NB	FIRE DEPT.	2008	CHEVROLET	IMPALA
0358-NB	FIRE DEPT.	2007	FORD	F-150 PICKUP
0363-NB	FIRE DEPT.	2013	FORD	EXPEDITION XLT
0374-NB	FIRE DEPT.	2005	FORD	EXPEDITION
ENG-0S2(20249)	FIRE DEPT.	2000	E-ONE	PUMPER
ENG-10	FIRE DEPT.	1999	E-ONE	PUMPER
LADDER2(131820	FIRE DEPT.	2006	E-ONE	MID MOUNT LADDER
0181-NB	OEM	1995	JEEP	CHEROKEE
0360-NB	OEM	2005	NIGHT HAWK	LIGHT TOWER TRAILER

0361-NB	OEM	2003	MAGNUM 4060-M-MH	LIGHT TOWER TRAILER
0182-NB	OEM	1997	DODGE	RESCUE
0080-NB	HEALTH DEPT.	2009	CHEVROLET	4 DOOR - AVEO
0158-NB	HEALTH DEPT.	2006	FORD	TAURUS SE
0159-NB	HEALTH DEPT.	2006	FORD	TAURUS SE
0161-NB	HEALTH DEPT.	2008	FORD	FUSION
0162-NB	HEALTH DEPT.	2006	FORD	TAURUS SE
0173-NB	HEALTH DEPT.	2017	FORD	ESCAPE
391052	PUBLIC WORKS	2010	TAKEUCHI	TB145CR
391204	PUBLIC WORKS	2012	HELI	FORK LIFT
391504	PUBLIC WORKS	2015	BOMAG	BW120SL ROLLER
0005-NB	PUBLIC WORKS	2016	FRIEGHTLINER	114SD DUMP TRUCK
0006-NB	PUBLIC WORKS	2008	FORD	F550 DUMP TRUCK
0008-NB	PUBLIC WORKS	2004	STERLING	L7500 DUMP TRUCK
0009-NB	PUBLIC WORKS	2016	FRIEGHTLINER	114SD DUMP TRUCK
0010-NB	PUBLIC WORKS	2006	FORD	F250 PICKUP
0012-NB	PUBLIC WORKS	2004	STERLING	L7500 DUMP TRUCK
0014-NB	PUBLIC WORKS	2004	STERLING	L7500 DUMP TRUCK
0016-NB	PUBLIC WORKS	2016	FRIEGHTLINER	114SD DUMP TRUCK
0017-NB	PUBLIC WORKS	1996	FORD	350 DUMP TRUCK
0018-NB	PUBLIC WORKS	2015	FORD	F550 DUMP TRUCK
0019-NB	PUBLIC WORKS	2016	FRIEGHTLINER	114SD DUMP TRUCK
0020-NB	PUBLIC WORKS	2017	FORD	F-250 PICKUP
0021-NB	PUBLIC WORKS	2015	FREIGHTLINER	6-WHEEL DUMP

0022-NB	PUBLIC WORKS	2015	FRIEGHTLINER	6-WHEEL DUMP
0023-NB	PUBLIC WORKS	2016	FORD	F-550 LOWBOY
0024-NB	PUBLIC WORKS	2016	FORD	F-550 LOWBOY
0025-NB	PUBLIC WORKS	2017	FALCON	ASPHALT HOT BOX
0026-NB	PUBLIC WORKS	1996	FORD	F-350 UTILITY BODY
0030-NB	PUBLIC WORKS	1996	FORD	RACK BODY
0031-NB	PUBLIC WORKS	2007	STERLING	DUMP TRUCK LT950
0034-NB	PUBLIC WORKS	2007	STERLING	DUMP TRUCK LT950
0036-NB	PUBLIC WORKS	2008	FORD	F550 DUMP TRUCK
0037-NB	PUBLIC WORKS	2008	FORD	F550 DUMP TRUCK
0042-NB	PUBLIC WORKS	2007	JOHN DEERE	624J LOADER
0043-NB	PUBLIC WORKS	2016	JOHN DEERE	624K LOADER
0045-NB	PUBLIC WORKS	2012	INTERNATIONAL	740 SBA
0047-NB	PUBLIC WORKS	2014	FREIGHTLINER	114SD
0048-NB	PUBLIC WORKS	2004	STERLING	L7500 DUMP TRUCK
0049-NB	PUBLIC WORKS	2007	PETERBILT	TRUCK 320
0050-NB	PUBLIC WORKS	2008	STERLING	LT9500 DUMP TRUCK
0054-NB	PUBLIC WORKS	2008	STERLING	LT9500 10-WHEELER
0056-NB	PUBLIC WORKS	2000	STERLING	HD DUMPTRUCK L9511
0058-NB	PUBLIC WORKS	2012	INTERNATIONAL	740 SBA
0069-NB	PUBLIC WORKS	2012	INTERNATIONAL	740 SBA
012-001	PUBLIC WORKS	2005	PAVER	8500 TRACK, LO DECK
0232-NB	PUBLIC WORKS	1994	CHEVROLET	C3500 H/D TRAFFIC BUCKET
0263-NB	PUBLIC WORKS	2008	FORD	TRAFFIC BUCKET TRUCK

0283-NB	PUBLIC WORKS	2000	INGERSOLL RAND	ROLLER
0285-NB	PUBLIC WORKS	2000	CHEVROLET	PICKUP TRUCK TRAFFIC UTILITY
0288-NB	PUBLIC WORKS	2005	ELGIN	SWEEPER-PELICAN
0290-NB	PUBLIC WORKS	2008	ELGIN	SWEEPER
0291-NB	PUBLIC WORKS	2008	ELGIN	PELICAN-SWEEPER
0293-NB	PUBLIC WORKS	2006	ELGIN	SWEEPER-PELICAN
FUEL KEY	PUBLIC WORKS	2014	TENCO	SNOWBLOWER
0004-NB	SANITATION	2016	FORD	F-250 PICKUP
0060-NB	SANITATION	2007	JOHN DEERE	624J LOADER
0064-NB	SANITATION	2008	STERLING	LT9500 HOOK LIFT
0067-NB	SANITATION	2017	FORD	F-550 RACKBODY
0068-NB	SANITATION	2008	STERLING	LT9500 HOOK LIFT
0027-NB	PARK DEPT.	2001	FORD	PICKUP
0101-NB	PARK DEPT.	2008	JEEP	LIBERTY SPORT
0102-NB	PARK DEPT.	2006	FORD	F-250 PICKUP
0104-NB	PARK DEPT.	2011	FORD	F-250 PICK-UP TRUCK
0105-NB	PARK DEPT.	2006	FORD	F-350 PLATFORM TRUCK
0106-NB	PARK DEPT.	2008	FORD	F550 DUMP TRUCK
0107-NB	PARK DEPT.	2011	FORD	F350
0108-NB	PARK DEPT.	2006	FORD	F-250 PICKUP
0109-NB	PARK DEPT.	2006	FORD	F-250 PICKUP
0110-NB	PARK DEPT.	2007	FORD	F-475 PICKUP
0111-NB	PARK DEPT.	2001	FORD	DUMP TRUCK
0114-NB	PARK DEPT.	2012	INTERNATIONAL	IH7400

0115-NB	PARK DEPT.	2015	FRIEGHTLINER	BUCKET TRUCK
0116-NB	PARK DEPT.	2008	FORD	PICKUP
0117-NB	PARK DEPT.	2009	FORD	F350 PLATFORM DUMP BODY
0120-NB	PARK DEPT.	2008	FORD	F-450 UTILITY TRUCK
0121-NB	PARK DEPT.	2006	FORD	F-350 PLATFORM TRUCK
0122-NB	PARK DEPT.	2007	PETERBILT	TRUCK 320
0128-NB	PARK DEPT.	2008	JOHN DEERE	310J BACKHOE LOADER
0141-NB	PARK DEPT.	2006	JOHN DEERE	LOADER
0143-NB	PARK DEPT.	2008	FORD	F750 HOOKLIFT
0150-NB	PARK DEPT.	2008	FORD	F550 DUMP TRUCK
0160-NB	PARK DEPT.	2008	FORD	F-750 AERIAL BUCKET
0317-NB	PARK DEPT.	1998	CHEVROLET	CHASSIS CAB
0336-NB	PARK DEPT.	2010	BRUSH BANDIT	BANDIT CHIPPER
0343-NB	PARK DEPT.	2007	BRUSH	BANDIT CHIPPER
0174-NB	CEMETERY	2002	FORD	PICKUP
0179-NB	CEMETERY	2008	FORD	F-250 PICKUP
0191-NB	PROPERTY MGMT.	2015	FORD	UTILITY
0194-NB	PROPERTY MGMT.	2017	FORD	F-150 PICKUP
0195-NB	PROPERTY MGMT.	2006	CHEVROLET	VAN
0196-NB	PROPERTY MGMT.	2008	GMC	SIERRA PICKUP
0197-NB	PROPERTY MGMT.	2002	FORD	PICKUP
0213-NB	PROPERTY MGMT.	2008	DODGE	CHARGER
0218-NB	PROPERTY MGMT.	2011	FORD	CROWN VIC.
0301-NB	PROPERTY MGMT.	2017	JEEP	WRANGLER

0071-NB	WATER DEPT./QUALITY	2015	FORD	ESCAPE SE
0074-NB	WATER DEPT./QUALITY	2006	CHEVROLET	EXPRESS VAN - G3500
0091-NB	WATER DEPT./QUALITY	2008	FORD	4WD EXTCAB PICKUP - F350
0076-NB	WATER DEPT/QUALITY	2016	FORD	4WD EXTCAB PICKUP- F350
0077-NB	WATER DEPT./QUALITY	2009	FORD	4WD CREW CAB P/UP - F350
0083-NB	WATER DEPT./QUALITY	2015	FORD	4WD F350 PICKUP
0084-NB	WATER DEPT./QUALITY	2017	FORD	DUMP TRUCK F-550
0089-NB	WATER DEPT./QUALITY	2000	CHEVROLET	4WD/PICKUP - K3500
0095-NB	WATER DEPT./QUALITY	2010	JOHN DEERE	TRACTOR - TIGER
0164-NB	WATER DEPT./QUALITY	2007	HOLLAND	TRACTOR MOWER
0166-NB	WATER DEPT./QUALITY	2005	DODGE	PICKUP
0234-NB	WATER DEPT./QUALITY	2007	FORD	4WD/PICKUP - RANGER
0304-NB	WATER DEPT./QUALITY	2007	FORD	RANGER
0089-NB	WATER DEPT/QUALITY	2017	FORD	F-250 PICKUP
0072-NB	WATER DEPT./UTILITY	2015	FORD	TRANSIT CONNECT XL
0073-NB	WATER	2012	FREIGHTLINER	PLATFORM/CRANE

	DEPT./UTILITY			
0075-NB	WATER DEPT./UTILITY	2007	FORD	4WD PICKUP - F150
0078-NB	WATER DEPT./UTILITY	2016	FORD	TRANSIT 250 VAN
0079-NB	WATER DEPT./UTILITY	2011	JEEP	4 DOOR - LIBERTY
0081-NB	WATER DEPT./UTILITY	2000	STERLING	DUMP TRUCK - L7500
0082-NB	WATER DEPT./UTILITY	2008	CHEUROLET	PICKUP - COLORADO
0085-NB	WATER DEPT./UTILITY	2013	FREIGHTLINER	MAINT VAN MT55
0086-NB	WATER DEPT./UTILITY	2008	FORD	DUMP TRUCK - F550
0088-NB	WATER DEPT./UTILITY	2012	FORD	F-350 4X4 UTILITY BODY
0090-NB	WATER DEPT./UTILITY	2015	FORD	F150 PICKUP
0096-NB	WATER DEPT./UTILITY	2009	CHEVROLET	EXPRESS VAN - G3500
0098-NB	WATER DEPT./UTILITY	1993	JOHN DEERE	BACKHOE
0099-NB	WATER DEPT./UTILITY	1995	KOMATSU	LOADER
0171-NB	WATER DEPT./UTILITY	1998	GMC	SONOMA PICKUP
0233-NB	WATER DEPT./UTILITY	2006	FORD	4WD/PICKUP - F350
0268-NB	WATER DEPT./UTILITY	2013	FORD	E-350 VAN

0270-NB	WATER DEPT./UTILITY	2004	FORD	STERLING DUMP TRUCK
0274-NB	WATER DEPT./UTILITY	2002	CHEVROLET	4WD PICKUP - K1500
0282-NB	WATER DEPT./UTILITY	2008	CHEVROLET	4WD PICKUP - COLORADO
0322-NB	WATER DEPT./UTILITY	2012	FORD	E350 VAN
0007-NB	PUBLIC WORKS-SEWER	2004	STERLING	L7500 6-WHEEL DUMP
0011-NB	PUBLIC WORKS-SEWER	2017	FORD	F-250 PICKUP
0087-NB	PUBLIC WORKS-SEWER	2008	FORD	F-250 PICK-UP TRUCK
0015-NB	PUBLIC WORKS-SEWER	2002	FORD	F-550 LOWBOY
0028-NB	PUBLIC WORKS-SEWER	2008	FORD	F450 - PLATFORM
0032-NB	PUBLIC WORKS-SEWER	2005	CASE	TRACTOR LOADER BACK
0038-NB	PUBLIC WORKS-SEWER	1991	FORD	L8000 DUMP TRUCK
0039-NB	PUBLIC WORKS-SEWER	2008	FORD	F-550 LOWBOY
0044-NB	PUBLIC WORKS-SEWER	2008	FORD	F-550 LOWBOY
0052-NB	PUBLIC WORKS-SEWER	2006	STERLING	SEWER JET RODDER
0055-NB	PUBLIC WORKS-SEWER	1995	FORD	CRANE/COMP
0057-NB	PUBLIC WORKS-	2008	STERLING	LT9500 JET VAC

	SEWER			
0062-NB	PUBLIC WORKS-SEWER	2002	GMC	TRUCK W/MOUNTED CRANE
0066-NB	PUBLIC WORKS-SEWER	2016	FRIEGHTLINER	M2106 JET TRUCK
0180-NB	PUBLIC WORKS-SEWER	2007	JOHN DEERE	624J LOADER
	PUBLIC WORKS-SEWER	2000	EXCAVATOR	MENZI ALL TERRAIN
0039417	RECREATION	2003	FORD	ECONOLINE 15 PASS.
0127-NB	RECREATION	2001	GMC	1500 PICKUP
0136-NB	RECREATION	2012	FORD	TRANSIT CONNECT XLT WAGON
0154-NB	RECREATION	2006	HONDA	CIVIC HYBRID
0303-NB	RECREATION	2009	CHEVROLET	AVEO
AC87165	POLICE DEPT.	2014	FORD	TAURUS
78178	POLICE DEPT.	2016	FORD	TAURUS
3923	POLICE DEPT.	2017	FORD	TAURUS
934447	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
934448	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
934449	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
934450	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
934451	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
934452	POLICE DEPT.	2015	HARLEY DAVIDSON	FLHTP
0123-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0124-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0125-NB	POLICE DEPT.	2017	FORD	EXPLORER

0126-NB	POLICE DEPT.	2005	DODGE	DURANGO
0135-NB	POLICE DEPT.	2012	FORD	F550 CRIME SCENE TRUCK
0142-NB	POLICE DEPT.	2017	FORD	EXPLORER AWD
0183-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD
0186-NB	POLICE DEPT.	2017	FORD	EXPLORER AWD
0152-NB	POLICE DEPT.	2004	FORD	CROWN VIC.
0157-NB	POLICE DEPT.	2014	FORD	EXPLORER
0168-NB	POLICE DEPT.	2013	FORD	F-550
0170-NB	POLICE DEPT.	2004	FREIGHTLINER	M2
0177-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0192-NB	POLICE DEPT.	2015	CHEVY	TAHOE 4x4 SUV
0198-NB	POLICE DEPT.	2016	FORD	EXPLORER AWD
0201-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0202-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0203-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0205-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0206-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0207-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0208-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0204-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0209-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0210-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0211-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0212-NB	POLICE DEPT.	2017	FORD	EXPLORER

0216-NB	POLICE DEPT.	2017	FORD	EXPLORER
0217-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD
0219-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0220-NB	POLICE DEPT.	2018	FORD	EXPLORER AWD
0221-NB	POLICE DEPT.	2014	CHEVOLET	EXPRESS VAN
0222-NB	POLICE DEPT.	2011	FORD	EXPEDITION
0223-NB	POLICE DEPT.	2004	DODGE	UTILITY BODY 4WD
0224-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0225-NB	POLICE DEPT.	2017	FORD	EXPLORER
0226-NB	POLICE DEPT.	2007	FORD	CROWN VIC.
0227-NB	POLICE DEPT.	2007	FORD	CROWN VIC.
0228-NB	POLICE DEPT.	2007	FORD	CROWN VIC.
0229-NB	POLICE DEPT.	2017	FORD	EXPLORER
0229-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0230-NB	POLICE DEPT.	2016	FORD	EXPLORER
0238-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD
0240-NB	POLICE DEPT.	2015	FORD	EXPLORER AWD
0241-NB	POLICE DEPT.	2015	FORD	EXPLORER AWD
0243-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD
0244-NB	POLICE DEPT.	2008	FORD	EXPEDITION
0245-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0246-NB	POLICE DEPT.	2014	CHEVROLET	TAHOE 4x4 SUV
0247-NB	POLICE DEPT.	2003	GMC	SAVANNA CARGO VAN
0273-NB	POLICE DEPT.	2016	FORD	EXPLORER
0278-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD

0295-NB	POLICE DEPT.	2016	FORD	EXPLORER AWD
0300-NB	POLICE DEPT.	1997	FORD	E-250 VAN
0302-NB	POLICE DEPT.	2016	FORD	EXPLORER AWD
0305-NB	POLICE DEPT.	2003	FORD	ANIMAL TRANSPORT
0311-NB	POLICE DEPT.	2016	FORD	EXPLORER
0316-NB	POLICE DEPT.	2012	FORD	CAMPER COMMAND POST
0332-NB	POLICE DEPT.	2016	FORD	EXPLORER
0334-NB	POLICE DEPT.	2016	FORD	EXPLORER
0342-NB	POLICE DEPT.	2008	FORD	TAURUS SEL
0346-NB	POLICE DEPT.	2011	FORD	CROWN VIC.
0356-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD
0359-NB	POLICE DEPT.	1999	CHEVY	TAHOE
0364-NB	POLICE DEPT.	2017	FORD	EXPLORER AWD
0365-NB	POLICE DEPT.	2008	FORD	TAURUS SEL
0366-NB	POLICE DEPT.	2011	FORD	TAURUS
0367-NB	POLICE DEPT.	2004	FORD	TAURUS SE
0368-NB	POLICE DEPT.	2017	FORD	EXPLORER AWD
0369-NB	POLICE DEPT.	2011	FORD	TAURUS
0370-NB	POLICE DEPT.	2008	FORD	TAURUS SEL
0371-NB	POLICE DEPT.	2012	FORD	TAURUS
0372-NB	POLICE DEPT.	2004	FORD	TAURUS SE
0373-NB	POLICE DEPT.	2017	FORD	EXPLORER
0374-NB	POLICE DEPT.	2005	NISSAN	TITAN
0375-NB	POLICE DEPT.	2014	FORD	EXPLORER AWD

0376-NB	POLICE DEPT.	2007	FORD	CROWN VIC.
1ALBF5	POLICE DEPT.	2014	FORD	TAURUS
1ALBF6	POLICE DEPT.	2013	FORD	TAURUS
390ZHX	POLICE DEPT.	2013	FORD	TAURUS
391ZHX	POLICE DEPT.	2011	FORD	CROWN VIC.
425-ZDN	POLICE DEPT.	2012	CHEVROLET	CAPRICE
0215-NB	POLICE DEPT.	2011	FORD	TAURUS
242-NB	POLICE DEPT.	2002	CHEVROLET	TAHOE
429-YLT	POLICE DEPT.	2011	FORD	TAURUS
203-NB	POLICE DEPT.	2005	DODGE	DAKOTA
7ATPG3	POLICE DEPT.	2007	HYUNDAI	ENTOURAGE
842-XTJ	POLICE DEPT.	2005	CHRYSLER	300
AC26792	POLICE DEPT.	2016	FORD	EXPLORER
AC26793	POLICE DEPT.	2016	FORD	EXPLORER
AC87164	POLICE DEPT.	2016	FORD	TAURUS
AH78179	POLICE DEPT.	2017	FORD	TAURUS
AL94265	POLICE DEPT.	2008	ACURA	TL
AL94266	POLICE DEPT.	2008	HONDA	CIVIC
C125432	POLICE DEPT.	2003	GMC	3500 PICKUP
	POLICE DEPT.	1990	AM GENERAL	H-1 HUMV M1025/NG3SU1
	POLICE DEPT.	1996	AM GENERAL	H-1 HUMV M1025A2/96L360
0037599	SENIOR CENTER	2000	FORD-GOSHEN	COACH BUS
40964	SENIOR CENTER	2007	FORD	E-350 SUPER BUS
40968	SENIOR CENTER	2011	FORD	E-350 SUPER BUS

8479-CA	SENIOR CENTER	2010	TOYOTA	VENSA
8619-CN	SENIOR CENTER	2015	FORD	EDGE
0113-NB	STANLEY GOLF	1997	FORD	F350
0119-NB	STANLEY GOLF	2008	FORD	F-250 PICK-UP TRUCK
0034551	YOUTH SERVICES	1999	FORD	ECONOLINE CLUB
0041436	YOUTH SERVICES	2009	FORD	E-350 SD 3DR VAN
0134-NB	YOUTH SERVICES	2012	DODGE	GRAND CARAVAN SE
5C-6280	YOUTH SERVICES	1997	DODGE	CARAVAN
0092-NB	PUBLIC WORKS FLEET	2009	FORD	UTILITY BODY 4WD - F350
0093-NB	PUBLIC WORKS FLEET	2005	FORD	UTILITY BODY 4WD - F350
0097-NB	PUBLIC WORKS FLEET	2003	GMC	VAN
0103-NB	PUBLIC WORKS FLEET	2008	FORD	F-450 UTILITY TRUCK
0112-NB	PUBLIC WORKS FLEET	2017	FORD	F-650 ROLL BACK RECKER
0118-NB	PUBLIC WORKS FLEET	2001	FORD	UTILITY TRUCK
0277-NB	PUBLIC WORKS FLEET	2007	FORD	F150 PICKUP
0155-NB	PW POOL CAR	2002	VOLKS WAGON	JETTA
0094-NB	PW POOL CAR	2004	FORD	TAURUS
0318-NB	PW POOL TRUCK	1999	CHEVROLET	CHASSIS CAB
0131-NB	PW POOL CAR	2006	HONDA	CIVIC HYBRID
0167-NB	PW POOL SUV	2000	FORD	EXPEDITION

APPENDIX B

2018 Capital Equipment Bond

City of New Britain Capital Equipment Bond FY-19

Department	Vehicle / Equipment	Vehicles Primary Use	Quantity	Cost per Item	Total Cost
PUBLIC WORKS					
Field Services - Parks	60" Hustler Zero Turn Mowers	Mowing Grass	6	$9,900	$59,400
	Leaf Blowers Hurricane Z3	Leaf Blow/Blowing Off Parking Lots	2	$11,250	$22,500
	Trackless MT6 4x4 Articulated Tractor	Snow Removal/ boom mower	1	$160,000	$160,000
	Lowboy Dump Truck/Plow	MOVING MATERIALS/SNOW PLOWING	2	$80,000	$160,000
Field Services - Streets	6-Wheel Dump Truck (Front-line Snow Plow)	MOVING MATERIALS/SNOW PLOWING	2	$200,000	$400,000
	11'Rack Body With lift Gate	To Haul Equipment And To Plow Snow	1	$55,000	$55,000
	Heavy Duty Low Boy	To Haul Equipment And To Plow Snow	1	$80,000	$80,000
	Heavy Duty Pick-up with Plow & Lift-gate	Haul Equipment And Plow Snow	1	$47,000	$47,000
Field Services - Traffic	Heavy Duty/Sign Truck	Installation Of Traffic Signs	1	$75,000	$75,000
Utilities - Water Distribution			0	$0	$0
			0	$0	$0
Utilities - Water Quality			0	$0	$0
			0	$0	$0
Facilities & Energy					
	60" Hustler Zero Turn Mowers	To Mow City Owned Properties	1	$9,900	$9,900
	30' Electric Scissor Lift	To Service All City Building	1	$20,000	$20,000
RECREATION AND COMMUNITIY SERVICES					
	Transit Van	To move inflatable toys /equipment	1	$17,000	$17,000
Golf Course	Kubota Tractor L6060	To Aerate Greens and ferilize	0	$0	$0
Fairview Cemetery	60" Hustler Zero Turn Mowers	Mowing Grass	2	$9,900	$19,800
MUNICPAL DEVELOPMENT					
FIRE DEPARTMENT					
	Ford Expedition/Chevy Tahoe	Chief's car/Front Line Command Vehicles	3	$70,000	$210,000
	U T V	Off Road Vehicle for Off Road Rescues	1	$25,000	$25,000
POLICE DEPARTMENT					
	Ford Interceptor - Patrol Officer	PATROL	10	$53,896	$538,960
	Ford Taurus - Police Administration	ADMINISTRATION	2	$34,814	$69,628
				TOTAL:	$1,969,188

APPENDIX D
FLEET POLICIES

Public Works Department Policy

To: All NBPW Personnel
From: Mark E. Moriarty, PE. Director of Public Works
Date: December 4, 2017
Subject: Public Works Vehicle No Idling Policy and Guidelines for Seasonal Idling

Introduction:

Like agencies across the country New Britain Public Works has established a goal of eliminating unnecessary vehicle idling. There are many reasons for this. Vehicle idling wastes money, fuel, pollutes the environment, and running an engine at low speed (idling) also causes twice the wear on internal parts compared to driving at regular speeds. This waste results in unnecessary expenses on fuel, and the decreased lifecycles for vehicles and equipment.

By adopting this No Idling Policy, Public Works is demonstrating environmental stewardship, and eliminating wasteful spending. Everyone's cooperation is needed for the success of this policy, and the Department is open to having this policy revisited after we have more practical experience with it.

I. Public Works Vehicle and Equipment No Idling Policy

1. New Britain Public Works maintains a strict no idling policy regarding the use of its vehicles and equipment. Conformance with this policy means that **no discretionary idling is allowed** for City vehicles and equipment.

2. With few exceptions, vehicles shall not be left unattended while idling especially outside of the work area.

3. Some, non-discretionary, idling is allowed in the followings cases:

    a. When the vehicle is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control.
    b. When idling is necessary to accomplish the intended use of the vehicles or equipment and complete a work assignment.
    c. When idling is necessary to provide warning lights for work zone safety recognizing that this type of idling is only "non-discretionary" when idling is necessary to ensure a constant state of charge to the vehicle's battery. Vehicles equipped with LED traffic lights can be run continually for over two hours without the need to turn the vehicle on to recharge the battery.
    d. Weather related idling as discussed in the "Guidelines for Seasonal Idling Durations" portion of this document.
    e. Emergency response related idling as discussed in the "Guidelines for Idling during Winter Storm Operations and other Emergency Operations" portion of this document.

f. Other exemptions to the no idling policy are subject to the approval of the Director of Public Works.

II. Guidelines for Seasonal Idling Durations:

Seasonal variations to the City's no idling policy are necessary for the health and safety of our employees, and should take into consideration vehicle condition, and special circumstances during emergency operations such as Winter Storm Operations, cold weather Water Main breaks, and other related emergencies.

Heating and Cooling Shelter

In cases of extreme temperatures vehicle idling can be necessary for the health and safety of our employees as follows:

a. When the outdoor temperatures are below 25 degrees Fahrenheit or above 90 Fahrenheit idling is permissible related to the use of a vehicle for a heating or cooling shelter.

b. During the regular workday idling is permissible for a vehicle being used as a remote lunch/break room when the outside temperature necessitates (above 92 degrees F or below 40 degrees F). In these cases the vehicle can be warmed up by starting the vehicle 5 minutes prior to the work break, and then turned off at the conclusion of the break.

c. Intermittent idling is permissible for vehicles used as a remote office by supervisory staff, engineering division staff, and other approved staff when the outside temperatures are above 92 degrees Fahrenheit and below 40 degrees Fahrenheit. In these cases the vehicle shall not be run continuously unless the outside temperature drops below 25 degrees Fahrenheit.

Vehicles and Equipment with equipped with gasoline engines:

Cold Morning Starts - (parked outside)

Temperature - (Deg. F)	Idle Time Allowed - (min.)
33 Deg. F and above	No Idling
32 to 15 Deg. F	1 to 2 min.
14 to 5 Deg. F	2 to 4 min.
4 deg. F and below	5 to 10 min.

No idle warm up time shall occur on automotive units at temperatures above 32 degree Fahrenheit nor on units parked in an indoor garage/shop.

Some additional idle time may be allowed during cold morning starts for cases where frost has accumulated on a vehicle's windows that needs to be cleared before the vehicle can be operated safely.

Mid-Day Use (after initial warm up)

1. For gasoline engines turn the vehicle off if at any time it is going to be running and idling for 3 minutes or longer at temperatures of 25 and above.

2. Depending on outside temperatures and the length of time a vehicle has been shut off, it may become necessary to restart it to allow proper engine warm up. The idle warm up time shall never exceed the times listed for cold starts noted above.

Vehicles and Equipment with Diesel engines:

Cold Morning Starts - (parked outside)

Temperature - (Deg. F)	Idle Time Allowed - (min.)	Block heater
95 to 33 Deg. F	1 to 5 min.	not plugged in
32 to 10 Deg. F	10 to 15 min.	plugged in previous night
9 deg. F and below	15 to 30 min.	plugged in previous night

1 At temperatures of 32 degrees Fahrenheit and lower the initial start-up procedures shall conform to manufacture specifications and run at the lowest idle.

2 After 5 minutes of the engine being at the lowest idle, the operator should throttle up the engine's R.P.M. (1,000 to 1,200 rpm). The higher idle will seal the engine's turbo rings, eliminating the engine oil from clogging up the inside of turbo charger.

3 At this point the unit's hydraulic system should be cycled. This is achieved by fully extending and contracting each and every hydraulic cylinder. By completing this action the cold oil is warmed up, thus reducing the impact of cold, thick oil, shock loading the unit's hydraulic pump.

4 Operators shall only put a piece of equipment to work if the desired idle warm up time has been achieved, vehicle check completed and the hydraulic system cycled.

5 Some additional idle time may be allowed during cold morning starts for cases where frost has accumulated on a vehicles windows that needs to be cleared before the vehicle can be operated safely.

Mid-Day Use (after initial warm up)

1 A diesel unit that is not going to be worked for short periods of time should be left to idle - in all temperatures, with some limitations:

a. Interval Result

Up to 15 minutes not in use	let it run
Over 15 minutes not in use	shut the engine off

2 Once the operator determines the diesel-equipped unit is to be shut off, he or she must allow the engine to slow-idle for 1 to 2 minutes, this allows for a sufficient cool down period.

III. Idling during Winter Storm Operations, and Cold Weather Water Main Breaks, and other Weather Related Emergency Operations

Idling during Winter Storm Operations and other emergency response operations is approved per the discretion of the supervisor in charge of the operation. Even during emergency responses idling needs to be justifiable, and shall be limited depending on the weather and other factors. Supervisors need to be judicious about the idling of vehicles and equipment at emergency scenes and job sites. Not all the vehicles at the scene/site need to be idling.

IV. Verizon's Network Fleet Automatic Vehicle Locator (AVL) System

Public Works vehicles and equipment, as well as other City vehicles, have devices in them associated with an Automatic Vehicle Locator (AVL) System. The City used Verizon's Network Fleet program for its AVL system which is a web-based GPS based fleet tracking software, and that provides tracking of vehicle locations and times, speeds, hard stops and accelerations, fuel efficiency, as well as vehicle idling. The data from this system is collected is real-time, and also remains on file for future reference.

V. Compliance and Enforcement

The City's Fleet Manager and other Public Works supervisors will be doing routine checks about vehicle idling using the Network Fleet AVL System is system. It is typically expected that idling will involves less than 5% of each a vehicle's use noting the exceptions listed in this policy.

Each vehicle/equipment operator is responsible for compliance with this No Idling Policy, and supervisors in each division are responsible for the adherence and enforcement of the idling policy. If violations to this policy are reported they will be addressed accordingly, and if necessary corrective disciplinary actions will be taken. These shall follow City of New Britain and applicable union contracts, and shall be handled in a progressive manner.