



Goshen Common Council

6:00 p.m. June 1, 2021 Regular Meeting

Council Chambers, Police & Court Building, 111 East Jefferson Street, Goshen, Indiana

Call to Order by Mayor Jeremy Stutsman

Pledge of Allegiance

Roll: Megan Eichorn (District 4) Julia King (At-Large) Jim McKee (District 1)
Doug Nisley (District 2) Gilberto Pérez, Jr. (District 5) Matt Schrock (District 3)
Council President Brett Weddell (At-Large) Youth Advisor Hazany Palomino (Non-voting)

Approval of Minutes

Approval of Meeting Agenda

Privilege of the Floor

- I. Resolution 2021-16** Approve Disposal of Real Estate in the 200-Block of West Monroe Street
- II. Resolution 2021-20** Preliminary Finding Concerning Lippert Components Manufacturing, Inc.'s Compliance with Statement of Benefits for Personal Property
- Staff Memo (Marks)
 - Staff Memo (Brinson)
 - LCI Industries Letter
 - Form CF-1
- III. Resolution 2021-21** Preliminary Finding Concerning Benteler Automotive Corporation's Compliance with Statement of Benefits for Personal Property (Under Benteler II ERA)
- Staff Memo (Brinson)
 - Forms CF-1
 - Benteler / Baden Tax Mgmt Letter
- IV. Resolution 2021-22** Preliminary Finding Concerning Benteler Automotive Corporation's Compliance with Statement of Benefits for Personal Property (Under Benteler III ERA)



V. Ordinance 5083 (1st Reading) Amend Ordinance 5065, 2021 Compensation for Civil City and Utilities Employees, as amended by Ordinance 5081, to Clarify Payment of ASE Certification Bonus

- Clerk-Treasurer Memo (Scharf)

VI. Ordinance 5088 (1st Reading) Repeal Bicycle Registration Program and Bicycle Registration Fee Under Goshen City Code Title 4, Article 7, Chapter 1

Discussion Item: City of Goshen Government Operations Climate Action Plan

Elected Official Reports

Adjournment

COUNCIL RESOLUTION 2021-16

Approve Disposal of Real Estate in the 200-Block of West Monroe Street

WHEREAS the City of Goshen for the Use and Benefit of its Department of Redevelopment acquired title to the real estate in the 200-Block of West Monroe Street as depicted in Exhibit A (Subject Real Estate) to carry out an economic development area project.

WHEREAS the projects along West Monroe Street, River Race Drive and the Mill Race Canal affecting the Subject Real Estate have been completed.

WHEREAS the Redevelopment Commission wishes to dispose of the remainder of the Subject Real Estate.

NOW, THEREFORE, BE IT RESOLVED that the Goshen Common Council approves the disposal of the Subject Real Estate in the 200-Block of West Monroe Street as depicted in Exhibit A by the Goshen Redevelopment Commission. The Redevelopment Commission shall offer the Subject Real Estate for sale to the public in accordance with Indiana Code § 36-7-14-22.

PASSED by the Goshen Common Council on May 18, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on May _____, 2021, at _____ a.m./p.m.

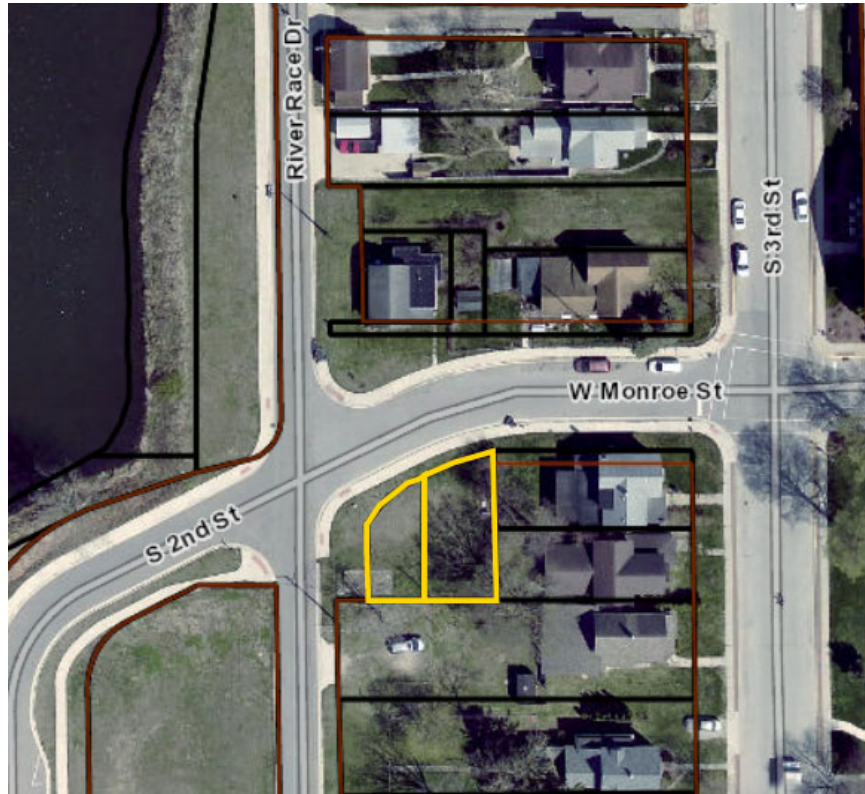
Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on May _____, 2021.

Jeremy P. Stutsman, Mayor

EXHIBIT A

**Subject Real Estate
in the 200-Block of West Monroe Street**





CITY OF GOSHEN LEGAL DEPARTMENT

City Annex
204 East Jefferson Street, Suite 2
Goshen, Indiana 46528-3405

Phone (574) 537-3820 • Fax (574) 537-3817 • TDD (574) 534-3185
www.goshenindiana.org

June 1, 2021

To: Goshen Common Council

From: Shannon Marks, Legal Compliance Administrator

Subject: Preliminary Findings Concerning Compliance with Statement of Benefits for Personal Property

The Common Council has designated various areas in the City as Economic Revitalization Areas and authorized a tax phase-in of certain real property and/or personal property for the property owners/taxpayers. Each year, a property owner/taxpayer receiving a deduction in their assessed valuation due to a tax phase-in must file with the Community Development Director an annual report for the previous calendar year which includes the Compliance with Statement of Benefits form (CF-1). Attached to this memo are memos from Mark Brinson and the CF-1s for Personal Property related to previously approved tax phase-ins that have been filed by Lippert Components Manufacturing, Inc. and Benteler Automotive Corporation.

In accordance with Ordinance 4630, if the information provided by the property owner/taxpayer does not demonstrate substantial compliance, the Community Development Director is to forward the information to the Council to make a preliminary finding of whether the property owner/taxpayer has substantially complied with the Statement of Benefits and the commitments made to the City to receive the tax phase-in, or whether any failure to substantially comply was due to factors beyond the property owner/taxpayer's control.

Included in meeting packet are three separate resolutions (one for Lippert and two for Benteler) which require the Council to make a preliminary finding based on either option (1) or option (2).

Option (1)

The property owner/taxpayer is in substantial compliance with the Statement of Benefits, or that the failure to substantially comply was caused by factors beyond the control of the property owner/taxpayer, and therefore, the property owner/taxpayer is considered to be in substantial compliance.

Should the Council's finding be based on option (1), the property owner/taxpayer is considered to be in substantial compliance with the Statement of Benefits. The City will then sign off on the CF-1 and the property owner/taxpayer may file for the tax deduction. No further action is required by the Council.

Option (2)

The property owner/taxpayer HAS NOT made reasonable efforts to substantially comply with the Statement of Benefits and the failure to substantially comply WAS NOT caused by factors beyond the control of the property owner/taxpayer. Therefore, the property owner/taxpayer IS NOT considered to be in substantial compliance with the Statement of Benefits.

Should the Council's finding be based on option (2), a notice must be given to the property owner/taxpayer that includes an explanation of the reason(s) for the Council's preliminary finding and a hearing is scheduled for an upcoming Council meeting. At the hearing, the property owner/taxpayer and other interested parties may present testimony and other evidence on the issues of whether the property owner/taxpayer is in substantial compliance with the Statement of Benefits and whether any failure to be in substantial compliance was caused by factors beyond the control of the property owner/taxpayer.

If, after the hearing, the Council determines the property owner/taxpayer to be in substantial compliance, then the City will then sign off on the CF-1 and property owner/taxpayer may file for the tax deduction. If the Council determines the property owner/taxpayer has not made reasonable efforts to comply with the Statement of Benefits, the Council may take action to terminate the property owner/taxpayer's tax phase-in.



**Department of Community Development
CITY OF GOSHEN**

204 East Jefferson Street, Suite 6 • Goshen, IN 46528-3405

Phone (574) 537-3824 • Fax (574) 533-8626

communitydevelop@goshencity.com • www.goshenindiana.org

Memo

To: Goshen City Council

From: Mark Brinson

Subject: Lippert Components Compliance with Statement of Benefits

Date: May 18, 2021

Lippert Components was granted a tax phase-in for new manufacturing equipment in 2013. The phase-in included three manufacturing locations in Goshen: 2703 College Ave., 1701 Century Drive and 2475 Kercher Road.

Below is a summary of the employment and investment included in the original Statement of Benefits that was submitted with the phase-in application and incorporated into Resolution 2013-19. Also shown is the actual employment and investment as stated in the Compliance with Statement of Benefits (CF-1) filed for 2020. These figures are for all three facilities combined:

Goal vs. Actual	Manufacturing Equipment Investment	Job Retention	New Employees
As estimated on SB-1	\$10,000,000	1078	376
Actual (end of 2020)	\$24,636,268	890	0
Difference	\$14,636,268	(188)	(376)

Lippert exceeded the investment goal, but actually reduced the number of employees at these locations. The company has provided a letter explaining why the employment numbers were below the estimate.

As explained in the attached memo from the Legal Department, the Council will need to review the CF-1 and determine whether Lippert has substantially complied with the Statement of Benefits.



3501 County Road 6 East
Elkhart, IN 46514
(574) 535-1125
(574) 217-0181 (Fax)

May 14, 2021

Mr. Mark Brinson,
Community Development Director
204 East Jefferson Street
Goshen, IN 46528

RE: Indiana Tax Form CF-1 / PP, Compliance with Statement of Benefits, Personal Property
City of Goshen Resolution # 2013-19.
Address: 2703 College Avenue, 1701 Century Drive and 2475 Kercher Road, Goshen

Dear Mr. Brinson,

The purpose of this letter is to support the Lippert Components Mfg., Inc. (LCMI) Form CF-1 / PP related to the property tax abatement for operations located at 2703 College Avenue, 1701 Century Drive and 2475 Kercher Road, Goshen as approved by Resolution 2013-19.

Total Employees

Per the SB-1, Total employees expected to be retained were 1,078 plus projected number of new employees of 376 for a total of 1,454 and total salaries of \$45,521,144.

Per the CF-1, Actual employees retained were 890 plus new employees of -0-for a total of 890 and total salaries of \$39,096,632. This was an increase of 49 employees over the prior year.

As such, the company fell short of its projected total # of employees and fell short of the projected salary by \$6,424,512

Cost and Values

Per the SB-1, Total values before project was \$28,813,584 plus projected value of proposed project of \$10,000,000 for a total value upon completion of project \$38,813,584.

Per the CF-1, Total values before project was \$28,813,584 plus actual value of proposed project of \$24,636,268 for a total value upon completion of project \$53,449,852.

As such, the company exceeded the projected value of the proposed project by \$14,636,268.

Other Factors to Consider

The company has invested substantially in the City of Goshen as it continues to play a vital role in our manufacturing operations.

The company exceeded the project spend by \$14.6 million during the project timeline.

May 14, 2021

Page 2

In addition, the company spent an additional \$25.7 million in real estate improvements and equipment at the abatement location after the completion of the project on which the company is paying property taxes. This investment generates over \$350,000 of additional annual of property tax revenue to the City, Schools, and County that Lippert did not request an abatement on.

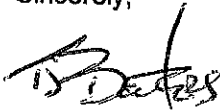
In addition to the spend at the project location, Lippert has also invested heavily in other projects in the city of Goshen. Over the past three years, Lippert has spent \$41M in real and personal property improvements at Plant 19 (mostly for our new beam line), over \$14M in improvements at Plant 228 (mostly for our new glass automation line), and over \$16M at other facilities located in the city of Goshen. This investment generates over \$640,000 of additional annual property tax revenue to the City, Schools, and County that Lippert did not request an abatement on.

Lastly, please note that the company currently employs 4,281 individuals in the City of Goshen.

Based on the above, the company contends that its investment has met the threshold of substantial compliance and respectfully requests that the City Council approve the current year Form CF-1 / PP as being in substantial compliance.

Thank you in advance for the continued support.

Sincerely,



Thomas J. Bauters, CPA
Assistant Treasurer & Tax Director





**COMPLIANCE WITH STATEMENT OF BENEFITS
PERSONAL PROPERTY**

State Form 51765 (R5 / 1-21)

Prescribed by the Department of Local Government Finance

PRIVACY NOTICE
This form contains confidential information pursuant to IC 6-1.1-35-9 and IC 6-1.1-12.1-5.6.

FORM CF-1 / PP
January 1, 2021

- INSTRUCTIONS:**
1. Property owners whose Statement of Benefits was approved must file this form with the local Designating Body to show the extent to which there has been compliance with the Statement of Benefits. (IC 6-1.1-12.1-5.6)
 2. This form must be filed with the Form 103-ERA Schedule of Deduction from Assessed Value between January 1 and May 17, 2021, unless a filing extension under IC 6-1.1-3.7 has been granted. A person who obtains a filing extension must file between January 1 and the extended due date of each year.
 3. With the approval of the designating body, compliance information for multiple projects may be consolidated on one (1) compliance (CF-1).

SECTION 1 TAXPAYER INFORMATION	
Name of taxpayer Lippert Components Manufacturing, Inc.	County Elkhart
Address of taxpayer (number and street, city, state, and ZIP code) 3501 County Road 6 E, Elkhart, IN 46514	DLGF taxing district number 015
Name of contact person Tom Bauters	Telephone number (574) 312-6159

SECTION 2 LOCATION AND DESCRIPTION OF PROPERTY		
Name of designating body Goshen Common Council	Resolution number 2013-19 & 2013-16	Estimated start date (month, day, year) 04/01/2013
Location of property 2703 College Ave/ 1701 Century Dr		Actual start date (month, day, year) 04/01/2013
Description of new manufacturing equipment, or new research and development equipment, or new information technology equipment, or new logistical distribution equipment to be acquired. Equipment is primarily painting equipment and dust collectors		Estimated completion date (month, day, year) 12/31/2016
		Actual completion date (month, day, year) 12/31/2016

SECTION 3 EMPLOYEES AND SALARIES		
EMPLOYEES AND SALARIES	AS ESTIMATED ON SB-1	ACTUAL
Current number of employees	1078	890
Salaries	35,315,000.00	39,096,632.00
Number of employees retained	1078	890
Salaries	35,315,000.00	39,096,632.00
Number of additional employees	376	0
Salaries	10,206,144.00	0.00

SECTION 4 COST AND VALUES								
AS ESTIMATED ON SB-1	MANUFACTURING EQUIPMENT		R & D EQUIPMENT		LOGIST DIST EQUIPMENT		IT EQUIPMENT	
	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE
Values before project								
Plus: Values of proposed project								
Less: Values of any property being replaced								
Net values upon completion of project								
ACTUAL	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	ASSESSED VALUE
Values before project								
Plus: Values of proposed project								
Less: Values of any property being replaced								
Net values upon completion of project								

NOTE: The COST of the property is confidential pursuant to IC 6-1.1-12.1-5.6(c).

SECTION 5 WASTE CONVERTED AND OTHER BENEFITS PROMISED BY THE TAXPAYER		
WASTE CONVERTED AND OTHER BENEFITS	AS ESTIMATED ON SB-1	ACTUAL
Amount of solid waste converted		
Amount of hazardous waste converted		
Other benefits:		

SECTION 6 TAXPAYER CERTIFICATION		
I hereby certify that the representations in this statement are true.		
Signature of authorized representative <i>TS DOSTO, CPA</i>	Title ASSISTANT TREASURER + TAX DIRECTOR	Date signed (month, day, year) 05.14.2021

OPTIONAL: FOR USE BY A DESIGNATING BODY WHO ELECTS TO REVIEW THE COMPLIANCE WITH STATEMENT OF BENEFITS (FORM CF-1)

INSTRUCTIONS: (IC 6-1.1-12.1-5.9)

1. Within forty-five (45) days after receipt of this form, the designating body may determine whether or not the property owner has substantially complied with the Statement of Benefits.
2. If the property owner is found **NOT** to be in substantial compliance, the designating body shall send the property owner written notice. The notice must include the reasons for the determination and the date, time and place of a hearing to be conducted by the designating body. If a notice is mailed to a property owner, a copy of the written notice will be sent to the county assessor and the county auditor.
3. Based on the information presented at the hearing, the designating body shall determine whether or not the property owner has made reasonable effort to substantially comply with the Statement of Benefits and whether any failure to substantially comply was caused by factors beyond the control of the property owner.
4. If the designating body determines that the property owner has **NOT** made reasonable effort to comply, then the designating body shall adopt a resolution terminating the deduction. The designating body shall immediately mail a certified copy of the resolution to: (1) the property owner; (2) the county auditor; and (3) the county assessor.

We have reviewed the CF-1 and find that:			
<input type="checkbox"/> the property owner IS in substantial compliance <input type="checkbox"/> the property owner IS NOT in substantial compliance <input type="checkbox"/> other (specify) _____			
Reasons for the determination (attach additional sheets if necessary)			
Signature of authorized member			Date signed (month, day, year)
Attested by:		Designating body	
If the property owner is found not to be in substantial compliance, the property owner shall receive the opportunity for a hearing. The following date and time has been set aside for the purpose of considering compliance.			
Time of hearing	<input type="checkbox"/> AM <input type="checkbox"/> PM	Date of hearing (month, day, year)	Location of hearing

HEARING RESULTS (to be completed after the hearing)	
<input type="checkbox"/> Approved	<input type="checkbox"/> Denied (see instruction 5 above)
Reasons for the determination (attach additional sheets if necessary)	
Signature of authorized member	
Date signed (month, day, year)	
Attested by:	
Designating body	

APPEAL RIGHTS [IC 6-1.1-12.1-5.9(e)]
A property owner whose deduction is denied by the designating body may appeal the designating body's decision by filing a complaint in the office of the clerk of Circuit or Superior Court together with a bond conditioned to pay the costs of the appeal if the appeal is determined against the property owner.

COUNCIL RESOLUTION 2021-20

**Preliminary Finding Concerning Lippert Components Manufacturing, Inc.'s
Compliance with Statement of Benefits for Personal Property**

WHEREAS by Resolutions 2013-16 and 2013-19, the Goshen Common Council designated the area located at 2703 College Avenue, 1701 Century Drive, and 2475 Kercher Road in Goshen as the Lippert II Economic Revitalization Area and authorized a tax phase-in of certain personal property taxes for Lippert Components Manufacturing, Inc. (Lippert).

WHEREAS Lippert submitted the required annual Compliance with Statement of Benefits for Personal Property (CF-1) for 2020 to the City on or about May 14, 2021.

WHEREAS the Community Development Director believes the CF-1 does not demonstrate Lippert's substantial compliance with the Statement of Benefits submitted and approved as part of the original designation.

WHEREAS the Goshen Common Council is to make a preliminary finding of whether Lippert has substantially complied with Statement of Benefits and commitments made to the City of Goshen to receive the tax phase-in, or whether any failure to substantially comply with the Statement of Benefits and commitments was due to factors beyond Lippert's control.

NOW, THEREFORE, BE IT RESOLVED, after review of Lippert Components Manufacturing, Inc.'s CF-1 and any information provided, the Goshen Common Council finds that (*check one*):

_____ Lippert Components Manufacturing, Inc. is in substantial compliance with the Statement of Benefits, or that Lippert's failure to be in full compliance was caused by factors beyond Lippert's control, and therefore, Lippert is considered to be in substantial compliance.

_____ Lippert Components Manufacturing, Inc. HAS NOT made reasonable efforts to substantially comply with the Statement of Benefits, and the failure to substantially comply WAS NOT caused by factors beyond the control of Lippert. Therefore, a written notice shall be mailed to Lippert which includes an explanation of the reason(s) for the Common Council's preliminary finding, and the Common Council shall hold a hearing for the purpose of further considering Lippert's compliance with the Statement of Benefits.

PASSED by the Goshen Common Council on _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on _____, 2021, at
_____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on _____, 2021.

Jeremy P. Stutsman, Mayor



Department of Community Development
CITY OF GOSHEN
 204 East Jefferson Street, Suite 6 • Goshen, IN 46528-3405

 Phone (574) 537-3824 • Fax (574) 533-8626
 communitydevelop@goshencity.com • www.goshenindiana.org

Memo

To: Goshen City Council
From: Mark Brinson
Subject: Benteler Automotive Compliance with Statement of Benefits
Date: May 17, 2021

Resolution 2020-04

In 2020 Benteler Automotive was granted a tax phase-in for new manufacturing equipment. The project involved the investment of approximately \$26 million in new equipment to be installed at the Goshen facility located at 910 South Eisenhower Drive. In the phase-in application Benteler stated they would complete the investment by the end of 2020. In addition to the investment in equipment, Benteler committed to retain 272 jobs at the Goshen facility. No new jobs were planned.

As required by State Statute, Benteler has filed their annual Compliance with Statement of Benefits (CF-1) for 2020. As summarized below, they did not meet the investment or job goals:

Goal vs. Actual	Manufacturing Equipment Investment	Job Retention
As estimated on SB-1	\$26,064,506	272
Actual (end of 2020)	\$10,983,687	230
Difference	(\$15,080,819)	(42)

Resolution 2011-40

Benteler was also granted a tax phase-in for manufacturing equipment in 2011. Their compliance with the Statement of Benefits is as follows:

Goal vs. Actual	Manufacturing Equipment Investment	Job Retention	New Employees
As estimated on SB-1	\$32,201,000	304	98
Actual (end of 2020)	\$24,864,584	230	0
Difference	(\$7,336,416)	74	98

As explained in the attached memo from the Legal Department, the Council will need to review both CF-1s and determine whether Benteler has substantially complied with the Statement of Benefits.



May 27, 2021

RE: BENTELER Automotive Corporation
2650 N. Opdyke Road, Suite B
Auburn Hills, MI 48326

Dear Common Council:

We ask for your consideration regarding the employment information reported on the 2021 CF-1 Forms. 2020 presented several challenges that resulted in unsteady employment levels. We experienced a disruption in service due to both a decrease in demand, and a significant increase in cost, all due to COVID.

Our facility was closed for 44.5 business days and we had force layoffs for 69 individuals due to Covid and customer volume reduction (-2 Overheads, -28 Indirects, -35 Directs & -4 Temps). During this time, many of our employees found work elsewhere and did not return once the facility re-opened. Prior to the temporary closure (February 2020), our headcount level was 270. We dropped as low as 24 active employees in April 2020. Since re-opening, we have been struggling to reach our previous level of employment. Additionally, the pandemic caused a global shortage of semiconductors to our OEM's which is causing a reduction in throughput at the OEMS, filtering down to the Tier 1 supply base reducing demand for our products.

We have made many efforts to increase our level of employment, the most significant highlighted below:

- We have participated in 2 job fairs in May but only 3 resumes were received
- We have 5 staffing agencies working to assist us and we are also direct hiring
- We have also tried various other avenues to recruit such as: Goshen Merit School, Elkhart Career Center, Vocational Rehab in Elkhart (they in turn work with ADEC, Benchmark, Logan Center and Goodwill Industries)
- We are reaching out to former employees to see if they would be interested in coming back to work
- We are offering bonuses to our employees, if their friend or family come to work for Benteler
- For temporary employees, we are also offering a bonus if they will stay and work 90 workdays
- We have also increased our starting wage for operators who are direct hires and we increased the starting wage for our temporary employees who are operators or material handlers
- We were able to bring our headcount to 230 by 2020 year end
- We currently have a headcount as of April 30, 2021 of 216 due to the semiconductor shortage
- We are expecting to reach 260 full-time employees by November 2021 due to a volume production increases we are expecting from a new program, Ford Bronco, which was delayed but expected to start June 2021 and be at full capacity by September 2021

Our Goshen plant had \$19M in CIP on 12/31/2020, the spending was achieved, but assets were not placed into service in 2020.

We ask that you consider these factors as you make your determination regarding the abatement for this year. We are working towards meeting our promised level of employment by the end of the year.

Should you have any questions, please feel free to contact me at (260) 969-2572 or stemplar@badentax.com.

Thank you for your assistance in this matter.

Respectfully,

A handwritten signature in cursive script that reads 'Sabrina Templar'.

Sabrina Templar, CPA



Dallas TX



6920 Pointe Inverness Way, Ste 301
Fort Wayne, Indiana 46804



Tampa FL



COMPLIANCE WITH STATEMENT OF BENEFITS PERSONAL PROPERTY

State Form 51765 (R5 / 1-21)
Prescribed by the Department of Local Government Finance

PRIVACY NOTICE
This form contains confidential information pursuant to IC 6-1.1-35-9 and IC 6-1.1-12.1-5.6.

FORM CF-1 / PP

JANUARY 1, 2021

- INSTRUCTIONS:**
1. Property owners whose Statement of Benefits was approved must file this form with the local Designating Body to show the extent to which there has been compliance with the Statement of Benefits. (IC 6-1.1-12.1-5.6)
 2. This form must be filed with the Form 103-ERA Schedule of Deduction from Assessed Value between January 1, and May 17, 2021, unless a filing extension under IC 6-1.1-3.7 has been granted. A person who obtains a filing extension must file between January 1, and the extended due date of each year.
 3. With the approval of the designating body, compliance information for multiple projects may be consolidated on one (1) compliance (CF-1).

SECTION 1 TAXPAYER INFORMATION								
Name of taxpayer BENTELER AUTOMOTIVE CORPORATION						County ELKHART		
Address of taxpayer (street and number, city, state and ZIP code) 910 SOUTH EISENHOWER DRIVE GOSHEN IN 46526-5351						DLGF taxing district number 30-GOSHEN -015		
Name of contact person SEE ATTACHED						Telephone number		
SECTION 2 LOCATION AND DESCRIPTION OF PROPERTY								
Name of designating body GOSHEN COMMON COUNCIL				Resolution number 2011-24/2011-40		Estimated start date (month, day, year) 01/01/2012		
Location of property 910 S. EISENHOWER DRIVE GOSHEN IN 46526						Actual start date (month, day, year) / /		
Description of new manufacturing equipment, or new research and development equipment, or new information technology equipment, or new logistical distribution equipment to be acquired. HOT STAMPING EQUIPMENT, SHOT BLAST MACHINE, WELD CELLS, LASER CELLS, AND CMM MACHINE						Estimated completion date (month, day, year) 12/31/2013		
						Actual completion date (month, day, year) / /		
SECTION 3 EMPLOYEES AND SALARIES								
EMPLOYEES AND SALARIES						AS ESTIMATED ON SB-1		ACTUAL
Current number of employees						304		230
Salaries						17,787,040		13,984,421
Number of employees retained						304		230
Salaries						17,787,040		13,984,421
Number of additional employees						98		
Salaries						4,705,274		
SECTION 4 COST AND VALUES								
AS ESTIMATED ON SB-1	MANUFACTURING EQUIPMENT		R & D EQUIPMENT		LOGIST DIST EQUIPMENT		IT EQUIPMENT	
	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE
Values before project		24,187,530						
Plus: Values of proposed project		32,201,000						
Less: Values of any property being replaced								
Net values upon completion of project		56,388,530						
ACTUAL		ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE
Values before project		16,587,901						
Plus: Values of proposed project		7,459,375						
Less: Values of any property being replaced								
Net values upon completion of project		24,047,276						
NOTE: The COST of the property is confidential pursuant to IC 6-1.1-12.1-5.6 (c).								
SECTION 5 WASTE CONVERTED AND OTHER BENEFITS PROMISED BY THE TAXPAYER								
WASTE CONVERTED AND OTHER BENEFITS						AS ESTIMATED ON SB-1		ACTUAL
Amount of solid waste converted								
Amount of hazardous waste converted								
Other benefits:								
SECTION 6 TAXPAYER CERTIFICATION								
I hereby certify that the representations in this statement are true.								
Signature of authorized representative <i>[Signature]</i>				Title S. Tom Range		Date signed (month, day, year) 4-30-2021		

OPTIONAL: FOR USE BY A DESIGNATING BODY WHO ELECTS TO REVIEW THE COMPLIANCE WITH STATEMENT OF BENEFITS (FORM CF-1)

INSTRUCTIONS: (IC 6-1.1-12-5.9)

1. Within forty-five (45) days after receipt of this form, the designating body may determine whether or not the property owner has substantially complied with the Statement of Benefits.
2. If the property owner is found **NOT** to be in substantial compliance, the designating body shall send the property owner written notice. The notice must include the reasons for the determination and the date, time and place of a hearing to be conducted by the designating body. If a notice is mailed to a property owner, a copy of the written notice will be sent to the County Assessor and the County Auditor.
3. Based on the information presented at the hearing, the designating body shall determine whether or not the property owner has made reasonable effort to substantially comply with the Statement of Benefits and whether any failure to substantially comply was caused by factors beyond the control of the property owner.
4. If the designating body determines that the property owner has **NOT** made reasonable effort to comply, then the designating body shall adopt a resolution terminating the deduction. The designating body shall immediately mail a certified copy of the resolution to: (1) the property owner; (2) the county auditor; and (3) the county assessor.

We have reviewed the CF-1 and find that:			
<input type="checkbox"/> the property owner IS in substantial compliance			
<input type="checkbox"/> the property owner IS NOT in substantial compliance			
<input type="checkbox"/> other (specify) _____			
Reasons for the determination (attach additional sheets if necessary)			
Signature of authorized member			Date signed (month, day, year)
Attested by:		Designating body	
If the property owner is found not to be in substantial compliance, the property owner shall receive the opportunity for a hearing. The following date and time has been set aside for the purpose of considering compliance.			
Time of hearing	<input type="checkbox"/> AM <input type="checkbox"/> PM	Date of hearing (month, day, year)	Location of hearing
HEARING RESULTS (to be completed after the hearing)			
<input type="checkbox"/> Approved		<input type="checkbox"/> Denied (see instruction 5 above)	
Reasons for determination (attach additional sheets if necessary)			
Signature of authorized member			Date signed (month, day, year)
Attested by:		Designating body	
APPEAL RIGHTS [IC 6-1.1-12.1-5.9(e)]			
A property owner whose deduction is denied by the designating body may appeal the designating body's decision by filing a complaint in the office of the Circuit or Superior Court together with a bond conditioned to pay the costs of the appeal if the appeal is determined against the property owner.			



COMPLIANCE WITH STATEMENT OF BENEFITS PERSONAL PROPERTY

State Form 51765 (R5 / 1-21)
Prescribed by the Department of Local Government Finance

PRIVACY NOTICE
This form contains confidential information pursuant to IC 6-1.1-35-9 and IC 6-1.1-12.1-5.6.

FORM CF-1 / PP
JANUARY 1, 2021

- INSTRUCTIONS:**
1. Property owners whose Statement of Benefits was approved must file this form with the local Designating Body to show the extent to which there has been compliance with the Statement of Benefits. (IC 6-1.1-12.1-5.6)
 2. This form must be filed with the Form 103-ERA Schedule of Deduction from Assessed Value between January 1, and May 17, 2021, unless a filing extension under 1C 6-1.1-3.7 has been granted. A person who obtains a filing extension must file between January 1, and the extended due date of each year.
 3. With the approval of the designating body, compliance information for multiple projects may be consolidated on one (1) compliance (CF-1).

SECTION 1 TAXPAYER INFORMATION								
Name of taxpayer BENTELEER AUTOMOTIVE CORPORATION						County ELKHART		
Address of taxpayer (street and number, city, state and ZIP code) 910 SOUTH EISENHOWER DRIVE GOSHEN IN 46526-5351						DLGF taxing district number 30-GOSHEN -015		
Name of contact person SEE ATTACHED						Telephone number		
SECTION 2 LOCATION AND DESCRIPTION OF PROPERTY								
Name of designating body GOSHEN COMMON COUNCIL				Resolution number RES 2020-01 &		Estimated start date (month, day, year) 12/18/2019		
Location of property 910 S. EISENHOWER DRIVE GOSHEN IN 46526				2020-04		Actual start date (month, day, year) / /		
Description of new manufacturing equipment, or new research and development equipment, or new information technology equipment, or new logistical distribution equipment to be acquired. SEE ATTACHED						Estimated completion date (month, day, year) 12/31/2020		
						Actual completion date (month, day, year) / /		
SECTION 3 EMPLOYEES AND SALARIES								
EMPLOYEES AND SALARIES						AS ESTIMATED ON SB-1	ACTUAL	
Current number of employees						272	230	
Salaries						19,836,110	13,984,421	
Number of employees retained						272	230	
Salaries						19,836,110	13,984,421	
Number of additional employees								
Salaries								
SECTION 4 COST AND VALUES								
AS ESTIMATED ON SB-1	MANUFACTURING EQUIPMENT		R & D EQUIPMENT		LOGIST DIST EQUIPMENT		IT EQUIPMENT	
	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE
Values before project		23,298,488						
Plus: Values of proposed project		18,245,154						
Less: Values of any property being replaced								
Net values upon completion of project		41,543,642						
ACTUAL	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE	COST	ASSESSED VALUE
Values before project		20,752,170						
Plus: Values of proposed project		3,295,106						
Less: Values of any property being replaced								
Net values upon completion of project		24,047,276						
NOTE: The COST of the property is confidential pursuant to IC 6-1.1-12.1-5.6 (c).								
SECTION 5 WASTE CONVERTED AND OTHER BENEFITS PROMISED BY THE TAXPAYER								
WASTE CONVERTED AND OTHER BENEFITS						AS ESTIMATED ON SB-1	ACTUAL	
Amount of solid waste converted								
Amount of hazardous waste converted								
Other benefits:								
SECTION 6 TAXPAYER CERTIFICATION								
I hereby certify that the representations in this statement are true.								
Signature of authorized representative 				Title Sr. Vice Manager		Date signed (month, day, year) 4-30-2021		

OPTIONAL: FOR USE BY A DESIGNATING BODY WHO ELECTS TO REVIEW THE COMPLIANCE WITH STATEMENT OF BENEFITS (FORM CF-1)

INSTRUCTIONS: (IC 6-1.1-12-5.9)

1. Within forty-five (45) days after receipt of this form, the designating body may determine whether or not the property owner has substantially complied with the Statement of Benefits.
2. If the property owner is found **NOT** to be in substantial compliance, the designating body shall send the property owner written notice. The notice must include the reasons for the determination and the date, time and place of a hearing to be conducted by the designating body. If a notice is mailed to a property owner, a copy of the written notice will be sent to the County Assessor and the County Auditor.
3. Based on the information presented at the hearing, the designating body shall determine whether or not the property owner has made reasonable effort to substantially comply with the Statement of Benefits and whether any failure to substantially comply was caused by factors beyond the control of the property owner.
4. If the designating body determines that the property owner has **NOT** made reasonable effort to comply, then the designating body shall adopt a resolution terminating the deduction. The designating body shall immediately mail a certified copy of the resolution to. (1) the property owner; (2) the county auditor; and (3) the county assessor.

We have reviewed the CF-1 and find that:			
<input type="checkbox"/> the property owner IS in substantial compliance <input type="checkbox"/> the property owner IS NOT in substantial compliance <input type="checkbox"/> other (specify) _____			
Reasons for the determination (attach additional sheets if necessary)			
Signature of authorized member			Date signed (month, day, year)
Attested by:		Designating body	
If the property owner is found not to be in substantial compliance, the property owner shall receive the opportunity for a hearing. The following date and time has been set aside for the purpose of considering compliance.			
Time of hearing	<input type="checkbox"/> AM <input type="checkbox"/> PM	Date of hearing (month, day, year)	Location of hearing
HEARING RESULTS (to be completed after the hearing)			
<input type="checkbox"/> Approved <input type="checkbox"/> Denied (see instruction 5 above)			
Reasons for determination (attach additional sheets if necessary)			
Signature of authorized member			Date signed (month, day, year)
Attested by:		Designating body	
APPEAL RIGHTS [IC 6-1.1-12.1-5.9(e)]			
A property owner whose deduction is denied by the designating body may appeal the designating body's decision by filing a complaint in the office of the Circuit or Superior Court together with a bond conditioned to pay the costs of the appeal if the appeal is determined against the property owner.			

COUNCIL RESOLUTION 2021-21

**Preliminary Finding Concerning Benteler Automotive Corporation's
Compliance with Statement of Benefits for Personal Property
(Under Benteler II ERA)**

WHEREAS by Resolutions 2011-24 and 2011-40, the Goshen Common Council designated the area located at 910 Eisenhower Drive South in Goshen as the Benteler II Economic Revitalization Area and authorized a tax phase-in of certain personal property taxes for Benteler Automotive Corporation (Benteler).

WHEREAS Benteler submitted the required annual Compliance with Statement of Benefits for Personal Property (CF-1) for 2020 to the City on or about April 30, 2021.

WHEREAS the Community Development Director believes the CF-1 does not demonstrate Benteler's substantial compliance with the Statement of Benefits submitted and approved as part of the original designation.

WHEREAS the Goshen Common Council is to make a preliminary finding of whether Benteler has substantially complied with Statement of Benefits and commitments made to the City of Goshen to receive the tax phase-in, or whether any failure to substantially comply with the Statement of Benefits and commitments was due to factors beyond Benteler's control.

NOW, THEREFORE, BE IT RESOLVED, after review of Benteler Automotive Corporation's CF-1 and any information provided, the Goshen Common Council finds that (*check one*):

_____ Benteler Automotive Corporation is in substantial compliance with the Statement of Benefits, or that Benteler's failure to be in full compliance was caused by factors beyond Benteler's control, and therefore, Benteler is considered to be in substantial compliance.

_____ Benteler Automotive Corporation HAS NOT made reasonable efforts to substantially comply with the Statement of Benefits, and the failure to substantially comply WAS NOT caused by factors beyond the control of Benteler. Therefore, a written notice shall be mailed to Benteler which includes an explanation of the reason(s) for the Common Council's preliminary finding, and the Common Council shall hold a hearing for the purpose of further considering Benteler's compliance with the Statement of Benefits.

PASSED by the Goshen Common Council on _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on _____, 2021, at
_____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on _____, 2021.

Jeremy P. Stutsman, Mayor

COUNCIL RESOLUTION 2021-22

**Preliminary Finding Concerning Benteler Automotive Corporation's
Compliance with Statement of Benefits for Personal Property
(Under Benteler III ERA)**

WHEREAS by Resolutions 2020-01 and 2020-04, the Goshen Common Council designated the area located at 910 Eisenhower Drive South in Goshen as the Benteler III Economic Revitalization Area and authorized a tax phase-in of certain personal property taxes for Benteler Automotive Corporation (Benteler).

WHEREAS Benteler submitted the required annual Compliance with Statement of Benefits for Personal Property (CF-1) for 2020 to the City on or about April 30, 2021.

WHEREAS the Community Development Director believes the CF-1 does not demonstrate Benteler's substantial compliance with the Statement of Benefits submitted and approved as part of the original designation.

WHEREAS the Goshen Common Council is to make a preliminary finding of whether Benteler has substantially complied with Statement of Benefits and commitments made to the City of Goshen to receive the tax phase-in, or whether any failure to substantially comply with the Statement of Benefits and commitments was due to factors beyond Benteler's control.

NOW, THEREFORE, BE IT RESOLVED, after review of Benteler Automotive Corporation's CF-1 and any information provided, the Goshen Common Council finds that (*check one*):

_____ Benteler Automotive Corporation is in substantial compliance with the Statement of Benefits, or that Benteler's failure to be in full compliance was caused by factors beyond Benteler's control, and therefore, Benteler is considered to be in substantial compliance.

_____ Benteler Automotive Corporation HAS NOT made reasonable efforts to substantially comply with the Statement of Benefits, and the failure to substantially comply WAS NOT caused by factors beyond the control of Benteler. Therefore, a written notice shall be mailed to Benteler which includes an explanation of the reason(s) for the Common Council's preliminary finding, and the Common Council shall hold a hearing for the purpose of further considering Benteler's compliance with the Statement of Benefits.

PASSED by the Goshen Common Council on _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on _____, 2021, at
_____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on _____, 2021.

Jeremy P. Stutsman, Mayor

ORDINANCE 5083

Amend Ordinance 5065, 2021 Compensation for Civil City and Utilities Employees, as amended by Ordinance 5081, to Clarify Payment of ASE Certification Bonus

WHEREAS Ordinance 5065 approves the 2021 minimum and maximum compensation, including wages and benefits, for Civil City and Utilities employees.

WHEREAS Ordinance 5081 clarified prior practice of the City Administration and recognized that the positions of Fleet Maintenance Manager and Assistant Fleet Maintenance Manager should receive a certification bonus if the employee possesses and maintains ASE certifications.

WHEREAS questions arose after the adoption of Ordinance 5081 as to the schedule of payments of certification bonus to which the Fleet Maintenance Manager and Assistant Fleet Maintenance Manager are entitled, as well as for the bargaining unit employees of Goshen City Central Garage.

WHEREAS the Common Council now wishes to further clarify the way ASE Certification bonuses are paid.

NOW, THEREFORE, BE IT ORDAINED by the Goshen Common Council that Ordinance 5065, 2021 Compensation for Civil City and Utilities Employees, as amended by Ordinance 5081, shall be amended to read as follows:

SECTION 1. ASE Certification Bonus

The ASE Certification Bonus section added to Ordinance 5065 by Ordinance 5081 shall be amended to read as follows:

ASE Certification Bonus

- (A) This section applies to the positions of Central Garage Fleet Maintenance Manager and Central Garage Assistant Fleet Maintenance Manager.
- (B) Each employee is eligible to receive an annual bonus of Four Hundred Dollars (\$400) for each approved ASE certification test passed, and provided the ASE certification is current, up to a maximum of One Thousand Two Hundred Dollars (\$1,200) annually. The ASE certification bonus shall be included in the employee's regular bi-weekly paycheck.
- (C) The ASE certification test must be within one of the following disciplines:
 - (1) Automobile/Light Truck Certification (A Series)
 - (2) Medium/Heavy Duty Truck Certification (T Series)
 - (3) Truck Equipment Certification (E Series)
 - (4) Electronic Diesel Engine Diagnosis Specialist Certification (L2)
- (D) In addition, the City shall reimburse each employee passing the certification tests required to obtain the Master Automotive Certification or Master Heavy Truck

Certification the cost of the test registration and test fee up to a maximum of One Hundred Thirty-five Dollars (\$135) per test.

The total amount of ASE certification bonus to which the Fleet Maintenance Manager and Assistant Fleet Maintenance Manager are each entitled shall be prorated over the remainder of 2021, and paid in the bi-weekly pay of the Fleet Maintenance Manager and Assistant Fleet Maintenance Manager commencing after the passage and adoption of this ordinance so that the Fleet Maintenance Manager and Assistant Fleet Maintenance Manager each receive the full amount of the annual ASE Certification Bonus to which they are each entitled. The City shall pay other employees of the Goshen City Central Garage ASE Certification, allowed under Ordinance 5065 and their collective bargaining agreement, in the manner in which such employees have received ASE Certification pay in years prior to 2021, and not prorated and paid in their biweekly pay.

SECTION 2. Effective

All remaining provisions of Ordinance 5065, as amended, shall remain in full force and effect; however the ASC Certification Bonus section added by Ordinance 5081 shall be replaced by the language found in Section 1 above.

PASSED by the Goshen Common Council on _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on _____, 2021 at _____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on _____, 2021.

Jeremy P. Stutsman, Mayor



City Clerk-Treasurer
CITY OF GOSHEN

202 South Fifth Street, Suite 2 • Goshen, IN 46528-3714

Phone (574) 533-8625 • Fax (574) 533-9740

clerktreasurer@goshencity.com • www.goshenindiana.org

1 June 2021

To: Goshen Common Council

From: Adam Scharf, City Clerk-Treasurer

Re: Ordinance 5083

A broad theme of the Labor Movement and resultant labor law is “Do work, get paid.” As a general rule, it is good to pay people what they have earned when they have earned it.

Historically, certification pay earned through the course of the year has been withheld from Central Garage employees until near the end of the year, then paid as a single lump sum. This was an administrative decision by a previous Clerk-Treasurer acting under IC 36-4-4-4(c) and IC 36-4-10-4.5. The practice is in contrast to other Teamsters covered under the same contract, which was being administered in different manners for different bargaining unit employees.

The administrative change that our office began to implement takes nothing away, but only offers Teamsters employees with ASE certifications additional choices of how and when to receive money that they have already earned. If an individual wishes to set aside money in their own dedicated account to save for year-end, we will facilitate that. If an individual wishes to receive their certification pay along with their regular pay in the same account, we will do that as well. It is important to note that neither manner of payment affects total annual pay or tax liability.

We held a productive roundtable meeting this past week with various stakeholders, including Teamsters bargaining unit employees. We are expecting a follow-up discussion after these union-represented employees confer. Allowance of time for these discussions is requested.

Council action to codify a highly specific manner of employee payment as proposed in Ordinance 5083 could limit individual employee choices going forward, hinder city administration’s ability to streamline and modernize the payroll system, and create unnecessary tension between statutorily-delegated duties of the City’s fiscal body and fiscal officer.

ORDINANCE 5088

**Repeal Bicycle Registration Program and Bicycle Registration Fee
Under Goshen City Code Title 4, Article 7, Chapter 1**

WHEREAS to facilitate the identification, recovery and return of bicycles found in the city to the rightful owner, the City of Goshen established a bicycle registration program in which residents of Goshen and the surrounding area could voluntarily participate.

WHEREAS the City requires payment of a bicycle registration fee for residents to voluntarily participate in the bicycle registration program, except at events sponsored by the Goshen Police Department, Goshen Fire Department or Goshen Parks and Recreation Department that the Board of Public Works and Safety authorized waiving the assessment and payment of registration fees.

WHEREAS over the past 5 years, the City has collected less than \$900 in bicycle registration fees.

WHEREAS the City administration wishes to continue to provide a bicycle registration program, but no longer wishes to assess a bicycle registration fee to participants.

NOW THEREFORE, BE IT ORDAINED by the Goshen Common Council that:

- (1) The City of Goshen may elect to provide a bicycle registration program in which residents of Goshen and the surrounding area may voluntarily participate. The bicycle registration program shall be established by the Board of Public Works and Safety.
- (2) The bicycle registration program, along with its bicycle registration fee, established by Ordinance 4599 and codified in Goshen City Code Title 4, Article 7, Chapter 1, is repealed.
- (3) All other ordinances and parts of ordinances inconsistent or in conflict with the terms of this ordinance are repealed to the extent of the inconsistency or conflict.
- (4) This ordinance shall be in full force and effect from and after its passage, approval and adoption according to the laws of the State of Indiana.

PASSED by the Goshen Common Council on June _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on June _____, 2021 at _____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on June _____, 2021.

Jeremy P. Stutsman, Mayor

COUNCIL RESOLUTION 2021-19

City of Goshen Government Operations Climate Action Plan

WHEREAS the City of Goshen Common Council adopted Resolution 2019-19 which called for, *inter alia*, City government operations to achieve a net-zero carbon dioxide emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

WHEREAS the City of Goshen Environmental Resilience Department has developed a Government Operations Climate Action Plan (a copy of which is attached hereto) that includes nine major carbon dioxide emission reduction strategies.

WHEREAS the City of Goshen seeks to build a city government that: 1) operates with fiscal responsibility, 2) tends a healthy and sustainable ecosystem, and 3) cares equitably for its employees and city residents.

NOW, THEREFORE, BE IT RESOLVED by the Goshen Common Council that the City of Goshen Government Operations Climate Action Plan is hereby found to contain worthy goals and strategies to reduce the carbon dioxide emissions by the City's government operations.

BE IT FURHTER RESOLVED that the Goshen Common Council hereby adopts the provisions of the City of Goshen Government Operations Climate Action Plan.

PASSED by the Goshen Common Council on June _____, 2021.

Presiding Officer

ATTEST:

Adam C. Scharf, Clerk-Treasurer

PRESENTED to the Mayor of the City of Goshen on June _____, 2021, at _____ a.m./p.m.

Adam C. Scharf, Clerk-Treasurer

APPROVED and ADOPTED on June _____, 2021.

Jeremy P. Stutsman, Mayor

MAY 2021

CITY OF GOSHEN

CLIMATE ACTION PLAN FOR GOVERNMENT OPERATIONS



SUMMARY

04.

ACKNOWLEDGEMENTS

This page contains a listing of many of the people and organizations that worked to make this effort a reality.

05.

ABBREVIATIONS

This page lists the abbreviations that are used in this document.

06.

LETTER FROM MAYOR JEREMY P. STUTSMAN

The letter by Mayor Jeremy P. Stutsman is followed by the the signature page from the City of Goshen Public Board of Works & Safety and Stormwater Board authorizing the adoption of the Plan..

08.

EXECUTIVE SUMMARY

The Executive Summary summaries the nine strategies and each set of goals.

16.

INTRODUCTION

The Introduction is a brief statement by Aaron Sawatsky Kingsley that introduces the purpose of the Government Operations Climate Action Plan.

18.

INTRODUCTION TO CLIMATE CHANGE

These pages take a look at the data being collected on carbon and explain how carbon in the atmosphere affects climate.

20.

GOSHEN EXPERIENCES HISTORIC FLOODING

This section explores local consequences of climate change.

22.

GOSHEN TAKES ACTION ON CLIMATE CHANGE

This section documents the history of the Climate Action activities in the City of Goshen.

24.

THE INVENTORY

The Inventory quantifies overall emissions data for the City of Goshen Government Operations.

26.

DISTRIBUTION OF ENERGY AND EXPENSES

This section details the financial footprint of the City's energy usage.

28.

EMISSIONS FORECAST

This section outlines the emissions forecast for the business-as-usual model and the forecast with planned reductions.

30.

MITIGATION AND ADAPTATION

This section discusses the importance and differences between mitigation and adaptation practices to reduce the impact of climate change.

32.

EMISSIONS REDUCTION STRATEGIES

This section is a brief introduction to the process of selecting and vetting possible emissions reduction strategies.

34.

STRATEGY #1 ENERGY MANAGEMENT OF BUILDINGS AND FACILITIES

This section focuses on energy consumed in building and facilities and target goals for reduction.





38.

STRATEGY #2 SOLID WASTE MANAGEMENT

This section examines solid waste emissions, expenses, and proposes strategies to reduce waste.

47.

STRATEGY #5 UTILITY PROCESSES

This section discusses the utility's constant need to innovate and the challenges associated with emissions reductions.

54.

STRATEGY #8 SUSTAINABLE ENERGY

This section is a brief introduction to the concept of developing municipal owned sustainable energy systems.

42.

STRATEGY #3 SUSTAINABLE TRANSPORTATION

This section discusses transportation needs and challenges in emissions reductions.

49.

STRATEGY #6 SUSTAINABLE LAND USE

This section discusses the need for an ecosystem approach to developing climate change mitigation and adaptation policies.

55.

STRATEGY #9 EDUCATION

This section focuses on the importance of education for leadership and staff to provide the culture and inspiration to innovate city systems as needed to keep pace with a changing climate.

44.

STRATEGY #4 SUSTAINABLE INFRASTRUCTURE

This section discusses infrastructure challenges as a result of climate change.

52.

STRATEGY #7 TREE CANOPY

This section discusses the importance the tree canopy goal and the challenges that climate change brings in preparing for a changing urban forest, especially through species migration.

56.

EQUITY

This section documents the importance of equity in developing solutions that will affect climate action outcomes.

ACKNOWLEDGEMENTS

MAYOR

JEREMY P. STUTSMAN

CLERK-TREASURER

ADAM SCHARF

GOSHEN CITY COUNCIL

BRETT WEDDELL, COUNCIL AT LARGE

MATT SCHROCK, DISTRICT 3

JULIA KING, COUNCIL AT LARGE

MEGAN EICHORN, DISTRICT 4

JIM MCKEE, DISTRICT 1

GILBERTO PEREZ JR., DISTRICT 5

DOUG NISLEY, DISTRICT 2

HAZANY PALOMINO, YOUTH ADVISOR

BOARD OF PUBLIC WORKS & SAFETY AND STORMWATER BOARD

JEREMY P. STUTSMAN, MAYOR

MICHAEL LANDIS

MARY NICHOLS

DEPARTMENT HEADS

MARK BRINSON

KENT HOLDREN

DUSTIN SAILOR

JOSH CORWIN

JIM KEREZMAN

AARON SAWATSKY KINGSLEY

CARL GAINES

BURT MATTESON

RANDY SHARKEY

DAVID GIBBS

RICHARD MEHL

DANNY SINK

TANYA HEYDE

JOSE MILLER

BODIE STEGELMANN

KELLY SAENZ

DEPARTMENT OF ENVIRONMENTAL RESILIENCE

AARON SAWATSKY- KINGSLEY

THERESA SAILOR

BRANDI DEVOE

KOLT VOHN, IU

KENDEL MARTIN

RESILIENCE EXTERN



SPECIAL THANKS



Special thanks to all the City employees who participated in focus groups and surveys. Their participation was instrumental in sharing and vetting ideas and identifying areas that could be improved. Their continued participation will be important in making successful fiscal and emissions reductions.



This plan was developed with support from the Resilience Cohort, a program offered by the Environmental Resilience Institute (ERI). ERI is an initiative of Indiana University as a part of the Environmental Grand Challenge.



This plan was developed with support from ICLEI USA in partnership with the Resilience Cohort.

ABBREVIATIONS

ABBREVIATION	TERM
BAU	business-as-usual
CAP	climate action plan
CO ₂ e	carbon dioxide equivalent
EPA	Environmental Protection Agency
EV	electric vehicle
g	gram
GHG	greenhouse gas emissions
GW	gigawatt
GWh	gigawatt hours
GWP	global warming potential
HVAC	heating, ventilation, and air conditioning
kg	kilogram
kW	kilowatt
kWh	kilowatt hour
l	liter
lb	pound
LED	light-emitting diode
LEED	Leadership in Energy & Environmental Design
LFG	landfill gas
LGOP	Local Governmental Operations Protocol
CH ₄	methane
MG	million gallons
MMBTU	million British thermal units
MT	metric ton
MTCO ₂ e	metric tons of carbon dioxide equivalent
MW	megawatt
NIPSCO	Northern Indiana Public Service Organization
N ₂ O	nitrous oxide
ppm	parts per million
PV	photovoltaic
SMP	sustainability master plan
VFD	variable frequency drives
WCP	water conservation plan

To Members of Goshen City Council and the Goshen Community,



Almost 200 years ago, Goshen was founded with a name which many people recognized as synonymous with prosperity and abundance. Situated in a landscape of rich soils, vibrant forests, and plentiful water, Goshen thrived. Today, we continue to thrive, mixing industrial ingenuity, with digital dynamism, while growing quality of life which is rooted in our natural setting.

As there have always been, there are challenges which our community has to face. Climate change is a challenge unlike any other. It is unique because it is so large – climate effects nearly every aspect of our lives, in subtle ways and in obvious ways – and because it is widespread, effecting nearly every place on earth in different ways. We face the dual challenge of mitigating these changes (lessening their impacts) and adapting to these changes.

We are working hard to understand how the changing climate will affect us in Goshen, and how we should prepare. This Local Government Operations Climate Action Plan for the City of Goshen is our first attempt to name the challenge before us and to describe how we want to meet the challenge. We know that our understanding of the climate challenge will change over time, and this will require that our responses also change and adapt. This fluid reality may be one of the trickiest dynamics of climate change. For that reason, it is important to understand that this Climate Action Plan is a living document, intended to be reviewed and revised.

The challenges in this document are real, and intend to move our operations to net zero emissions by 2035: from reimagining the way we manage grounds and landscaping, to shifting our vehicles away from fossil fuels toward electricity; from auditing and inventorying the energy we use in our offices and buildings, to investing in solar and renewable energy; from planting and caring for trees, to finding humane operating efficiencies. Making these adaptations will stretch us and require patience and creativity. Above all, it will take all of us, working together to build a city government which does these 3 essential tasks: 1) operate with fiscal responsibility, 2) tend a healthy and sustainable ecosystem, and 3) care equitably for our employees and our residents.

This Climate Action Plan for Goshen’s government operations is our opportunity to respond to our youth, who asked us in the 2019 Youth Environmental Resolution to “work to achieve carbon neutrality by 2035 and take all appropriate actions to do so”. We want to engage this Climate Action Plan for ourselves, and especially for those who come after us. With this plan we seek to demonstrate that meeting the challenges of climate change will ensure that Goshen continues to be a place of prosperity and abundance. We will ensure the sustainability of both our community and our budgets. We will ensure our great-great-grandchildren have a community they are proud to call home.

With hope for the future,

A handwritten signature in blue ink, appearing to read 'JPM', with a long horizontal flourish extending to the right.

Mayor Jeremy P. Stutsman

(This letter was appropriately finalized on Thursday, April 22, 2021, Earth Day)

RESOLUTION 2021-15

City of Goshen Government Operations Climate Action Plan

WHEREAS the City of Goshen Common Council adopted Resolution 2019-19 which called for, *inter alia*, City government operations to achieve a net-zero carbon dioxide emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

WHEREAS the City of Goshen Environmental Resilience Department has developed a Government Operations Climate Action Plan (a copy of which is attached hereto) that includes nine major carbon dioxide emission reduction strategies.

WHEREAS the City of Goshen seeks to build a city government that: 1) operates with fiscal responsibility, 2) tends a healthy and sustainable ecosystem, and 3) cares equitably for its employees and city residents.

NOW, THEREFORE, BE IT RESOLVED by the Goshen Board of Public Works and Safety that the City of Goshen Government Operations Climate Action Plan is hereby found to contain worthy goals and strategies to reduce the carbon dioxide emissions by the City's government operations.

BE IT FURHTER RESOLVED that the Goshen Board of Public Works and Safety hereby adopts the provisions of the City of Goshen Government Operations Climate Action Plan.

PASSED and ADOPTED by the Goshen Board of Public Works and Safety on _____, 2021.

Jeremy P. Stutsman, Mayor

Michael A. Landis, Board Member

Mary Nichols, Board Member

EXECUTIVE SUMMARY

CITY OF GOSHEN LOCAL GOVERNMENT OPERATIONS CLIMATE ACTION PLAN

THE 2021 GOSHEN CLIMATE ACTION PLAN FOR LOCAL GOVERNMENT OPERATIONS IS THE CITY'S FIRST ATTEMPT TO REDUCE ITS IMPACT ON THE GLOBAL CLIMATE CRISIS.

Greenhouse gases (GHGs) are essential to life on Earth. These gases provide a shield from the Sun's solar radiation, and they help the Earth retain some of that heat, allowing the planet to exist at a temperature suitable for life to thrive. However, human activity – specifically the releasing of ancient carbon dioxide into the atmosphere by burning fossil fuels – is contributing greenhouse gases at an increasing rate. As a result, the Earth is warming faster than it would naturally, which poses hazards to all life on Earth.

A 2020 study of Goshen's greenhouse gas emissions calculated that 9,396 metric tons of carbon dioxide equivalents were released into the atmosphere by government operations in 2019.

The 2021 Goshen Climate Action Plan for Local Government Operations is the City's first attempt to reduce its impact on the global climate crisis. This plan is also an attempt to curb the climate change impacts that threaten the City and local community. At its

heart, this plan is offered as a map toward equity for all of Goshen's residents, now and into the future, human and non-human alike. Seeking a more fully humane community is in the deepest interest of all.

To achieve these goals, the Environmental Resilience Department presents nine major Emission Reduction Strategies. Each strategy comprises unique programs and goals that will need implementation. After implementation, monitoring efforts should occur to evaluate this plan's efficacy. When sections of this plan appear to be lacking or ineffective, the City should alter its course of action to achieve more desirable outcomes. The sum of these efforts combined with added efforts in future revisions are expected to achieve net-Zero emissions by 2035 and increase resiliency across the City and community.

NET-ZERO BY 2035

The Youth Environmental Resolution (i.e., Resolution No. 2019-19) asks for creation of a Climate Action Plan and reduction of emissions to net-zero by 2035. The resolution is non-binding but was passed with bi-partisan support, 6-0, in April 2019. The unique nature of the resolution – crafted and submitted by Goshen high school students and supported by other youth and children of the Goshen community – fills it with an extra-legal urgency and gravity.

Resolution No. 2019-19 also calls for setting short term

benchmark goals to track progress towards the main target. By the end of 2026, the City will aim for a 30% reduction of electricity consumption in buildings, a 20% reduction in natural gas consumption in buildings, and 25% reduction in gasoline consumption by the City's fleet.

EXECUTIVE SUMMARY

EMISSIONS REDUCTION STRATEGIES

STRATEGY #1 ENERGY MANAGEMENT OF BUILDINGS

A fundamental component of reducing emissions is to reduce energy consumption. The energy used to power government operations (lights, air conditioners, heaters, printers, computers) originates from electricity and natural gas. Energy consumption, consequently, results in the emission of greenhouse gases. Reducing energy can reduce emissions.

Reducing energy also has monetary benefits. Initial research indicates that the City can expect to save \$65,000 per year in Buildings & Facilities. These anticipated savings result from the goals below.

CITY ANNEX BUILDING



SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: CONDUCT ENERGY AUDITS ON ALL CITY BUILDINGS AND FACILITIES BY 2024.
- GOAL 2: DEVELOP A HEATING AND COOLING POLICY RELEVANT TO EACH CITY OPERATED BUILDING BY 2022.
- GOAL 3: EVALUATE LANDSCAPING AROUND CITY BUILDINGS AND, WHERE NEEDED, DEVELOP A PLAN TO MAXIMIZE SHADE PRODUCTION.
- GOAL 4: DESIGN NEW FACILITIES WITH EFFICIENT BUILDING AND ENERGY SYSTEMS.
- GOAL 5: EXPLORE TELECOMMUTING AND ALTERNATIVE WORK SCHEDULES TO REDUCE RESOURCE CONSUMPTION.

EXECUTIVE SUMMARY

STRATEGY #2 SOLID WASTE MANAGEMENT

The City of Goshen generates two primary forms of solid waste: trash generated by City employees throughout the workday and green waste (leaves and brush) picked up curbside and composted or chipped at the Goshen Environmental Center. The decomposition of these products either in a landfill or in a composting pile generates carbon dioxide.

Lifetime emissions of any product include creating, collecting, or extraction of raw materials, fabrication, transportation, use, and disposal of a product. Using less can reduce all of these emissions, but

reducing one or more of the components in the lifetime emissions sequence can make a difference. An example of this is when the City purchases items made locally, there is a reduction in lifetime emissions. When green waste is composted on the property where it is generated, there are no emissions generated to take it to the Environmental Center.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: REVIEW GREEN WASTE PROCESSES TO INNOVATE REDUCTIONS IN GHG EMISSIONS.
- GOAL 2: STOCK REUSABLE PLATES AND CUTLERY; BUY 20% OR BETTER POST-CONSUMER OR BIODEGRADABLE FOOD SERVICE ITEMS WHEN POSSIBLE.
- GOAL 3: EVALUATE AND IMPLEMENT COMPOST OPPORTUNITIES.
- GOAL 4: DEVELOP AND ADOPT POLICY FOR WASTE MANAGEMENT PROTOCOL, INCLUDING FOR REGULAR WASTE AND “UNIVERSAL” WASTE (E-WASTE, FLUORESCENT BULBS, ETC.).
- GOAL 5: EVALUATE CONSUMABLE PRODUCTS USING FINANCIAL AND ENVIRONMENTAL COST-BENEFIT ANALYSES.
- GOAL 6: EVALUATE CURRENT WASTE REMOVAL AND RECYCLING CONTRACTS FOR BEST MANAGEMENT PRACTICES.

RESIDENTIAL RECYCLING



EXECUTIVE SUMMARY

STRATEGY #3 SUSTAINABLE TRANSPORTATION

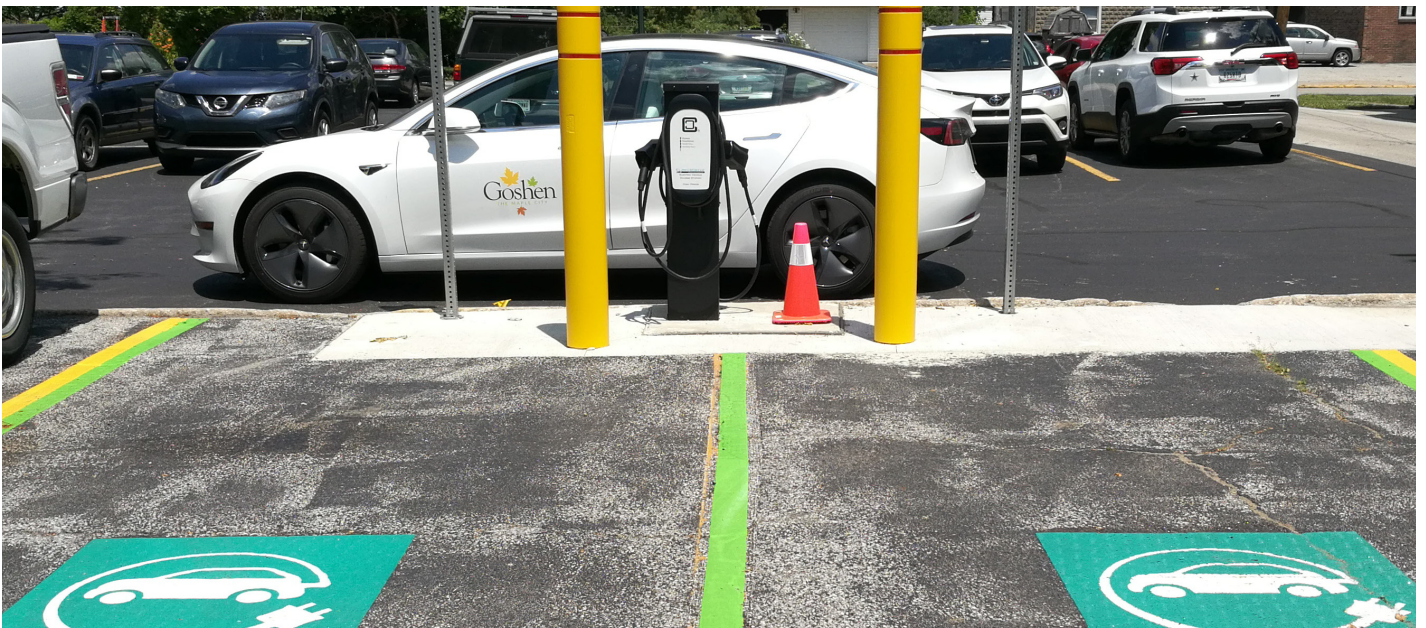
Many greenhouse gases are emitted from typical transportation activities. The largest percentage of Goshen's government transportation emissions come from heavy equipment, large trucks, and police operations, with smaller emission amounts from other

regular operations. These combined activities resulted in 1,505 MTCO₂e. Increasing sustainable transportation is crucial to reducing Goshen's government emissions.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: FUND THE ADOPTION OF ENERGY EFFICIENT LIGHT-DUTY VEHICLES (INCLUDING HYBRID-ELECTRIC AND ELECTRIC) TO REDUCE EMISSIONS BY 25% BY 2026.
- GOAL 2: DEVELOP AND IMPLEMENT GASOLINE EMISSIONS REDUCTION STRATEGY FOR EACH DEPARTMENT, RESULTING IN EMISSIONS REDUCTION OF 25% OR MEAN FUEL ECONOMY OF 27 MPG BY 2026.
- GOAL 3: DEVELOP STRATEGIC PLAN FOR MUNICIPAL FLEET ELECTRIC VEHICLE CHARGING STATIONS.
- GOAL 4: DEVELOP AN EDUCATION AND AWARENESS CAMPAIGN TO ENCOURAGE EMPLOYEE BICYCLE COMMUTING.
- GOAL 5: WORK TO ACHIEVE "SILVER STATUS" AS A BICYCLE FRIENDLY COMMUNITY.

CITY OF GOSHEN PUBLIC EV CHARGING STATION



EXECUTIVE SUMMARY

STRATEGY #4 SUSTAINABLE INFRASTRUCTURE

Pursuing emission reduction goals reveals complex hurdles that require new or improved infrastructure. These supporting systems (roads, streetlights, stormwater, wastewater, and water infrastructure) require on-going maintenance and replacements. A changing climate will require revisions of policies and standards, such as designing to heavier spring rainfall loads and increase in freeze-thaw events during the winter. Introduction and maintenance of green infrastructures – designed to take advantage of natural systems - will help mitigate impacts from increased precipitation and heat



STORM DRAIN ART

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: CONVERT MORE THAN 95% OF STREETLIGHTS, PARKING LIGHTS, AND TRAFFIC SIGNALS TO LED BY 2025.
- GOAL 2: EVALUATE AND REVISE DEVELOPMENT STANDARDS TO MEET THE CHALLENGES OF CLIMATE CHANGE IMPACTS.
- GOAL 3: DEVELOP AND TRAIN A GREEN INFRASTRUCTURE MAINTENANCE CREW.
- GOAL 4: INCREASE THE MILES OF “COMPLETE STREETS” TO INCREASE SAFE, LOW-EMISSIONS, HIGH ACCESS TRAVEL.

STRATEGY #5 UTILITY PROCESSES

The Goshen Water and Wastewater Utility utilizes electricity and natural gas to pump groundwater for water treatment and distribution of drinking water throughout the City and collect and process wastewater. The Utility generates fifty-eight (58) percent of all MTCO₂ emissions in government operations, with most of that energy used to power pumps.

The Utility uses approximately 7,345,718 kWh of electricity and 156,108 therms of natural gas annually, generating 5,480

MTCO₂ emissions.

Currently, the WWTP is undergoing expansion and efficiency improvements. As a result of those improvements, the wastewater treatment plant is expected to save 1,321,000 kWh annually, equating to 858 MTCO₂. That is a twenty-one (21) percent reduction in emissions at the wastewater treatment plant and a 9.1% reduction of MTCO₂ in overall city emissions.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: CONTINUE TO ENCOURAGE AND SUPPORT PROFESSIONAL LEARNING OPPORTUNITIES, EVALUATING NEW STRATEGIES AND KNOWLEDGE SHARING.

EXECUTIVE SUMMARY

STRATEGY #6 SUSTAINABLE LAND USE THROUGH RESILIENT ECOSYSTEMS AND BIODIVERSITY

Protecting and enhancing ecosystems will be a critical factor in the natural environment's success in and around Goshen. Yet, this task is complex and must go beyond individual species to have a meaningful impact. Supporting ecosystems and biodiversity at large will ensure Goshen continues to enjoy

the intrinsic value and economically measurable benefits that the natural environment provides. Preserving floodplain and wetlands and adopting a flood resilience plan responsive to climate science are critical characteristics of sustainable land use.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: DEVELOP OR UPDATE LONG-TERM LAND-USE PLANS FOR CITY-OWNED PROPERTY.
- GOAL 2: INCORPORATE CANOPY GOAL OBJECTIVES AND APPLY APPROPRIATE TREE MAINTENANCE PRACTICES ON ALL CITY PROPERTIES AND RIGHTS-OF-WAY.
- GOAL 3: DEVELOP CITY-WIDE LANDSCAPE MAINTENANCE POLICIES ON FERTILIZER, IRRIGATION, MOWING, AND OTHER PRACTICES, AIMED AT BEST SUSTAINABLE USE.
- GOAL 4: INCORPORATE LONGER-TERM CLIMATE PROJECTIONS AS PART OF LAND USE PLANNING.
- GOAL 5: COLLABORATE WITH SPECIALISTS TO DEVELOP AND IMPLEMENT A FLOOD RESILIENCE PLAN.

MONARCH BUTTERFLY CATERPILLAR



EXECUTIVE SUMMARY

STRATEGY #7 TREE CANOPY

Urban forestry is the practice of managing and caring for tree populations in urban settings to improve the built environment. The Goshen Urban Tree Canopy Goal (2019) spelled out an ambitious goal for the City to increase its urban forest from 22% ground cover to 45% by 2045. Similarly, the goal intends to diversify the City's tree species and adapt to climate change.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: DEVELOP AN INTERNAL POLICY TO PROTECT CURRENT CITY-OWNED FORESTS.
- GOAL 2: UPDATE URBAN TREE CANOPY ASSESSMENT EVERY 5 YEARS.
- GOAL 3: COLLABORATE WITH LANDOWNERS TO PROMOTE LONG-TERM PROTECTION OF FORESTED LAND.
- GOAL 4: UPDATE TREE ORDINANCE, INCLUDING POLICY IN SUPPORT OF THE CANOPY GOAL.

MAIN STREET IN DOWNTOWN GOSHEN



EXECUTIVE SUMMARY

STRATEGY #8 SUSTAINABLE ENERGY

Another key component to reducing emissions from local government operations is to invest in sustainable energy sources. Currently, the City acquires most of its energy from NIPSCO. However, NIPSCO's energy production will continue to generate greenhouse gas emissions for 35% of the energy supplied beyond its commitment to convert to clean energy. By making sustainable energy investments, the City can develop greater energy source diversity and increase its long-term sustainability while reducing

emissions. Converting to clean energy also can result in cost savings as well.

This would allow the City to directly invest in renewable energy. The addition of approximately 5 megawatts of alternative (solar) energy generation would meet the electricity needs of the City if that electricity could be net metered. By making these investments, the City will reduce emissions and save money.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: DEVELOP A 5-YEAR PLAN TO BEGIN INCORPORATING ENERGY GENERATION AT SELECT SITES.
- GOAL 2: IDENTIFY BUILDINGS AND PROPERTIES THAT COULD BE USED FOR RENEWABLE ENERGY INSTALLATION.
- GOAL 3: EVALUATE INVESTING PUBLIC FUNDS IN LOCAL RENEWABLE ENERGY PROJECTS (SUCH AS SOLAR UNITED NEIGHBORS)

STRATEGY #9 EDUCATION

Since education is essential to this plan's ability to achieve its desired results, professional development will play a foundational role in meeting Net Zero Emissions by 2035. Every employee must understand why the City initiated a Climate Action Plan to reduce emissions. Furthermore, voluntary meetings focused on

environmental topics can provide an additional opportunity to educate employees and the community. The latter can help reduce emissions and build a more resilient Goshen.

SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: DEVELOP AND IMPLEMENT EMPLOYEE TRAINING ON GREEN INFRASTRUCTURE, LOW-IMPACT DEVELOPMENT, AND CLIMATE CHANGE MITIGATION AND ADAPTATION PRACTICES.
- GOAL 2: INVOLVE FRONT-LINE EMPLOYEES IN PROBLEM-SOLVING PROCESSES RELATED TO THE REDUCTION OF GHG EMISSIONS.
- GOAL 3: PROVIDE FLEXIBLE HOURS FOR EMPLOYEES TO PARTICIPATE IN EDUCATIONAL PROGRAMS SUCH AS INDIANA MASTER NATURALISTS, TREE

INTRODUCTION

EMISSIONS TELL US WHERE WE NEED TO SEARCH FOR BETTER, COST-SAVING OPERATING OPTIONS. REDUCING EMISSIONS WILL SAVE THE CITY MONEY.

AARON SAWATSKY KINGSLEY

If there ever was such a thing as an “old normal,” we won’t be going back to it. The new normal is one of change and adaptation. On the one hand, cultural and technological change is something that we have become fairly used to over the twentieth century and into the twenty-first century. On the other hand, large-scale changes, which we don’t have much control over, and which require difficult choices, are not a part of our preferred reality.

Climate change is a large-scale set of forces that will increasingly require difficult decisions from us during this century. Anticipating the impacts of climate change ahead of time, doing what we can to mitigate those impacts now, and setting into motion now adaptations to those impacts, will allow us to keep open the broadest set of decisions in the future. This Government Operations Climate Action Plan for the City of Goshen is designed to give us the best options.

In 2019, the Youth Environmental Resolution was unanimously adopted by the Common Council in a 6-0 vote. While non-binding, the Resolution called for, among other things, government

operations to achieve a net-zero emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

This plan is the result of the insistence and aspirations of Goshen’s youth. Goshen completed its first greenhouse gas emissions inventory in 2019 (assessing 2017 data) and the second inventory in 2020 (assessing 2019 data). This emissions data forms the Climate Action Plan’s backbone – it tells us where we are currently, which informs what we need to do to meet our goal: net-zero emissions by 2035.

In 2019, City government operations emitted 9,396 metric tons of carbon dioxide equivalents (MTCO_{2e} – an equation used to express the heat-trapping potential of different greenhouse gases in terms of carbon dioxide, the most plentiful of these gases). This number is maybe interesting to compare to other communities, but ultimately each community is unique, and comparisons are relatively meaningless. However, it is meaningful to us in Goshen in that it tells us what our emissions are, and because of the inventory detail, we know where they are coming from.

This detail is laid out carefully in the following document, but the highlights

are these: Water and Wastewater Utility Processes - 5,480 MTCO_{2e}; Buildings and Facilities - 1,410 MTCO_{2e}; Vehicle Fleet - 1,505 MTCO_{2e}; Environmental Center operations – 349 MTCO_{2e}; Street Lighting – 652 MTCO_{2e}.

These emissions cost us money in at least two broad categories. Emissions cause and exacerbate climate change which can cost us money in the form of the many economic disruptions it creates, from weather disasters to crop failure to environmental degradation to human distress and violence. Emissions also cost us money because they directly reflect the energy we buy and use (electricity, natural gas, gasoline, diesel, etc.), especially the inefficient ways we use it. Emissions tell us where we need to search for better, cost-saving operating options. Reducing emissions will save us money.

Not all of the emissions from our government operations can be easily reduced. The largest portion of our emissions – Water and Wastewater Utility Processes (58%) – is a very tricky set of emissions. Water and wastewater have to be treated, no way around that. While we are finding ways to reduce energy consumption in significant ways related to these essential operations, water and

GOSHEN MILLRACE

wastewater treatment will likely always be a large source of our emissions.

The Climate Action Plan lays out goals and strategies for reducing various sectors of our emissions. All of these reductions will take effort, cooperation, willingness to adapt, and funding. Cost-benefit analyses show that spending money to reduce emissions ultimately saves us real dollars in fuel costs. For example, an analysis of a \$5000 investment in energy-saving retrofits at the Rieth Interpretive Center could save \$4,700 annually in energy costs. Upgrading the boiler-heating system at the Police Department will yield a \$30,180 savings over the 20 year lifetime of the new unit. Investment in cleaner electric and hybrid-electric vehicles has similar returns.

This Climate Action Plan proposes that by 2026, we aim to reduce our government operation emissions by 40%. While the strategies outlined below can help us achieve this first step in our overall goal of net-zero emissions, this document does not dictate the process that “should” be implemented to reach the goal. It is up to the various Departments to choose their path to GHG reduction. Likewise, it is up to the Mayor to support these efforts and the Goshen City Council to provide appropriate funding levels to enable Departments to reach those goals. Furthermore, it is important to note that we are at the beginning of a long process; as we work to reduce emissions and increase efficiencies, we will discover trends and technologies which this Plan could not anticipate.

It’s also important to note that the primary supplier of electricity and natural gas for our operations, NIPSCO, is in the process of eliminating its coal-generators and replacing them with 65% renewable energy generation. These changes alone will reduce our emissions by close to 40% by 2028. This is a significant



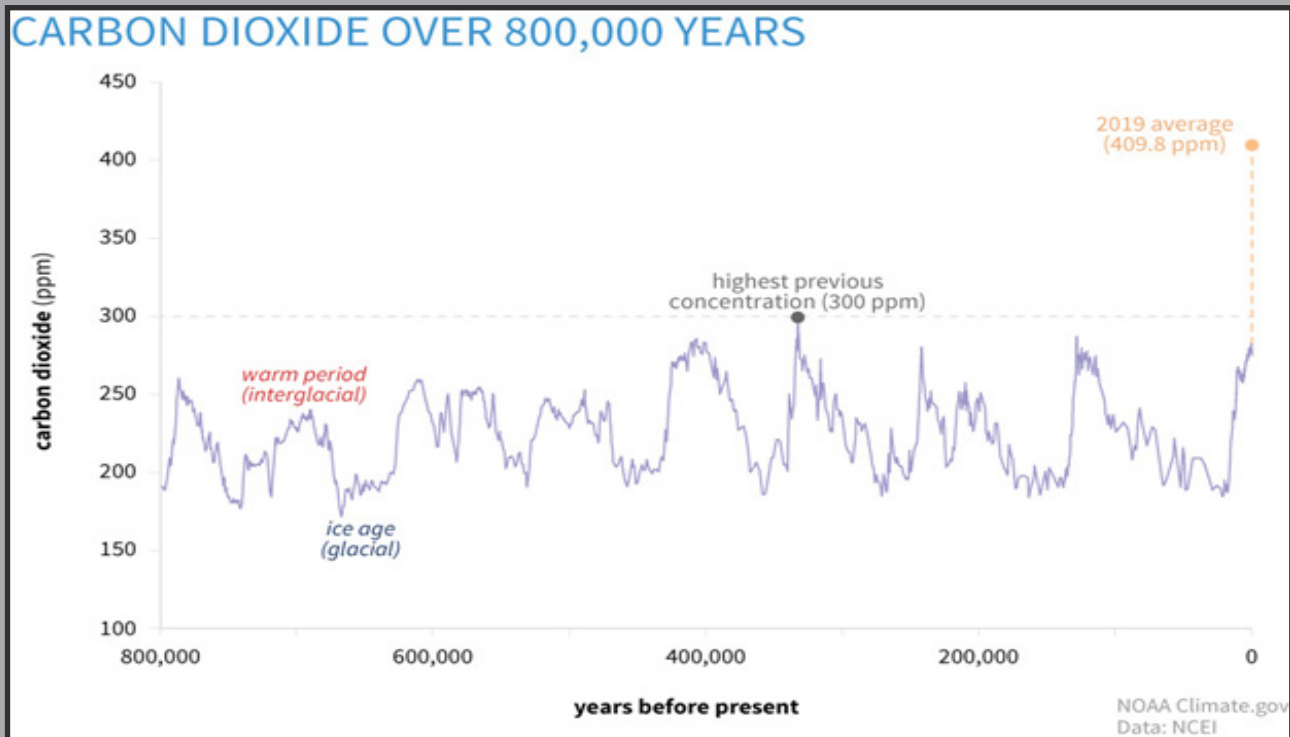
development, making our task, in some ways easier.

However, this news should not make us complacent. The work which is in front of us, in many ways, is to reduce the most pernicious, most difficult sets of emissions, such as those generated by cleaning our water and wastewater. To

that end, this document will need to be a living and breathing document, reviewed and updated regularly, along with our regular emissions inventories. As stated above, adapting to change is our new normal, and even this Climate Action Plan will have to reflect this reality.

INTRODUCTION TO CLIMATE CHANGE

THE LAST TIME THE ATMOSPHERIC CO₂ AMOUNTS WERE AS HIGH AS 400 WAS MORE THAN 3 MILLION YEARS AGO, WHEN THE TEMPERATURE WAS 3.6°-5.4°F HIGHER THAN DURING THE PRE-INDUSTRIAL ERA, AND SEA LEVEL WAS 50-80 FEET HIGHER THAN TODAY.



Carbon is essential to life on Earth. Carbon is an element that is required to form complex molecules and DNA. All living things and those made from previously living things are all made from carbon, prompting the phrase “carbon life-form.” We build homes, power our vehicles, clothe ourselves with carbon; we even eat carbon. Although carbon is integral to life on the planet, the modern human relationship with carbon goes well beyond life-sustaining uses.

Carbon atoms are continually moving from the atmosphere to Earth and then back into the atmosphere in a carbon cycle process. Surface carbon moves in a relatively fast cycle (over a period of decades or centuries); rock-bound and deep-ocean bound carbon moves in a much slower cycle (100 thousands to 100 millions of years). Carbon in the slow cycle is often trapped in the decomposed bodies of ancient lifeforms, and may be transformed into such fossil fuels as coal, oil, and natural gas through a combination of pressure, heat, and epoch-scale periods of time.

Carbon in our atmosphere is part of the surface carbon cycle. It exists in the atmosphere in the form of carbon dioxide. Along with water vapor and other trace gases, carbon dioxide absorbs heat that would otherwise be lost into space, allowing the Earth to hold a steady 60-degree average temperature instead of near zero. It is for this reason that these gases are termed “greenhouse gases” (GHGs) – their ability to insulate and stabilize temperature is similar to the function of a greenhouse. The balance these GHGs provide has enabled the relatively moderate climate of the 20th century and the climate that life on Earth has adapted to over at least the last 800,000 years.

The surface carbon cycle has maintained a balance of 200-300

ppm CO₂ in the atmosphere for the last 800,000 years, based on the measurement of air bubbles trapped in mile-thick ice cores and other evidence. Even during the ice age cycles of the past one million years, carbon dioxide never exceeded 300 ppm. To add perspective to these measurements, before the industrial revolution began in the mid-1700s, the global average amount of carbon dioxide was about 280 ppm.

The burning of fossil fuels (from the slow carbon cycle) is causing a rapid rise in carbon dioxide in the atmosphere as it is added to the surface carbon cycle. Fossil fuels like coal and oil contain ancient carbon that plants pulled out of the atmosphere through photosynthesis millions of years ago. As humans burn fossil fuels, large amounts of carbon stored in the ground over millions of years are being converted to atmospheric carbon dioxide in a span of a few hundred years. While plants, such as trees, and oceans are able to absorb some of this newly re-introduced carbon dioxide, significant amounts of it concentrate in our atmosphere.

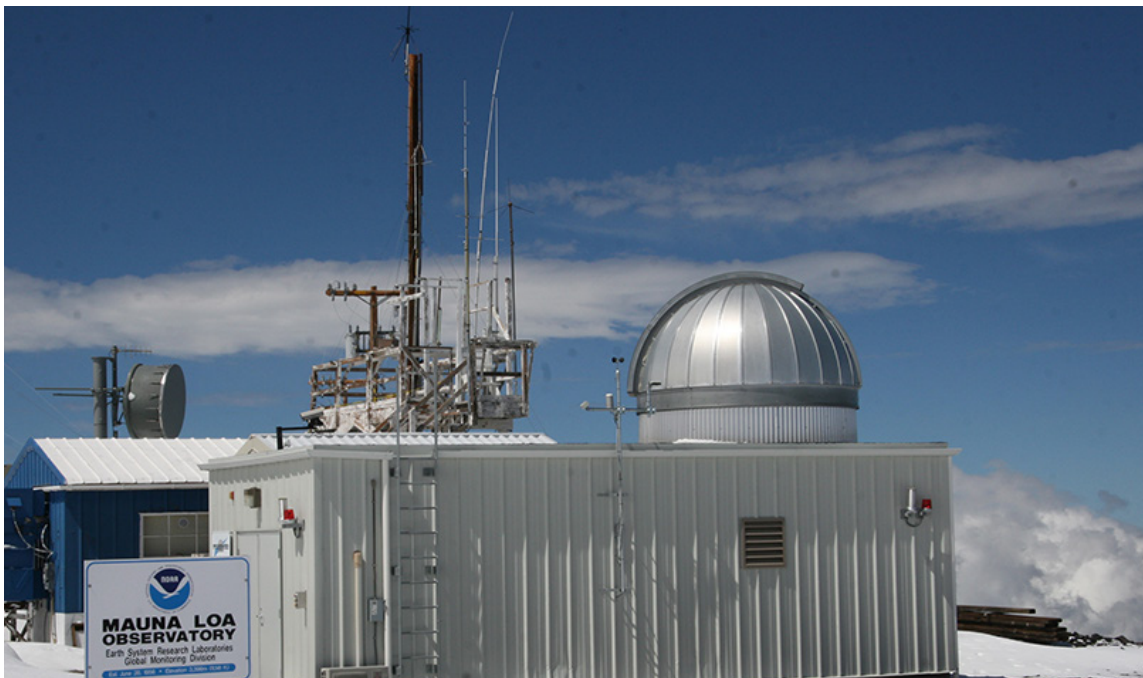
As carbon dioxide concentrations increase in our atmosphere, the greenhouse heat-trapping capacity of the atmosphere also increases. This increase in heat is compounded by the fact that a warmer atmosphere also holds more water vapor. Water vapor further amplifies heat and produces larger precipitation events (<https://www.earthobservatory.nasa.gov/features/CarbonCycle/page1.php>). Large precipitation events can result in flooding.

In 1958, the United States began atmospheric carbon observations at the the Mauna Loa Volcanic Observatory (<https://www.esrl.noaa.gov/gmd/ccgg/trends/mlo.html>). In that year, the global atmospheric carbon dioxide concentration had risen to 315 ppm. In 2014, the global daily average carbon dioxide concentration

surpassed 400 ppm for the first time on record.

Given the current trends, Climatologists estimate if fossil fuels continue to meet the bulk of global energy demand, atmospheric carbon dioxide concentration is projected to exceed 900 ppm by the end of this century. The last time the atmospheric CO₂ amounts were as high as 400 was more than 3 million years ago, when the temperature was 3.6°–5.4°F higher than during the pre-industrial era, and sea level was 50–80 feet higher than today.

MONA LOA OBSERVATORY, MONA LOA, HAWAII



GOSHEN EXPERIENCES HISTORIC FLOODING

In February 2018, after receiving over 5 1/2 inches of rainfall in two days, the Elkhart River rose to 12.53 feet, 6.53 feet above the flood “action” stage. The City of Goshen experienced the largest flood in recorded history, causing several injuries, extensive property damage, and displaced businesses that resulted in a local state of emergency declaration.

While flooding is not new to the City, this event was the worst on record. Rain events in Indiana are becoming heavier and with greater intensity, on average. The reality of increased flooding illustrates just one example of the impacts a changing climate can have on communities across the Midwest.

Elkhart County is expected to see the number of extreme heat events (highs 90°F or greater and nights with lows 68°F or greater) per year increase. Between 1971 and 2000, Elkhart county experienced 21 extreme heat events per year, on average. Yet, by the 2050s, Elkhart County will see between 58 and 72 extreme heat events per year, on average (Environmental Resilience Institute 2020). Further evidence of this is observable by assessing recent years’ heat events. For example, in 2019, Goshen experienced 26 extreme heat waves, and in 2020, it experienced at least 29 (National Centers for Environmental Information 2020).

These extreme heat waves have profound impacts. As the

Indiana Climate Change Impacts Assessment describes, extreme heat can lead to an increased number of heat-related illnesses, hospitalization, and medical costs. Likewise, extreme heat reduces crop yields, essentially counteracting improved harvests from longer growing seasons. Longer growing seasons “also increase (the) growth of less desirable plants like ragweed and create favorable conditions for some invasive species.” Furthermore, reducing cold temperatures means potential disease-carrying mosquitoes, ticks, and forest pests will expand their range and remain active for longer portions of each year (Purdue Climate Change Research Center 2018).

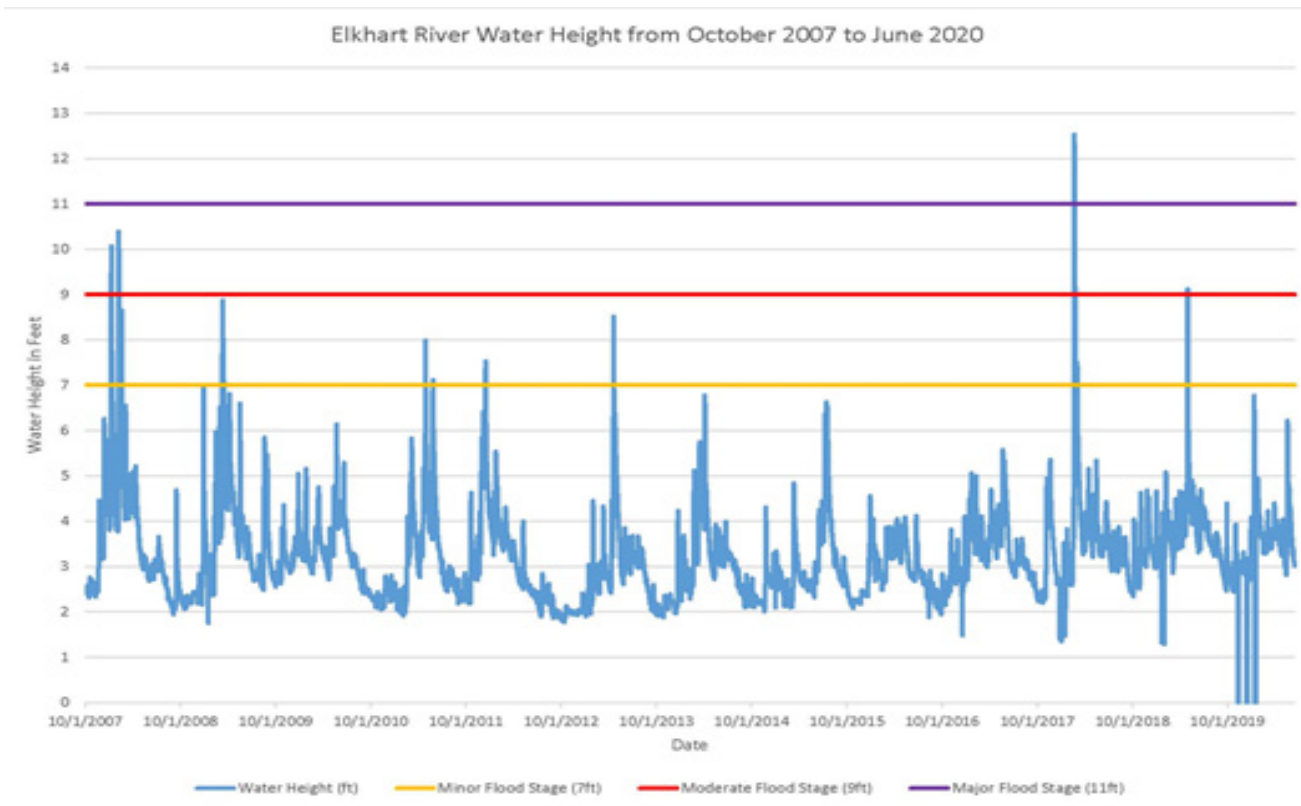
As temperatures increase, the number of extreme precipitation events per decade (daily precipitation of two inches or greater) will increase in Elkhart County from ten events per decade to eleven or twelve per decade by the 2050s (Environmental Resilience Institute 2020). Yet, while this increase alone is not staggering, the change in timing warrants greater attention. The Purdue Climate Change Research Center (2018) finds that “winters and springs are likely to be much wetter by mid-century, while expected changes in summer and fall precipitation are less certain.” Extreme precipitation events in late winter and early spring increase Goshen’s flood risk when soils are likely saturated or frozen, meaning less water infiltrates the ground and more becomes runoff.

2018 FLOODING ON PIKE STREET, GOSHEN, INDIANA



PHOTOGRAPHER: ANDREW KAUFFMAN

WATER HEIGHT AND FLOOD STAGES ON THE ELKHART RIVER 2007-2019



WHEN THE WATER RISES IN GOSHEN

In 2018, Goshen firefighters went door to door in the middle of the night to rescue residents from the rising flood waters.

When the Elkhart River rises above five feet, outlying areas including ditches and streams (including Rock Run Creek, Horn and Leedy Ditch, East Wilden) begin flooding.

The Elkhart River officially reaches flood stage at 6 feet: it overflows its banks to inundate the wetlands between the Goshen Dam pond and the Elkhart River, a large part of Shanklin Park, and Mullet Park.

As the Elkhart River reaches eight feet, Rogers Park and Oakridge Park become inundated. Creekside Estates Mobile Home Park begins to flood; flooding now begins to affect businesses and close roads.

At nine feet, the flooded river cuts off access to Trinity Square businesses, such as Kroger.

In 2018, the river rose to inundate Kroger Grocery, Linway Plaza and home on Denver Avenue and Huron Street. Four of the five bridges were inundated, effectively cutting the city in half. Goshen firefighters went door to door in the middle of the night to rescue residents from the rising flood waters.

GOSHEN TAKES ACTION ON CLIMATE CHANGE

Soon after the 2018 flood, Mayor Stutsman established the Mayor’s Environmental Advisory Committee to guide on environmental issues. Around the same time, Goshen High School students spearheaded the Youth Environmental Resolution (2019-19), which called for a climate action plan. Recognizing a need to focus on climate issues in great detail, the City acted to support the measure, including establishing a new department – the Department of Environmental Resilience – to pioneer this plan.

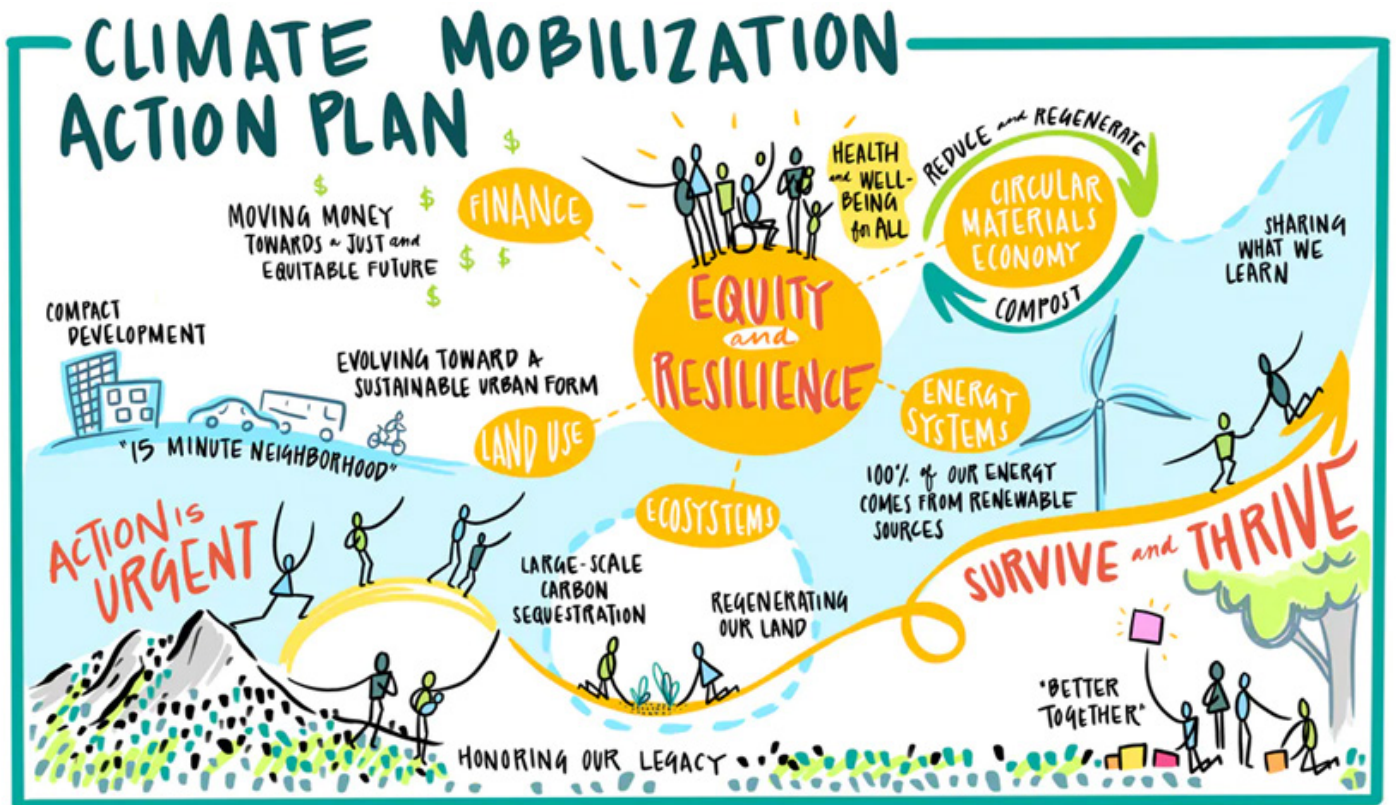
In the Spring of 2019, by a vote of 6 to 0, the Common Council and Mayor Stutsman passed the non-binding resolution 2019-19 to create and implement a Climate Action Plan by 2021.

In the Summer of 2019, the City partnered with I.U.’s Environmental Resilience Institute to collect and analyze energy consumption data, leading to the first-ever emissions inventory of 2017 of both the community and city government data.

In the fall of 2019, the Mayor, supported by City Department Heads, proposed the Department of Environmental Resilience.

January 2020, the Environmental Resilience Department began operations, with the first major project being to develop a Climate Action Plan for Goshen City Government Operations. Again, the City partnered with I.U.’s Environmental Resilience Institute to work through the process of the creation of a Climate Action Plan.

Throughout 2020, the Environmental Resilience Department worked with other Departments to compile data, update emissions calculations, develop realistic strategies, and sought feedback from employees, Department Heads, the Mayor’s Environmental Action Committee, and the I.U. Environmental Resilience Institute to generate a plan for reducing emissions from city operations.



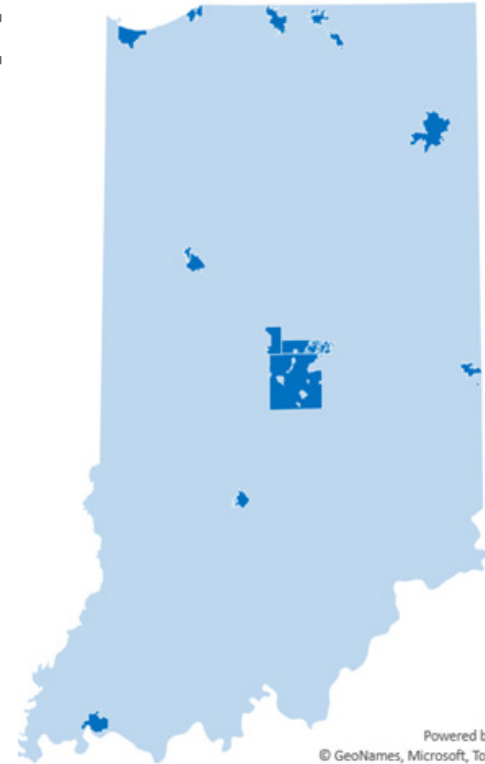
(EMMA MORRIS) DESERT RAVEN DESIGN | 9.26.19

MAKING PLANS IN THE STATE OF INDIANA

Climate Action Planning and the active reduction of emissions has become a global operation of global proportions in an attempt to avoid the worst of these impacts.

By improving preparedness, planning for impacts, and reducing the emission of heat-trapping gases, the City (referring to the local government) is working toward a resilient future. While the City is a regional leader, it is not alone in its efforts in Indiana. Fifteen other municipalities are working on developing and implementing climate action. Indianapolis, South Bend, Bloomington, and Zionsville have already published climate action plans.

- Bloomington
- Carmel
- Elkhart
- Evansville
- Fishers
- Fort Wayne
- Gary
- Goshen
- Indianapolis
- Lafayette
- Michigan City
- Richmond
- South Bend
- West Lafayette
- Zionsville



NET-ZERO BY 2035

The 2021 City of Goshen Operations Climate Action and Mitigation Plan aims to develop emissions reduction goals projected five years forward to 2026, where tested practices currently exist that will allow the City to reduce emissions in a logical, pragmatic approach. These goals will be the first step in moving toward the overarching goal of net-zero government operations emissions by 2035. The Climate Action Plan will serve as a living document. It will need to be revised and updated to incorporate new strategies as new insights technologies become available and as new practices are adopted.

In developing this plan, the Department of Environmental

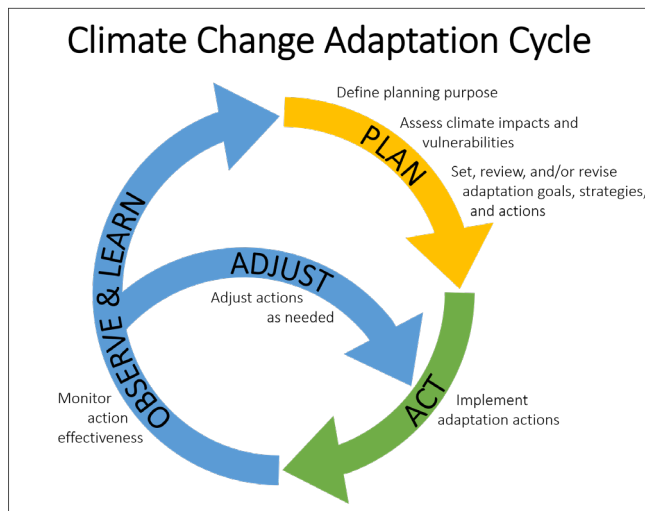
Resilience compiled many forms of data (such as energy and fuel use records) with other Departments' assistance. It then used real-world scenarios to develop strategies to reduce greenhouse gases in City operations.

Where strategies exist to reduce greenhouse gases, the Environmental Resilience Department has proposed a proportionate goal as a part of a multi-step process to attain net-zero emissions for City operations by 2035. In some

cases, there were no obvious or proven solutions to reducing GHGs; therefore, more in-depth review will be needed.

The Department of Environmental Resilience is committed to supporting other Departments through this process. The Department has established target goals for multiple categories that will be important to achieve if the City is to reach net-zero by 2035.

It is important to note that this document does not dictate the process to be implemented to reach the goal. Instead, the document outlines possible paths City Departments can take in choosing the best routes to GHG emissions reduction. The Mayor's support and Goshen City Council funding approval will be needed to meet each Department's goals. Support from elected officials will be critical as City policies, practices, and standards are adapted to meet the Climate Action Plan's goals.

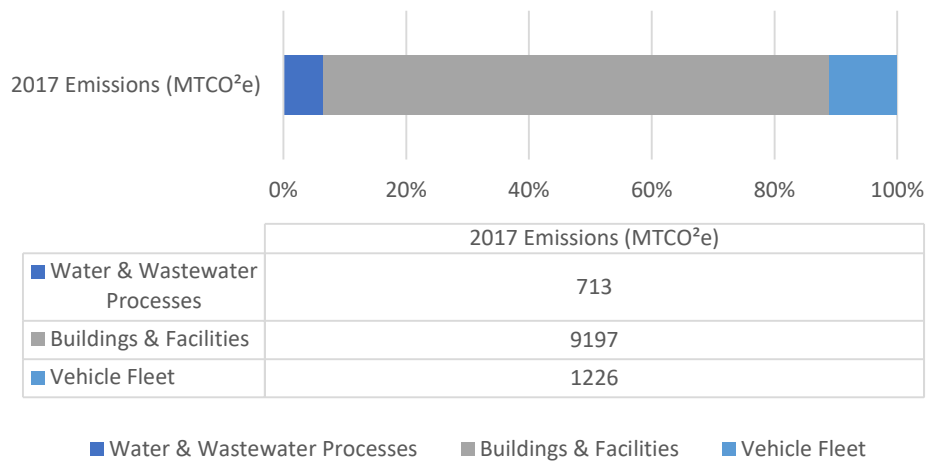


THE INVENTORY

The Climate Action Plan is being written with the benefit of having two separate inventories in two different years. Having two inventories has enabled both comparison and improvement based on experience. The Department had the opportunity to learn and improve the second inventory and set up the data for long-term monitoring.

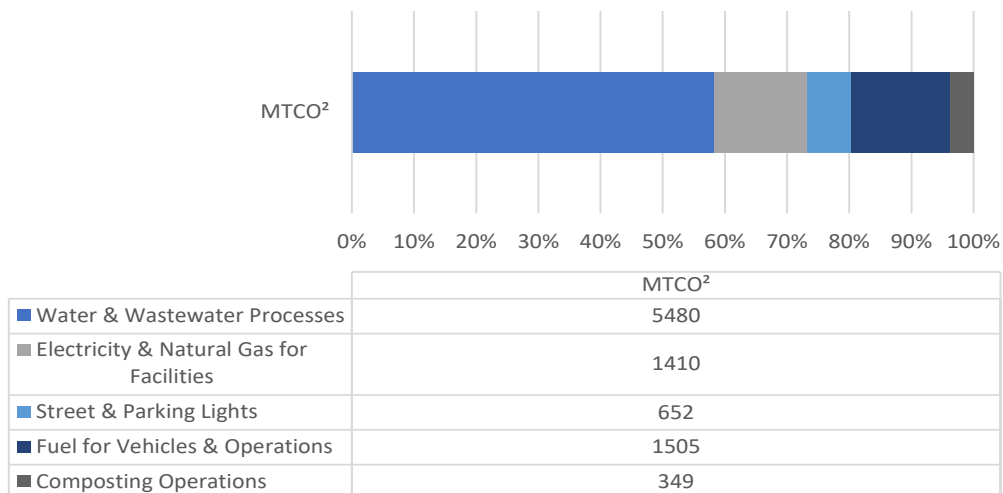
2017 INVENTORY

2017 MTCO₂e Goshen Government Emissions



2019 INVENTORY

Emissions



The 2017 inventory of Goshen Government Operations was the first study of the Goshen City government’s emissions. It measured 11,136 metric tons of carbon dioxide equivalents (MTCO_{2e}). Carbon Dioxide Equivalent includes all greenhouse gases but reports their warming potential in terms of carbon dioxide, the most common greenhouse gas. Table 1 illustrates the emissions sectors and activities. Of this, total electricity use contributed 73 percent of emissions, natural gas at 9 percent, emissions from the vehicle fleet in gasoline and diesel use totaled 11 percent, and wastewater treatment effluent comprised the remaining 7 percent of emissions. The determination was made to include solid waste emissions, a contracted service that includes Goshen residential waste, in the Community inventory. The inventory did not include emissions from the environmental center or flared methane at the wastewater treatment facility.

The 2017 emissions inventory provided a solid starting point for identifying local government emissions; though it did not provide a detailed accounting of energy usage over time, energy costs, or a system to continue to track both emissions and costs, it laid the foundation for building an even more robust inventory.

The 2019 inventory includes an accounting of all City energy accounts and purchases and tracking of materials and services and assets that contribute to emissions both positive and negative. This allowed the identification of emissions by energy type, source, user, and expenses and provided a way to track each variable.

Between the two inventories, there was a difference in total emissions. A significant reduction in emissions of 1,739 MTCO_{2e} is recorded over the two inventory years. This reduction is due to NIPSCO’s efforts to decarbonize their power generation by increasing their percentage of clean energy over coal power plants. Other more minor differences occurred when categorizing emissions and choosing which emissions should be included in the survey for Government Operations versus those that would be considered Community emissions.

In both the 2017 and 2019 inventories, the City followed the Local Government Protocol to quantify and report greenhouse gas emissions developed in partnership and adopted by the California Air Resources Board, California Climate Action Registry, ICLEI Local Governments for Sustainability, and the Climate Registry. The protocol provides a structure for determining which GHG emissions would be characterized as “Government Operations” and which would be “Community” emissions.

WHAT DOES A METRIC TON OF CO₂ ACTUALLY LOOK LIKE?

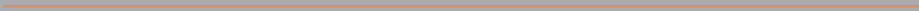
WITH ENVIRONMENTAL AWARENESS BECOMING PERSVASIVE IN BUSINESS YOU HAVE PROBABLY HEARD COMPANIES REPORTING THEIR CARBON FOOTPRINT BY NUMBER OF METRIC TONS BUT WHAT DOES THAT ACTUALLY MEAN?

- 8.12 METER CUBE**
At standard pressure and 15 °C the density of carbon dioxide gas is 1.87 kg/m³. One metric ton of carbon dioxide gas occupies 534.8 m³
- 1 HOT AIR BALLOON**
1 metric ton of CO₂ is roughly the size of an AX-03 hot air balloon. This size of air balloon is able to fit one passenger in the carriage.
- 3500 BATHTUBS**
The capacity of a typical bathtub is 0.16 Cubic Meters.
- 75,000 BASKETBALLS**
A NBA official ball, manufactured by Spalding, is a Size 7 ball and measures about 0.0071042167287 cubic meters
- 1 TREE**
It takes a single tree roughly 40 years in order to absorb 1 metric tons of CO₂

SOURCE:AMERICAN SOLAR ENERGY SOCIETY

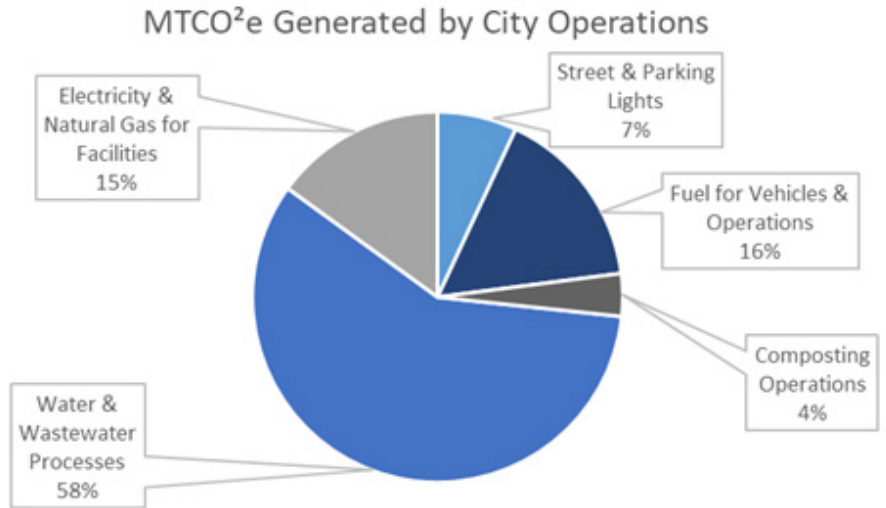
DISTRIBUTION OF ENERGY AND EXPENSES

CITY OF GOSHEN
2019 ENERGY EXPENSES



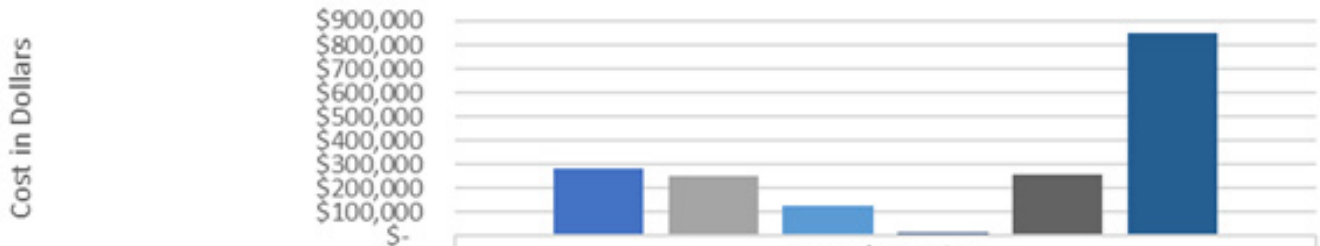
The City spends approximately \$1.8 million annually on energy; this purchase generated approximately 9,396 MTCO₂e in 2019. That includes electricity and natural gas utilized in city facilities (Buildings and Facilities – 15%), the processing, distribution, and collection of water and wastewater (Water Utility and Wastewater Utility combined - 58%), fuel for operations (Vehicle Fleet - 16%), composting operations at the Goshen Environmental Center (Environmental Center - 4%), and Electricity for street and parking lights (Street Lights - 7%).

TOTAL EMISSIONS FROM CITY OPERATIONS



BREAKDOWN OF ENERGY AND EXPENSES

Energy Use & Fuel Type 2019



	Approximate Cost
Buildings & Facilities	\$280,000
Street Lights	\$250,000
Fuel (Diesel-2.91)	\$127,000
Fuel (Off-road 2.58)	\$13,500
Fuel (Gasoline- 2.29)	\$260,000
Water & Wastewater Utility (Gas & Electric)	\$850,000

- Buildings & Facilities
- Street Lights
- Fuel (Diesel-2.91)
- Fuel (Off-road 2.58)
- Fuel (Gasoline- 2.29)
- Water & Wastewater Utility (Gas & Electric)

EMISSIONS FORECAST

BUSINESS AS USUAL AND STRATEGIC REDUCTIONS FORECAST SCENARIOS

The 2019 inventory was then used to create a Business as Usual (BAU) graph to trend the GHG emissions for the City if the City did nothing to reduce GHG emissions. The BAU graph accounts for significant GHG reductions that NIPSCO is undertaking as it converts to green power generation. That reduction affects GHG emissions until 2028.

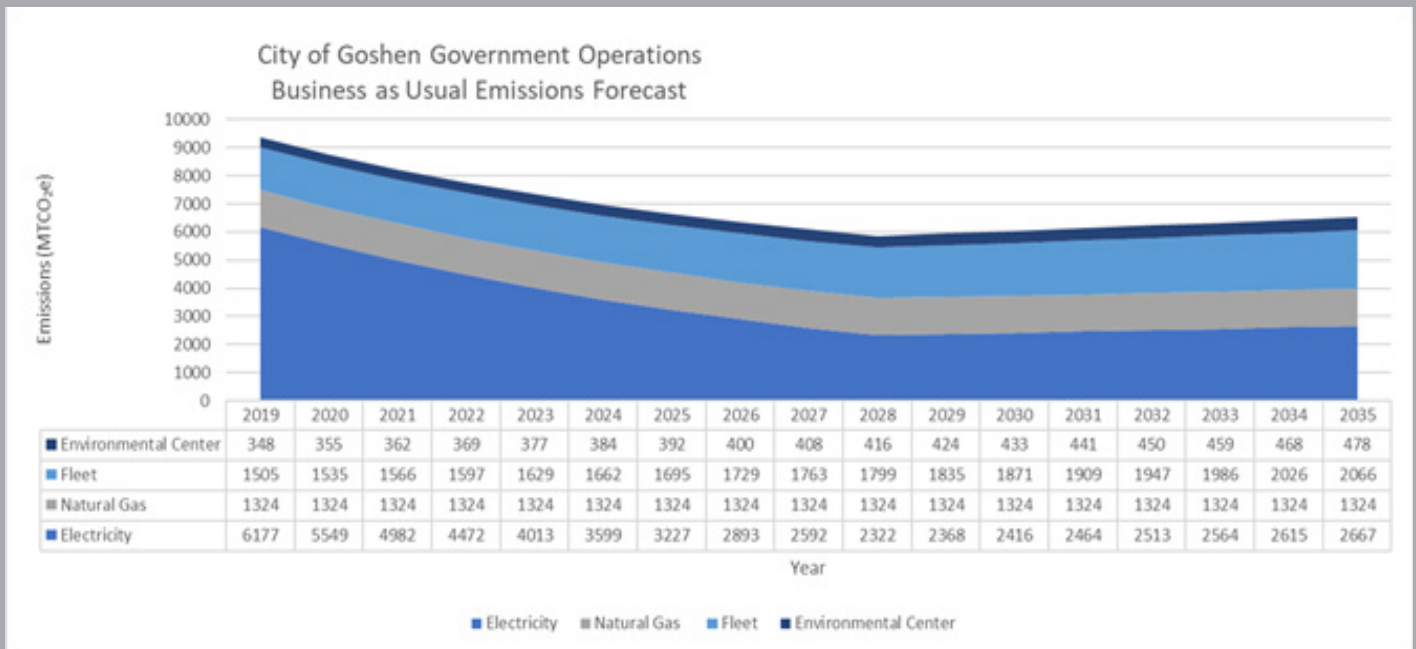
As a part of standard operations, the City’s energy consumption and GHG emissions do not stay constant. Factors such as growth, changing temperatures, changing city policies all affect GHG emission trends.

The electricity consumption, City Fleet, and the Environmental Center were all increased by 2% per year to reflect these trends. The natural gas consumption has remained relatively constant and was not increased in the BAU model. Based on NIPSCO’s reductions and the City’s

energy trends, the lowest GHG emissions will occur in 2028 and will begin trending upward.

If NIPSCO’s decarbonization of electrical power is evaluated without increases due to BAU, NIPSCO will decrease GHG emissions from electricity usage from 6,177 MTCO₂e in 2019 to 1,968 MTCO₂e in 2028. That is a 68% decline in GHG emissions from electricity. This number does not take into account the growth forecast model.

EMISSIONS IN A BUSINESS AS USUAL SCENARIO

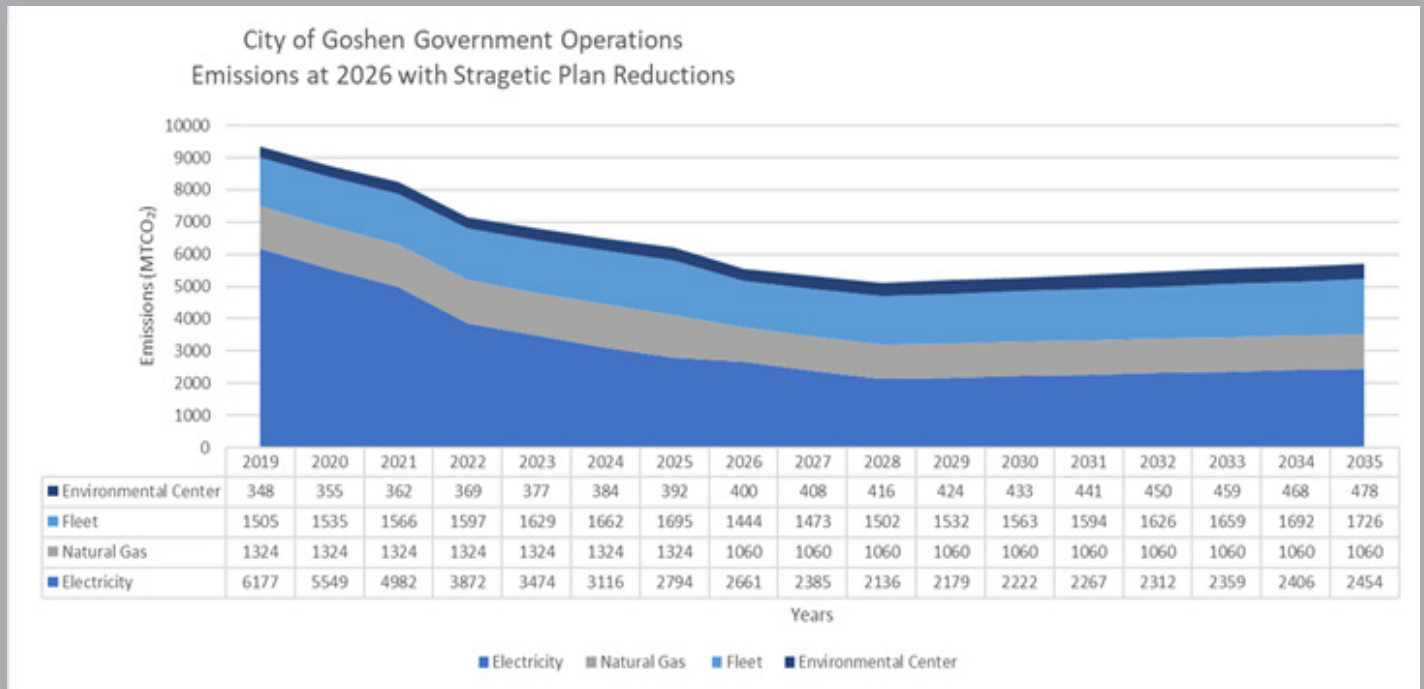


A second forecast was created taking into account proposed 2026 benchmark reductions in this Climate Action Plan. These benchmarks are comprised of a 30% reduction in electric consumption in buildings, 20% reduction in natural gas in buildings, and 25% reduction in gasoline

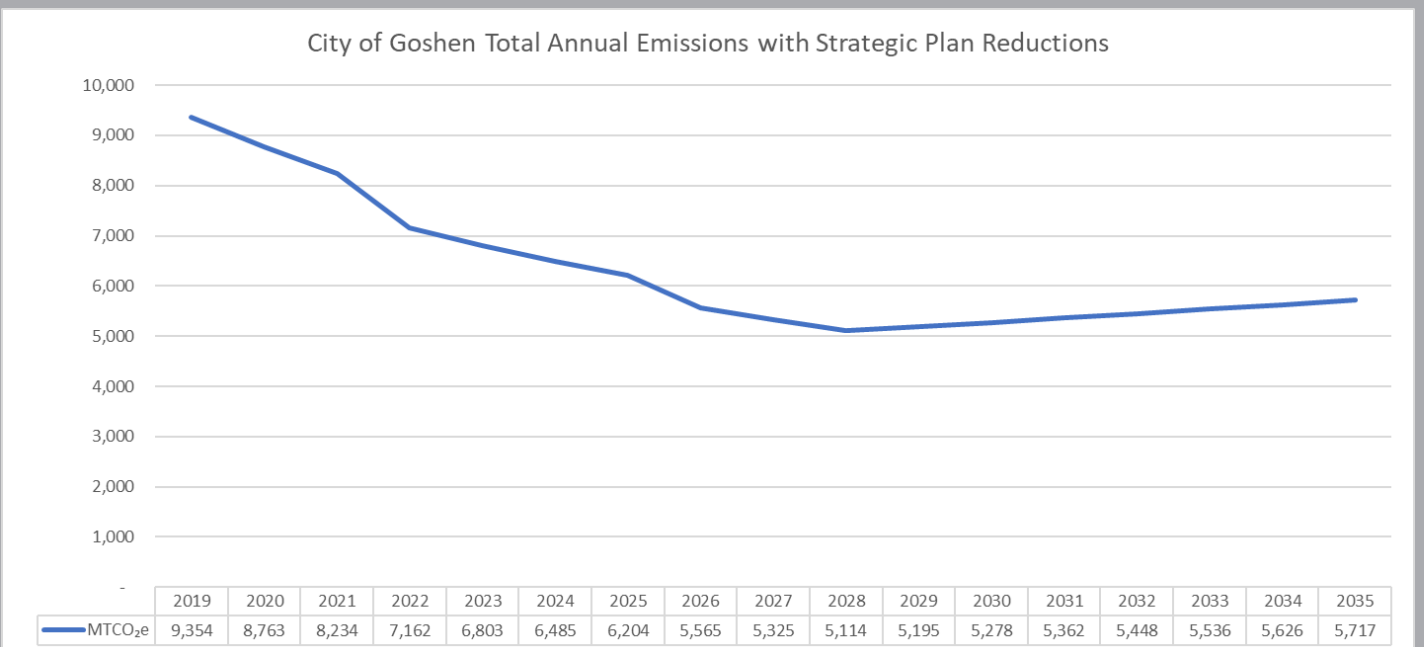
consumption across the vehicle fleet. The current wastewater energy efficiencies under construction now are factored in also as a 2022 drop in electricity. The NIPSCO emissions reductions are also factored into this forecast.

Similar to the BAU graph, emissions in the second forecast begin to rise again after 2028. This indicates that further reductions will need to be in place by or before that date in order to remain on schedule for a target of zero emissions by 2035.

TOTAL EMISSIONS WITH PLANNED REDUCTIONS



TOTAL EMISSIONS WITH PLANNED REDUCTIONS



MITIGATION AND ADAPTATION

Mitigation actions reduce emissions to help reduce climate changes.

Adaptation actions help the City and its residents adapt to a changing climate. Both activities are essential in building a resilient Goshen.

Mitigation is action aimed at reducing the impacts of climate change. The primary impacts of climate change are increases in temperature and increasingly unpredictable precipitation – periods of heavy precipitation resulting in possible flood scenarios, and periods of drought. Mitigative efforts seek to directly and indirectly reduce the greenhouse gas emissions that human activity produces, which are causing changes in our climate, resulting in temperature and precipitation impacts.

Mitigation is the adoption of technologies and behaviors that reduce greenhouse gas emissions. Sustainable energy production through solar and wind generation is mitigation; driving an electric vehicle is mitigation; refusing plastic packaging is mitigation. These are just a few examples of technologies and behaviors that mitigate climate change



impacts.

Adaptation refers to actions which are intended to help us live with the impacts of climate change. Since a certain amount of temperature rise is projected to manifest over the coming decades due to the large amount of greenhouse gas emissions already concentrated in our atmosphere, we can predict that our cities and towns will become warmer than in the past, our waterways will experience more flooding, and there will be changes in the flora and fauna that live in our ecosystems.

Adaptive actions help us prepare for these changes by recognizing that old patterns and habits may no longer serve us well. Capturing and

holding more stormwater on site is adaptation; identifying community cooling centers is adaptation; low water-input landscaping (xeriscaping) is adaptation; moving structures out of floodways is adaptation. These are a few examples of actions that help us adapt to climate change impacts.

Some actions blend mitigation and adaptation very seamlessly. In order to cool urban settings, tree planting, from homes and neighborhoods to parking lots and commercial/industrial districts, is an important adaptive strategy. But trees also double as a mitigation strategy because of their ability to sequester carbon dioxide, removing it from the atmosphere. Properly insulating buildings so that

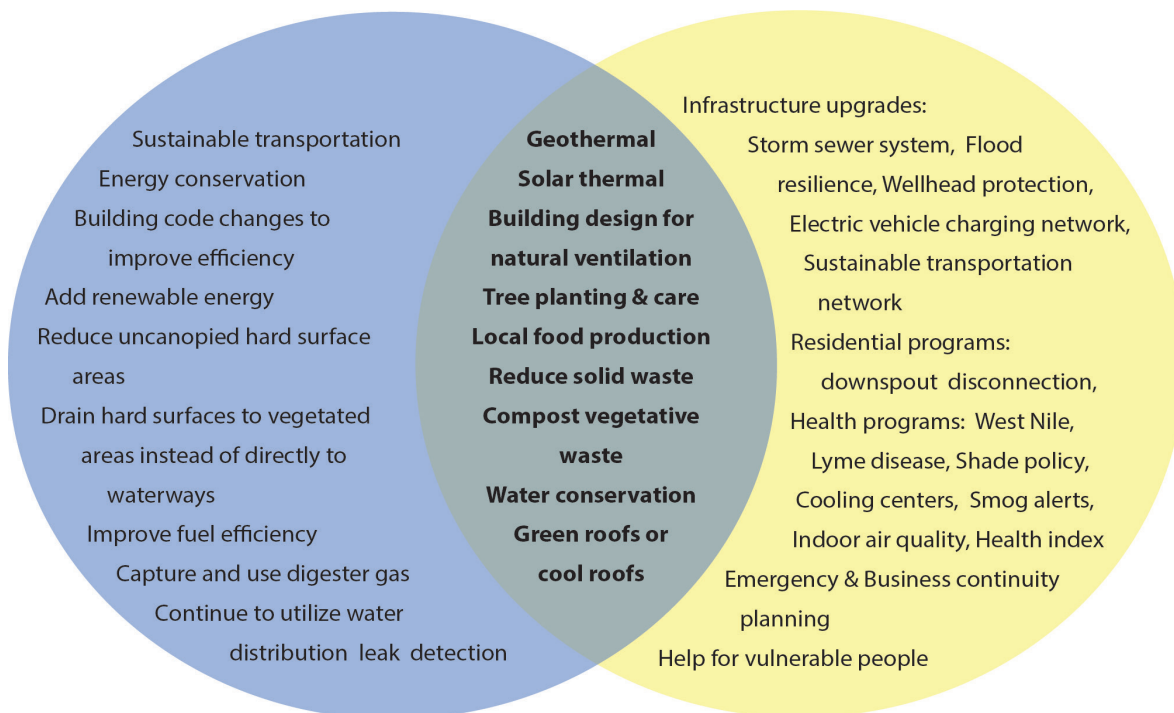


Mitigation

Adaptation

they use less energy to stay warm in the winter and cool in the summer is an obvious way to mitigate emissions. But insulating is also a critical adaptive strategy, helping to manage life with rising summer temperatures.

Most of the proposed strategies in Goshen’s government operations climate action plan are intended to reduce emissions toward the stated goal of net-zero emissions by 2035, and are therefore mitigative. There are some which are clearly adaptive as well, and some which blend both adaptation and mitigation, such as the Canopy Goal and flood preparation. By identifying and adopting both mitigation and adaptation strategies, the climate action plan strengthens our current and future resilience.




EMISSIONS REDUCTION STRATEGIES

The work of inventorying our energy consumption and the associated emissions, and then proposing reductions against projected consumption is sobering. The Climate Action Plan's stated 5-year benchmark goals for 2026 (30% reduction of electricity consumption in buildings, 20% reduction in natural gas consumption in buildings, and 25% reduction in gasoline consumption by the City's fleet) will net only about 746 fewer MTCO₂e than a do-nothing, business-as-usual approach. With the proposed reductions, in addition to the reduced emissions from NIPSCO's electric generation, the overall emissions reduction in government operations is about 45% – from 9,396 MTCO₂e to 5,114 MTCO₂e – by 2028.

On the surface this looks encouraging. However, NIPSCO's reductions make up the majority of these decreases (3,536 MTCO₂e) over the same period. Furthermore, looking at the projections, the City's emissions begin to climb again by 2029 in spite of the first round of reductions. Taken together, this means that while the initial proposals are good, they are not nearly good enough to set the City on the path to the larger stated goal of net-zero emissions by 2035. Solar energy production is the best bet – and it is a good one – to reduce operational electric emissions in a significantly meaningful way. The technology exists (along with the solar hours), as well as the facilities (Wastewater Treatment Plant) which could receive solar installations that result in critical electric

emissions reductions and long-term cost-savings. Solar energy is not a silver bullet, but investing in solar has never been more profitable.

The emissions reductions strategies which follow are challenging. They include the initial 2026 benchmarks. They also include strategies which can – if implemented with sustained effort, cooperation and funding, not to mention careful monitoring – propel the City toward zero emissions. This work comes with a hefty financial cost. If the City understands that this is the right thing to do, it will make the adjustments to operations, to behaviors, and to culture in order to meet the challenge. Understanding the necessity of the work is the essential ingredient.



The overall emissions reductions in government operations is about 45%. NIPSCO's reductions make up the majority of these decreases.

1. DEVELOP REDUCTION TARGETS FOR EMISSIONS CATEGORIES WHERE THERE IS A CLEAR PATH FOR SUCCESS THROUGH TECHNOLOGY OR BEHAVIOR CHANGE, RELATIVE EASE OF IMPLEMENTATION, POSITIVE COST-BENEFIT RATIO, AND PRESUMPTION OF CITY AND PERSONNEL DISCIPLINE TO ACCOMPLISH THE WORK.
2. DETERMINE EMISSIONS CATEGORIES THAT WILL REQUIRE ADDITIONAL DATA AND DEVELOP A TIMELINE FOR ACCUMULATING THE DATA AND WORKING TO CREATE SITE-SPECIFIC STRATEGIES AND THEIR CORRESPONDING COST-BENEFIT RATIO.
3. DETERMINE WHICH EMISSIONS CATEGORIES OR STRATEGIES SHOULD BE RE-EVALUATED LATER DUE TO UNCLEAR PATHS TO SUCCESS. THESE INCLUDE LACK OF AVAILABLE TECHNOLOGY, CURRENT PROJECTION YIELDS HIGH COST AND LOW BENEFIT, PERCEIVED DIFFICULTY IN DEVELOPING BUY-IN FOR BEHAVIOR CHANGES, OR OTHER OBSTACLES.
4. IDENTIFY STRATEGIES TO ANTICIPATE AND LESSEN LOCAL CLIMATE CHANGE IMPACTS ON PEOPLE, LIVING THINGS, PROPERTIES, AND OPERATIONS BASED ON INFORMATION FROM INDIANA'S UNIVERSITIES AND CLIMATE CHANGE SCIENTISTS.

STRATEGY #1

ENERGY MANAGEMENT OF BUILDINGS AND FACILITIES

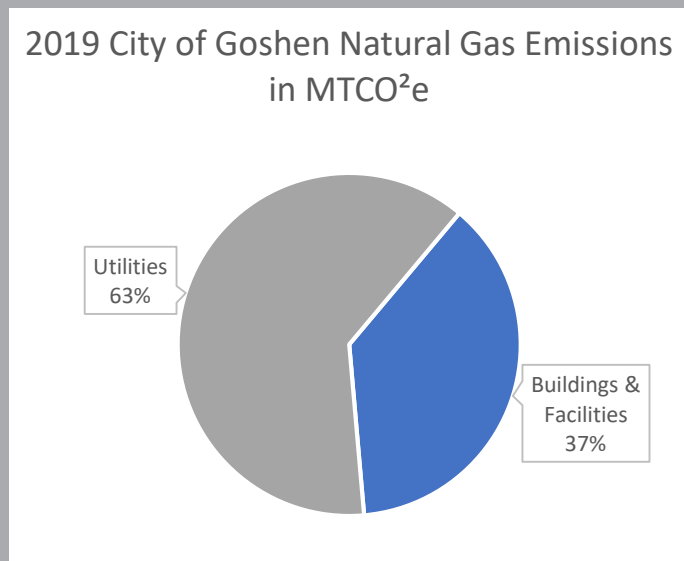
Energy Management is a fundamental component of all climate action plans. The City of Goshen utilizes electricity and natural gas for heating and cooling buildings, powering lights, equipment, computers, and the processes involved with drinking water treatment and distribution and wastewater collection and treatment. In 2019, the City used almost 2.5 million kWh of electricity powering city facilities and outdoor lighting, such as street lights and parking lights. That equated to emissions totaling 1,421.7 MTCO₂. Approximately fifteen percent of those emissions were generated by City facilities, ten percent by street lights, and seventy-five percent by utility processes.

The City has been converting lighting to LED for several years. Beginning in 2020, NIPSCO began converting NIPSCO owned street lights to LED which will also save the City money. That savings is not included in the estimates in this section. The CAP recommends a review of street lighting policies and accounts to better evaluate long term plans and savings in this area.

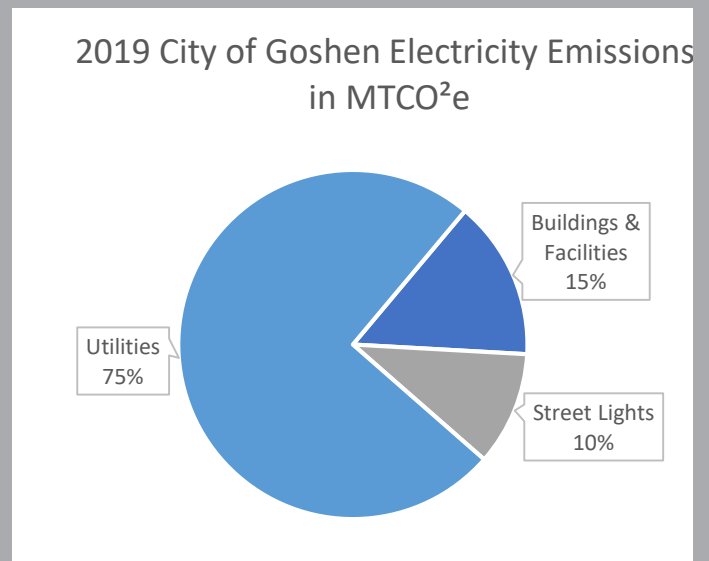
A 2015 energy report conducted by the U.S. Department of Energy (DOE) concluded that commercial buildings could reduce their energy consumption by twenty-one (21) percent if they employed all “energy star” equipment. They could reduce their consumption by forty-seven (47) percent if buildings utilized best and cost-effective technologies and fifty-nine (59) percent savings if all equipment operating at its theoretical efficiency limit.

Some city buildings have already had some upgrades completed, such as Central Garage, the Annex Building, City Hall, and Central Fire Station; however, building efficiency in almost all cases can be improved. Reductions in energy consumption result in cost savings and reduced emissions. The goal for emissions reduction in City buildings is thirty (30) percent in electricity and a twenty (20) percent in natural gas by 2026. Reductions at this level generally require only small investments or behavior change and net a larger financial reward. The savings from these reductions would result in upwards of \$65,000 annually. A case study on the Reith Center can be found on the Environmental Resilience Page of the website.

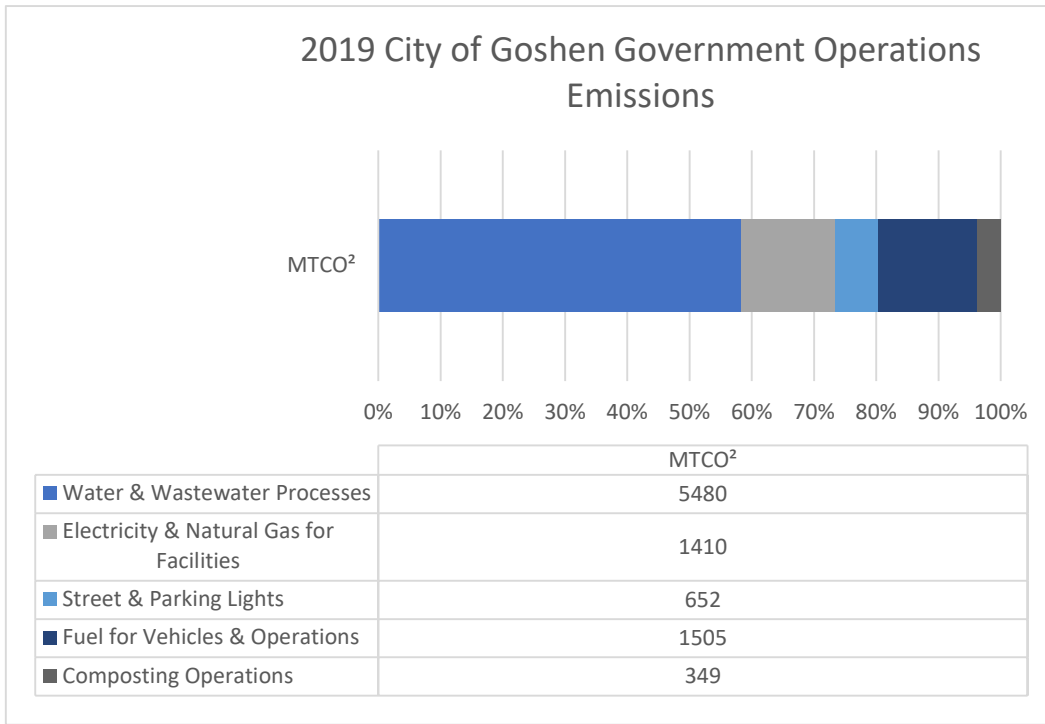
2019 GAS EMISSIONS



2019 ELECTRICITY EMISSIONS



2019 GOSHEN GOVERNMENT EMISSIONS




The savings from these reductions would result in upwards of \$65,000 annually. Reductions at this level generally require only small investments or behavior change to net a larger financial reward.

REITH INTREPRETATIVE CENTER



STRATEGY #1 ENERGY MANAGEMENT

Co-Benefits																
Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes	
Energy Management 	Increase Efficiency of Building Systems and Technologies and Reduce resource consumption (energy & water) Electricity 30%, Natural Gas 20%, Water 30% by 2026.	1.1	Perform energy consumption and water audit within each building/facility to determine the efficiency of components, appliances, mechanicals, envelope tightness, and evaluate workspace concerns. Generate a work plan for improvements to maximize return on investments based on available budgets and working toward Climate Action Plan goals.	1st - 3rd Years	✓	✓			✓	Environmental Resilience is compiling information from a multi-department effort (Engineering, Building, Etc..) to provide coordination, develop reports, summarize presented strategies, track progress. A management team could provide overall financial review and leadership toward the adoption of practices.	variable	Regular annual maintenance	\$65,000 +	Goshen Comprehensive Plan 2025, C-1: Provide and Maintain Excellent Public Facilities, NE-8: Encourage Sustainable Living and Business Practices, E-6: Encourage business practices that have positive social impacts on the community, E-7: Encourage Sustainable Living and Business Practices,	About 30% of a home's heating energy is lost through windows. In cooling seasons, about 76% of sunlight that falls on standard double-pane windows enters to become heat. https://www.blueaccounting.org/article/adaptive-management-and-collaborative-adaptive-management .	
		1.2	Develop mechanisms for all departments and/or building managers to be aware of and responsible for energy consumption and resulting costs.	2nd to 4th years	✓				✓		Staff Time	Staff Time				
		1.3	Develop a heating and cooling policy relevant to each specific building. Replace thermostats with "smart" thermostats (appropriately managed) where applicable.	2nd - 3rd Years	✓					✓		Staff Time	Staff Time		Can save up to 10% on energy costs	Thermostats that adjust to use less cooling and heating when buildings are empty can save 10% of energy costs
		1.4	Establish city-wide employee teams will participate with feedback and champion improvements to their workplace operations.	Quarterly	✓	✓				✓	Environmental Resilience with assistance from all Departments	Staff Time	Staff Time			
		1.5	Evaluate landscaping around city buildings and, where needed, develop a plan to co-plant fast-growing with slow-growing trees (tree shepherding) to maximize shade production to meet canopy goals and realize energy savings.	1st Year - On-going	✓	✓	✓	✓	✓	✓	Environmental Resilience in consultation with Facility Managers	Minimal	Regular annual maintenance		Can save up to \$50% on summer cooling costs	Building cooling expenses can be reduced by 5-50% where a tree canopy and smart landscaping design is implemented (energy.gov)
	1.6	Design new city facilities using the most efficient building & energy systems, 30 year (or the life of the specific accessory) payback period to prevent the future costs associated with retrofits. Design and construct to easily allow for the addition of solar systems at a later date. Model environmental resilience.	Immediate	✓	✓			✓	✓	Engineering / Environmental Resilience	Designed with a 30 year or less payback					
	1.7	Evaluate and adopt, if & where feasible, alternative work schedules to improve facility efficiency, including open hours, workplace schedules, in-person and online services to balance openness, accessibility, efficiency, costs, etc. Explore remote-work options and remove barriers to remote-work where needed, such as digitizing records.	Annual Review	✓	✓				✓	All Departments	undetermined	undetermined	undetermined			



STRATEGY #2

SOLID WASTE MANAGEMENT

In 2019, residential trash picked up at the curb equaled over one ton per household at a cost of \$1.4 million.

The City of Goshen generates two primary forms of solid waste: trash generated by City employees throughout the workday and green waste (leaves and brush) picked up curbside and composted or chipped at the Goshen Environmental Center. The decomposition of these products either in a landfill or in a composting pile generates carbon dioxide.

The emissions generated from operations at the Goshen Environmental Center total 349 MTCO_{2e}. These emissions are a natural process of decomposition. As any living thing decomposes it will generate carbon dioxide. The reason that these emissions are included in the CAP is that the material is quantified and placed on public property where it is stored and turned as it develops into a viable product for reuse.

The waste from City operations is co-mingled with the community's residential waste when picked up and taken to the landfill. As the owner, the Elkhart County Landfill reports the emissions from landfilled waste annually to the Indiana Department of Environmental Management (IDEM).

The City has significant influence over the community's waste generation by managing the contract for waste pickup, prompting the Environmental Resilience Department to include the solid waste data in this report. However, the overall emissions count is not included as a part of the overall Government Operations emissions. This area of emissions is significant, totaling 8,292 MTCO_{2e} and will be addressed in both the Government

Operations Climate Action Plan and a Community Climate Action Plan should that be developed in the future.

In 2019, the contracted waste hauler picked up 11,824 tons of solid waste from approximately 10,600 households and from some government operations. It is estimated that approximately 3.7% of solid waste was due to City Operations. City operations generated approximately 425 tons, and residents generated 11,398 tons, over one ton per household (ton equals 2,000 lbs). Disposal costs were \$1.3 million for 2019, up from \$809,000 in 2015, with a 15% increase in tonnage per household during that time.



COMMUNITY RESIDENTIAL SOLID WASTE

In 2019, the contracted waste hauler picked up 11,824 tons of solid waste from approximately 10,600 households and from some government operations. It is estimated that approximately 3.7% of solid waste was due to City Operations. City operations generated approximately 425 tons, and residents generated 11,398 tons, over one ton per household (ton equals 2,000 lbs).

Disposal costs were \$1.3 million for 2019, up from \$809,000 in 2015, with a 15% increase in tonnage per household during that time.

Some material is being diverted from the landfill. There is five drop-off recycling centers in Goshen placed there by the

Elkhart County

Currently approximately 1,140 households pay for private curbside recycling. Those households capture approximately 456,000 pounds of material annually that can be sold and reused as a part of the local economy.

Based on national statistics and the number of local dropoff sites, an additional ten percent of households also may be contributing to dropoff recycling sites diverting an additional 425,000 pounds, making the total solid waste diverted approximately 881,000 pounds. This is an important number when looking at the total landfilled amount of 12,694 tons (25,388,000 pounds) in 2020. If the solid

waste numbers are combined, the Goshen community reclaimed just 3.4% of the material entering the landfill.

Typical municipal residential solid waste is 48% recyclable or 12,186,240 lbs of the possible 25,388,000 pounds. Reducing solid waste entering the landfill by 48% would save almost \$675,000 and divert 12,186,240 pounds of material into the local and regional economy. It would also cut solid waste emissions in half.

GOSHEN SOLID WASTE STATISTICS

Solid Waste Statistics City of Goshen

Year	*Residential Households	Total Tons per Year Collected	Charges per ton		Total Charges per year	Total Tons Broken down by Customer -See tabs			lbs per household per year	\$ per household per year	Percentage change in weight by per household
			Pickup and Transport	Landfill Tipping Fees		Utility Tons	Civil City Tons	Residential Tons			
2021	10,706										
2020	10,646	12,694	\$ 92.15	\$ 18.60	\$ 1,405,861	203	254	12,237	2,299	\$ 127.17	7%
2019	10,600	11,824	\$ 92.15	\$ 18.60	\$ 1,309,508	189	236	11,398	2,151	\$ 118.97	15%
2018	10,553	10,242	\$ 92.15	\$ 18.60	\$ 1,134,302	164	205	9,873	1,871	\$ 103.51	-1%
2017	10,513	10,377	\$ 62.99	\$ 18.60	\$ 847,329	166	208	10,003	1,903	\$ 77.62	4%
2016	10,473	9,937	\$ 62.99	\$ 18.60	\$ 810,792	159	199	9,579	1,829	\$ 74.55	0%
2015	10,433	9,924	\$ 62.99	\$ 18.60	\$ 809,745	159	198	9,567	1,834	\$ 74.74	3%
2014	10,393	9,602	\$ 62.99	\$ 18.60	\$ 783,451	154	192	9,256	1,781	\$ 72.59	2%
2013	8,710	9,428	\$ 62.99	\$ 18.60	\$ 769,253	151	189	9,089	2,087	\$ 85.05	



SOLID WASTE MANAGEMENT

SOLID WASTE GOALS

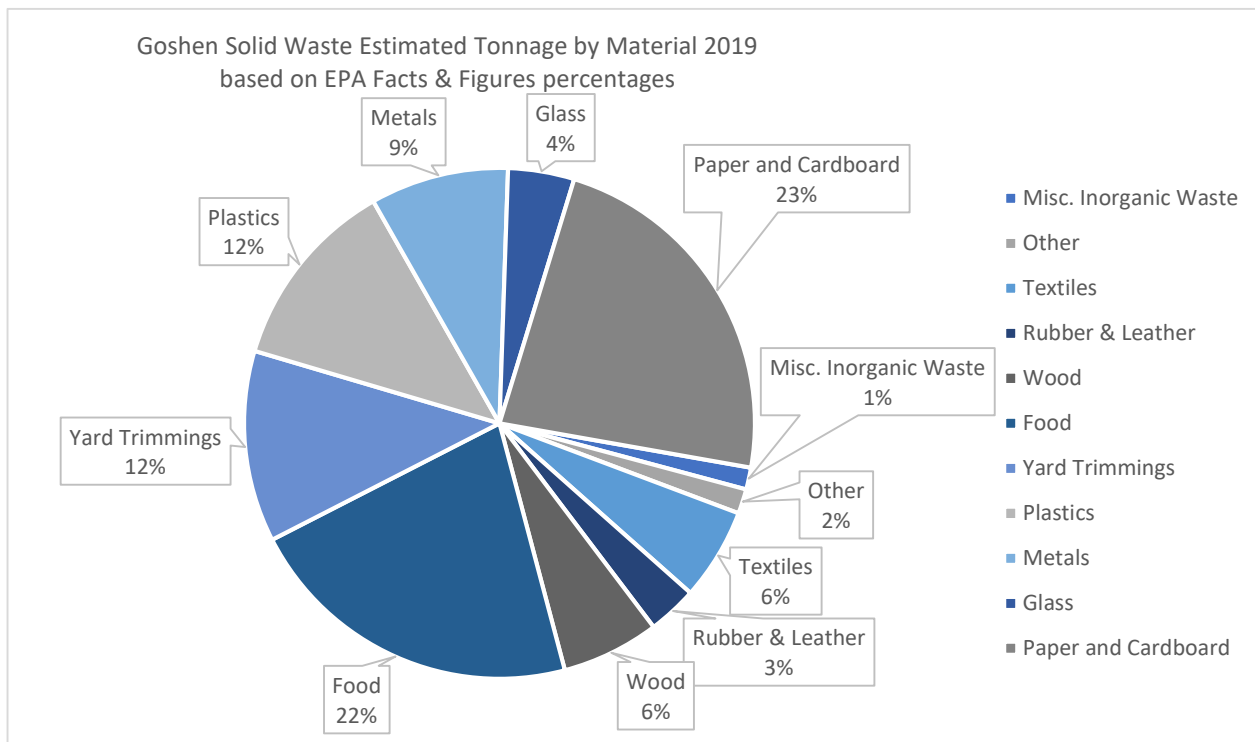
The City is working on specific goals to reduce the trash in City operations. Solid waste characterization and audit studies will need to be developed for City operations in the future but are not yet prioritized in the specified strategies due to a lack of poor existing metrics.

Also, the City will be developing a public education campaign on the topic of


solid waste. The campaign will inform on how solid waste impacts our community and our local budget. It will also highlight recycling is an essential part of our local economy that not only diverts material from the landfill but reclaims a valued commodity for use in local and regional businesses, supporting jobs and products made in Indiana. The education campaign

will also highlight local businesses that provide products that reduce waste, provide less packaging, and open up new choices for persons wanting to reduce their volume of landfilled trash.

TYPICAL MUNICIPAL SOLID WASTE



STRATEGY #2 SOLID WASTE MANAGEMENT

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits					Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes	
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience							
Solid Waste Management 	Review practices and promote Innovation to reduce GHG when providing services for Green Waste.	2.1	Review Green Waste processes and methods and look for ways to innovate that will reduce GHGs and improve systems, including employee communication.	Annual Review	✓				✓	Engineering and Street Departments	to be determined	to be determined	to be determined	Goshen Comprehensive Plan 2025, C-8 Efficient & Effective Street Department Services, NE-7 Use best practices to reduce and dispose of solid waste.		
		2.2	Stock & increase the use of reusable dishware & silverware. Buy 20% post-consumer waste or greater when possible (no Styrofoam or non-biodegradable products).	1st Year - On-going	✓			✓	✓	Could be someone in the building or a team that looks to continue to improve practices around recycling. Maybe a team would meet quarterly.	Minimal	Minimal	Reduction of solid waste entering landfill.	Goshen Comprehensive Plan 2025, NE-7 Use best practices to reduce and dispose of solid waste		
		2.3	Evaluate (survey need) and implement compost (organics waste) opportunities across applicable municipal departments.	2nd Year - On-going	✓			✓	✓		Minimal	Minimal				
		2.4	Develop and adopt a city-wide policy that outlines waste management protocols for government operations, including regular waste and "universal" (e-waste, fluorescent bulbs, etc.) waste.	1st Year	✓	✓	✓	✓	✓	Invite multi-department participation in brainstorming and policy development to determine City needs and values.	Creation of Training materials or posters	Minimal	indirect savings		It is illegal to send "universal" waste to the landfill. https://www.in.gov/idem/recycle/2384.htm	
		2.5	Evaluate consumable products by Financial and Environmental CBAs, develop an "approved" list used for most purchasing, and streamline on a city-wide basis.	2nd Year	✓	✓	✓	✓	✓	Would require centralized purchasing, lack storage and dedicated staff.	unknown	to be determined				
		2.6	Evaluate current waste removal and recycling contracts regarding best management practices.	2nd Year - On-going	✓				✓		to be determined	to be determined	to be determined			

STRATEGY #3

SUSTAINABLE TRANSPORTATION

Approaching net-zero will require a plan that reduces fleet emissions and still maintains City services.

The 2019 inventory of Goshen’s governmental operations reveals approximately sixteen percent of the City’s emissions from the direct burning of fossil fuels, gasoline, diesel, and off-road diesel in transportation and equipment. The total emissions from fossil fuel combustion in governmental operations are second only to the emissions generated in water and wastewater processing operations (Figure 2 2019 Goshen MTCO₂e Emissions Generated).

The City’s vehicle fleet includes passenger vehicles such as sedans and SUVs, light-duty and heavy-duty trucks, and off-road equipment such as loaders, mowers, and generators. While acknowledging that this is a substantial source of emissions, it is critical to understand that the City’s work necessitates vehicles and equipment.

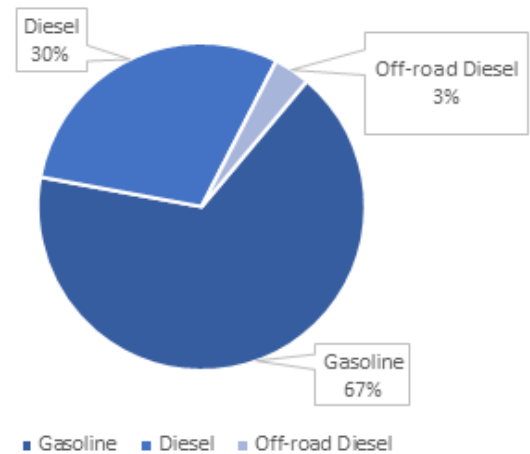
Approaching net-zero will require a plan that reduces fleet emissions and still maintains City services. It will also require additional regulation and substantial investment by the vehicle industry. Fuel efficiency is non-existent in heavy-duty options. This will prohibit reducing emissions in the vehicles classified as heavy-duty and critical to the City’s operations.

There is a complete fuel analysis located in the Appendix.

The City used approximately 162,000 gallons of fuel in 2019. Gasoline made up

FLEET EMISSIONS

Fleet Generated MTCO₂ in 2019



the majority of those gallons at sixty-seven percent. Diesel use was thirty percent, and off-road diesel was just three percent.

The gasoline-powered vehicles consist of sedans, SUVs, light-duty trucks (F150s),



and heavy-duty trucks (F250s, F350s, F550s). The diesel-powered vehicles consist of heavy-duty trucks (fire trucks, ambulances, International and Volvo trucks, sewage vacuum trucks, sweepers, and others). Off-road equipment would include equipment such as loaders, bobcats, and mowers. These distinctions are essential to understand as fuel use is examined.

Options in Reducing the Fleet’s Carbon Footprint

There are options in reducing emissions from the vehicle fleet. These options provide long-term costs savings to the City. The three apparent options are:

- Drive less. For example, the mean 2019 police vehicle mileage was 11,115 miles per vehicle, highest mileage at 26,904 miles and lowest at 1,377 miles;
- Increase the fuel economy of vehicles in the fleet. The mean for all city vehicles was 18 miles/gallon and sedans and SUVs were 21 miles/gallon, and
- Transition to vehicles that use a fuel type that releases fewer emissions, such as electric.

The first option in reducing emissions is merely driving fewer miles. This can be done through department policy or encouraging behavior changes, such as encouraging employees to combine trips and rideshare. This also includes remedies such as an idling policy, proposed by the Fleet Manager in 2019, to reduce wasted fuel from vehicles sitting with the engine running. Reducing miles can also be an

opportunity to experiment with greener transportation, such as bicycling and walking. Not all departments can employ this strategy, and those that can, typically cannot in all situations. Still, a successful walking and bicycling program could equate to a small but relevant percentage.

Increasing fuel economy is another effective way to reduce emissions and fuel consumed. The City has successfully used hybrids, both Toyota and Ford, for the Building and Engineering Departments for a decade; however, these departments are

not the city’s heaviest fuel users. Utilizing hybrids in departments where the vehicles are driven more miles per year would positively impact fuel consumption.

Current United States fuel economy standards for 2022 are 50.24 mpg (small footprint passenger vehicles), 37.59 mpg (larger passenger vehicles), 40.31 mpg (smaller footprint light-trucks), 26.02 mpg (larger light-trucks). These are the average automaker fleet economy targets (further information on US fuel economy standards can be found in the appendix under Fleet Analysis). They include all vehicles in the manufacturer’s fleet and both city and highway mileage. These targets do not reflect the current fuel economy of the City’s fleet due in part to the age of the fleet but also due to the traditional evaluation criteria used to purchase vehicles, including;

- Municipalities have traditionally given preference to American made vehicles;
- Fuel efficient vehicle options on the market have lagged, especially for police vehicles, which comprised the bulk of the gasoline fleet emissions;
- Adoption of new technology requires both drivers and technical support to adapt or add additional training;
- New technologies can be expensive, require additional equipment, new maintenance requirements, or have

a stigma of being unproven technology; and



- Budget considerations.

Sedans are the largest group of vehicles in the fleet (Table 1);

Breakdown of Gasoline - Powered Fleet					
Vehicle Description	Number of Vehicles	Highest MPG	Lowest MPG	Median MPG	Median Vehicle Year
All Vehicles	175	54	5	18	2015
Sedans	60	54	16	19	2012
SUVS	43	44	14	19	2016
Lgt Trucks	31	24	13	19	2011
Heavy Trucks	40	14.5	5	8	2015

however, they are the oldest with the exception of light trucks according to the calculated median of 2012. The Median fuel economy for all vehicles is a mere 18 mpg (City). This fuel economy is not atypical for American municipal fleets. They are replete with low-mpg options, especially in fleets comprised of a majority of police vehicles. Vehicles marketed as Police Interceptor vehicles have traditionally been American-made and sold on features, not gas mileage. For example, the 2019 inventory had seven 2019 Dodge Chargers, with a fuel economy of just 19 mpg for city mileage (30 mpg highway). Transitioning appropriate police vehicles to hybrid and fully electric as technologies advance can significantly reduce fleet-related emissions.

STRATEGY #3 SUSTAINABLE TRANSPORTATION

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits				Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality						
Sustainable Transportation  	Reduce passenger vehicle emissions by 25% or increase mean fuel economy to 27 mpg per City Department by 2026 (passenger vehicles)	3.1	Fund the adoption of light-duty vehicles to replace poor energy performers and reduce emissions by 25% from gasoline powered fleet by 2026. Continue to incorporate hybrid and EV alternatives.	1st Year - On-going	✓	✓	✓	✓	✓	Fleet Manager and Department Heads	\$ 250,000	\$ 250,000	\$ 75,000	Minimum fuel savings for gasoline with a reduction of 25% fuel priced at \$3/gallon. The automotive sector is rapidly changing. There are still limitations to EV technology. The City will incorporate EV as it makes sense using cost-benefit analysis evaluation both economically and environmentally.
		3.2	Facilitate the development and implementation of a gasoline emissions strategy by each Department to reduce emissions by 25% or increase Department mean fuel economy to 27 mpg for passenger vehicles by 2026.	1st Year - On-going	✓	✓	✓	✓	✓	Departments work with the Fleet Manager to develop strategies. Each Department's plan to increase fuel economy and reduce emissions responsibility of Department Head.	Staff Time	Staff Time	Reduce expense of gasoline. Health benefits through better air quality.	
		3.3	Evaluate and replace appropriate gasoline-only Police vehicles with hybrid and electric vehicles as technology improves.	1st Year - On-going	✓	✓			✓	Fleet Manager and Police Department	From line 3.1	From line 3.1	From line 3.1	
		3.4	Educate and Demonstrate to Departments and employees new innovations on the market as they become available or viable options.	1st Year - On-going	✓	✓	✓	✓	✓	Fleet Manager with assistance as needed	\$ 500	\$ 500	Create a culture of proactive and participating employees.	
		3.5	Develop a strategic plan for municipal fleet charging stations, including a few community access (early adoption only) to become EV sustainable in government operations.	1st Year - On-going	✓	✓	✓	✓	✓	Representatives of various Departments led by the Fleet Manger and coordinated by Environmental Resilience	Staff Time	Staff Time	Grant money could be used to fund.	
	Active Transportation - Increase the number of zero-emission miles commuting or traveled during work to 5,000 annually by 2026.	3.6	Develop an education and awareness campaign to promote bicycling and identify and eliminate barriers, where possible, to employees bicycling to work.	2nd Year - On-going	✓	✓	✓	✓	✓	Could develop an employee-represented "Active Transportation" committee comprised of representatives of various Departments and coordinated by Environmental Resilience	\$ 1,500	\$ 1,500	Health Insurance savings directly or indirectly. Healthy & Fit Employees.	
		3.7	Develop guidance to allow & encourage bicycling as a commuting option during the workday (where applicable), including bke storatge infrastructure.	2nd Year - On-going	✓	✓	✓	✓	✓		\$ 1,000	\$ 1,000		
		3.8	Start a pilot program to provide "fleet" bikes at appropriate City buildings to reduce miles driven using motorized vehicles.	2nd Year - On-going	✓	✓	✓	✓	✓		\$ 10,000	\$ 2,000		
		3.9	Continue to work to achieve the goals of Goshen's Bicycle and Pedestrian Plan. Work to achieve "Silver" status as a Bicycle Friendly Community.	1st Year - On-going	✓	✓	✓	✓	✓		All Departments	to be determined		to be determined

STRATEGY #4

SUSTAINABLE INFRASTRUCTURE

Indiana is expected to have an increase in the number of freeze and thaw events in the winter increasing stress on local infrastructure.

Climate changes will also affect infrastructure demands and maintenance practices. According to Purdue University Indiana Climate Change Impact Assessment, Indiana has already warmed 1.2°F, and that warming is accelerating, with an expected 5-6°F increase by mid-century and consistently more warming by the end of the century.

The number of extreme heat events (defined as a high of 90° F or more, combined with a low of 68° or more) is projected to rise from an average of twenty-one currently to between fifty-eight and seventy-two events per year.

The State will also see a continued increase in rainfall intensity and average annual rainfall. Annual average rainfall has increased by 5.6 inches since 1895, and more rain is falling in higher intensity downpours.

These changes will add heat stress to infrastructures such as roads, sidewalks, and bridges. Increased rainfall will bring a greater likelihood of flooding, especially localized flooding on streets where water pools before entering storm sewers. Additional rainfall and increased intensities will test sewer capacities and increase pollution from urban and agricultural runoff.

Increased heat and stormwater will create an opportunity for constructing green spaces to dissipate urban heat

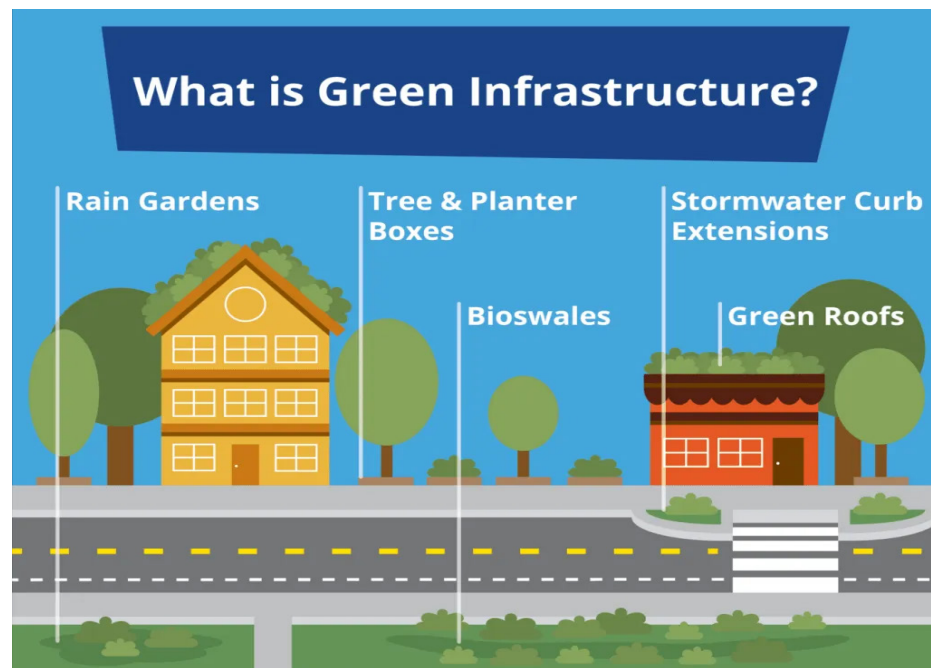
sinks and absorb rain events. Such green infrastructure provides value by reducing load within built stormwater systems and by providing ambient cooling.

Training city staff to care for green infrastructure will represent a new and critical capacity for the City to accept. As with other important infrastructure (streets, for example), techniques, skills, and schedules for maintenance of green infrastructure will need to be developed and deployed in order for these nature-based systems to work as effectively as possible.

The City can continue to look for ways to complement a variety of emission-cutting behaviors by looking

for opportunities for “road diets” – shrinking the size of our roadways. Doing so reduces material and maintenance costs (and associated emissions), reduces traffic emissions, and can increase non-motorized transportation.

Balancing infrastructure (including green infrastructure) and utility needs will be an ongoing point of discussion. Increasing the number of trees in the community is a vital part of adapting to climate change, and yet street right-of-way – a prime site for trees – is increasingly crowded with other infrastructural needs. State legislation, as well as local interest, will play a part in the manner in which sustainable infrastructure is created.



STRATEGY #4 SUSTAINABLE INFRASTRUCTURE

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits					Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience						
Infrastructure 	Reduce energy and emissions from street lights or eliminate where feasible.	4.1	Convert > 95% of street and parking lights & traffic signals to LED technology by 2026.	1st - 5th Year	✓				✓	All Departments who operate street and parking lights documented by Environmental Resilience	to be determined	Staff Time	to be determined		
		4.2	Identify , map & evaluate possible reductions or eliminations, incl. the number of parking lamps on public properties.	2nd - 3rd Year	✓				✓		to be determined	to be determined	\$200+ annually per LED pole eliminated		
	Review infrastructure standards and maintenance practices every three years to reflect current mitigation practices.	4.3	Evaluate and revise standards where climate change projections, such as increased winter freeze/thaw and higher intensity rainfall, create weaknesses in infrastructure. Consider revisions to require reasonable emissions reductions and low impact measures to adapt to climate impacts.	3rd - 5th Year	✓			✓	✓	Engineering & Street Departments	to be determined	to be determined			
	Develop capacity to maintain green infrastructure.	4.4	Develop and deploy maintenance skills, techniques and schedules for green infrastructure installations across the city.	3rd - 5th Year	✓		✓	✓	✓	Representatives of various Departments coordinated by Environmental Resilience	to be determined	to be determined	to be determined		
	Develop a culture of walking and biking as proven by the use of walking areas and local surveys.	4.5	Increase the number of miles of "Complete Streets" to enable safe, convenient, and efficient travel and access for users of all ages and abilities regardless of their mode of transportation.	On-going	✓	✓			✓	Representatives of various Departments coordinated by Environmental Resilience	to be determined	to be determined	Quality of Place		

STRATEGY #5

UTILITY PROCESSES

The Utilities are in a constant state of innovation due to the frequency of new regulations and the need to provide ongoing upgrades.

The Goshen Water and Wastewater Utility consume electricity and natural gas to pump groundwater for water treatment and distribution of drinking water throughout the City and collect and process wastewater. These Utilities generate fifty-eight (58) percent of all the MTCO₂ emissions in Goshen's government operations, with most of that energy used to power pumps and heat water.

The combined Utilities use approximately 7,345,718 kWh of electricity and 156,108 therms of natural gas annually, generating 5,545 MTCO₂ emissions (not including emissions related to nitrous oxide, currently under review). The Wastewater Treatment Plant (WWTP) is the primary user of energy, with the wastewater treatment process at sixty-two percent of electricity and seventy percent of natural gas.

The Utilities are consistently in a state of innovation due to the frequency of new regulations and the need to provide ongoing upgrades to maintain the Utilities as critical infrastructure in the community. These needs are balanced with the necessity to provide clean drinking water and wastewater services to the community at an affordable cost.

These needs have resulted in consistent upgrades and efficiency improvements over the years, such as the stormwater detention facility and adoption of Supervisory Control and Data Acquisition systems. Upgrades to the facilities are expensive, and as of 2021, it is hard to identify more upgrades that could yield significant energy and emissions savings with an adequate payback timeline.

Currently, the WWTP is undergoing expansion and efficiency improvements, set for completion in December, 2021. With these improvements, the wastewater treatment plant is expected to reduce energy consumption by 1,321,000 kWh annually, equating to 858 MTCO₂. This is a twenty-one percent reduction in emissions from the WWTP and a 9.6% reduction of MTCO₂ in overall City government emissions.

Beyond these current improvements, and some speculation about the ability to co-generate electricity from WWTP methane, the City's best option for mitigating Utility emissions may be through offsets, such as construction of solar arrays which either directly benefit Utility facilities, or which directly benefit other City operations. While there is significant cost involved in such

construction, solar is nevertheless a sound investment in the near and long term. Even in a more extended return-on-investment scenario, solar energy production benefits can be considered a worthy deposit on social and ecological health.

The critical nature of the water and wastewater utilities to the basic health and well-being of the Goshen community, combined with the facts that they a) require an extraordinary amount of energy to function and b) are an essential safeguard of ecosystem integrity, make them in many ways the centerpiece of any meaningful work toward City government emissions reductions.



STRATEGY #5 UTILITY PROCESSES

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits					Suggested Responsibility (implementation, enforcement, monitoring, etc.)	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience						
Utility Processes	Offset energy consumption through solar installation	5.2	Explore solar energy production options at WWTP and Water utility with the intent to fund as offset against current energy usage.	On-going	✓	✓			✓	Utility and Engineering Department, coordinated by Environmental Resilience.					
	Reduce maintenance costs and emissions	5.3	Introduce pollinator-friendly native plantings in various mower-intensive sites.	On-going	✓	✓	✓	✓	✓	Utility Department					
	Review Utility Processes & Energy Usage every 5 years for efficiency	5.1	Continue to encourage and support professional learning opportunities, evaluating new strategies, and knowledge sharing with other communities.	On-going	✓	✓		✓	✓	Utility Department		on-going	on-going		

STRATEGY #6

SUSTAINABLE LAND USE THROUGH RESILIENT ECOSYSTEMS AND BIODIVERSITY

Only a small amount of the 3.5 million gallons per day of groundwater pumped out of the ground for drinking water will return to the earth as groundwater.

LAND MANAGEMENT

Land Management encompasses all of the naturally occurring animate and inanimate members of our ecosystem. These occupants of the ecosystem play critical roles in the health of Goshen's human economy. Learning new ways to live with and appreciate these non-human members of our community is necessary for our social systems' ongoing health and wealth. Land management, in the context of this Climate Action Plan, means developing better ways for people to live within our means and encouraging our ecosystem to expand and flourish.

An essential part of better land management will be a comprehensive inventory of City-owned land. Such an inventory will describe how the land is currently used, what the land type is, what kinds of flora and fauna are present, how vegetation is currently managed, and what kind of long-range plans exist for the land. With such an inventory completed, current management practices can be compared to best sustainable management practices, and a plan developed to move land management in a direction that increasingly limits emissions and other pollutants, conserves water, and increases

biodiversity and canopy. Our goal will be to work towards mowing less, installing and managing more native grasses, forbs, and trees, and using less fertilizers and irrigation.

Preserving floodplain and adopting a flood resilience plan which is responsive to climate science are key characteristics of sustainable land use in Goshen. A Flood Resilience Plan commissioned in late 2020 will set the stage for ongoing discussion

and progress toward key goals, such as enhancing floodway property already managed by Goshen Parks and developing an efficient process for purchasing vulnerable floodway real estate when available. Incorporating Goshen's Urban Tree Canopy Goal of 45 percent tree-shade by 2045 will also play an important role in land management decisions on city property. More details of this plan are outlined in the Tree Canopy section.

PRESCRIBED BURN AT GOSHEN COLLEGE



WATER CONSERVATION

Land management in Goshen will require the conservation of such natural phenomena as groundwater, surface water (i.e. rivers, creeks, ditches), trees, healthy soil, and clean air. Drinking water in Goshen is sourced from groundwater. The Water Utility's average production is 3.5 million gallons per day, with a maximum production capacity of about 10 million gallons per day. Only a very small amount of that water will become groundwater again. Remaining water returns to the atmosphere through evaporation, becoming a part of a living organism, being aspirated into the air, or flowing to the wastewater treatment plant and then the Elkhart River. Groundwater is recharged by precipitation, but only about one-quarter of all the water falls will become groundwater. Reducing the consumption of water preserves groundwater stores. Saving water also reduces energy use and

emissions. Protecting ground- and surface water from pollution is an important aspect of conserving our water. Urban pollution typically comes in the form of phosphorus, nitrates, and soil sediment. (Industrial pollutants can present different toxins). The primary sources are vegetative (yard) waste, soil runoff, and fertilizer, none of which are so different from agricultural pollution except in concentrations: urban areas are connected to storm sewers. Storm sewers carry yard waste, soil, and fertilizer from all over the City and deposit them into the waterways in a potent mix. Once in our waterways, these pollutants can manifest long-lasting consequences for humans and non-humans alike. Freshwater is likely to be an increasingly precious resource in this century. We live in a region that has abundant freshwater access at the current moment. Planning for

its continued safety and abundance will be critical as human populations shift due to climate change.

GOSHEN MUNICIPAL WATER TOWER



POLLINATOR PLANTINGS COULD BE A LAND MANAGEMENT TOOL FOR REDUCING MOWING AND DEVELOPING POLLINATOR CORRIDORS IN THE CITY



STRATEGY #7

TREE CANOPY

The sugar maple has thrived in the Goshen area, but Goshen will increasingly be on the southern fringe of this tree's ideal habitat as climate changes

The 2019 Goshen Urban Tree Canopy Goal will increase our urban forest from twenty-two percent coverage (2013 data) to forty-five percent by 2045. Urban forest management will care for this increasing population of trees to improve the built environment. Additionally, the City intends to diversify tree species in order to reflect the changing migratory patterns of trees in the Goshen region due to a changing climate. An example of this is the sugar maple. This tree species has thrived in the Goshen area, but Goshen will increasingly be on the southern fringe of this tree's ideal habitat as the climate changes.

Adopting policies and practices to support the canopy goal on City-owned property can have a two-fold impact on our Climate Action Plan and the emissions it seeks to reduce. First, increased tree canopy can directly reduce emissions by lowering energy consumption, especially in summer months when air-conditioning is employed. Trees can also reduce winter heating needs by blocking freezing windchills. Goshen's public tree inventory calculates that public trees saved \$408,000 in energy consumption costs in 2020. Additionally, tree canopy captures significant amounts of precipitation,

keeping more than 16 million gallons of stormwater (2020) out of our sewer system, some of which would be treated, causing the release of emissions.

Secondly, trees offset greenhouse gases: by sequestering greenhouse gases, trees allow the City to deduct emissions from the total gases that are released into the atmosphere. Greenhouse gas emissions are a product of the activities that support

Goshen's essential services. The City cannot realistically achieve Net Zero Emissions by 2035 without offsetting some of those emissions. Our inventoried public trees (roughly 14,000) offset 1207 MTCO₂e in 2020 – 80 percent of 2019 Goshen City government-operated vehicle emissions (1505 MTCO₂e). This is a significant contribution to our overall goal of achieving zero emissions. As the City leads

SNOWY OWL LIKE THE ONE THAT VISITED THE GOSHEN AIRPORT IN DECEMBER 2020.



TREE CANOPY

the canopy goal effort toward 45 percent city-wide, we can continue to plant and care for trees to increase the important emissions offset which they contribute.


Achieving 45% canopy will require substantial planting in private property beyond the jurisdiction of the City. Nevertheless, the City will need to play its part in planting trees where feasible. With potential state-level legislation, a growing issue is continued crowding of rights-of-way with various underground

infrastructure (water, sewer, gas, electricity, telecom). Such crowding becomes prohibitive for trees and other green infrastructure. This is an issue which the City may need to address in order to accomplish the aims of the Canopy Goal.

It is important to recognize that while an increase in tree canopy will provide substantial benefits, there is also some increase in cost. More trees will produce more leaves and debris over the years. Goshen residents

have an important opportunity to assist the City toward the combined goals of the Canopy Goal and the Climate Action Plan by willingly adopting a culture of on-site leaf management (mulching, composting, etc) where possible, as well as woody debris management. Doing so will reduce the labor and emissions associated with this task. The City can engage the community on this and other related Canopy issues.

STRATEGY # 7 TREE CANOPY

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits					Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience						
Resource Conservation & Land Management Urban Forestry 	Urban Forestry - Increase the Tree Canopy to 45% by 2045.	7.1	Develop an internal policy to protect current city-owned forests.	1st Year	✓	✓	✓	✓	✓	Environmental Resilience with others	Discussion as a part of flood resilience plan development		Community benefits in stormwater retention, lower energy costs, improved quality of life, lower ambient temperatures.	Goshen Comprehensive Plan 2025, NE-4: Maintain, grow and promote Goshen's urban forest program. Goshen Parks Master Plan 2019-2023, Urban Forestry Division. Goshen Urban Tree Canopy Goal 2019	
		7.2	Update Urban Tree Canopy Assessment every five years to track progress toward 45% goal and to monitor the integrity of existing forested land. Maintain public tree inventory.	1st Year	✓	✓	✓	✓	✓	Environmental Resilience	\$ 15,000	\$ 3,000.00			
		7.3	Collaborate with landowners, promote long-term protection of forested land.	1st Year	✓	✓	✓	✓	✓	Environmental Resilience	Environmental Resilience Staff Time	Environmental Resilience Staff Time			
		7.4	Identify, map, and grade city-owned forested land.	1st - 2nd Year	✓	✓	✓	✓	✓	Environmental Resilience with others	to be determined	to be determined			
		7.5	Identify needs and opportunities to increase acreage of forested land.	On-going	✓	✓	✓	✓	✓						
		7.6	Update the tree ordinance including policy in support of the canopy goal.	1st Year	✓	✓	✓	✓	✓		Can be done as part of flood resilience plan development.				

STRATEGY #8

SUSTAINABLE ENERGY

By making investments in green energy, the City can develop greater energy independence and offset a portion of its own emissions.

Developing the City’s own sustainable energy source will be an important component to attaining some energy independence from both the purchase and delivery of energy through market fluctuation and long-term increases in the cost of that energy. By making sustainable energy investments, the City can develop greater energy independence and offset a portion of its own emissions.

Currently, the City acquires over 99% of its energy from NIPSCO. NIPSCO is aggressively working toward generating sixty-five (65) percent of its electricity from renewable sources by 2028. Solar has become cost-effective and NIPSCO is currently interested in making large investments in clean energy sources. The City’s government operations could meet its electricity needs with the addition of approximately 5.5 megawatts of energy generation if that electricity could be net metered. Given the current regulatory environment and the cost-benefit of large solar installations, is now a favorable time to invest in energy infrastructure.

The City could also look to develop community partners in the shared investment of energy projects.



STRATEGY # 8 SUSTAINABLE ENERGY

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits	Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes					
Sustainable Energy	Evaluate options for developing local, sustainable energy supply to increase energy independence and reduce emissions.	8.1	Based on available solar footprint and energy consumption, identify buildings and properties that could be used for renewable energy installation. Develop a cost-benefit analysis for best scenario properties that can be used as a starting point if funding is available.	2nd Year - Review Annually	Reduce GHG	Engineering with assistance from Facility Managers and Environmental Resilience	Cost and return on investment to be determined. Many large solar investments are becoming an 8-10 year payoff.	Staff time	0	0	Goshen Comprehensive Plan 2025 - NE-8: Encourage sustainable living and business practices	Solar: Roughly would need 5 MW Solar Field (Assuming 4 hours of peak sunlight) (WWTP reductions factored in), 470 wats typ. per panel - typ. size 20.8 sf (panel only) - Wind: Avg. wind speed at 33 ft is 5m/s. Vertical turbines can operate as low as 2m/s and as high as 60m/s.				
					Improve Quality of Life & Workplace								✓		0	0
					Improve Wildlife Habitat											
					Improve Water Quality											
					Improve Government Resilience											
					Improve Quality of Life & Workplace											
					Improve Wildlife Habitat											
					Improve Water Quality											
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					Improve Water Quality											
					Improve Government Resilience											
					Improve Quality of Life & Workplace											
					Improve Wildlife Habitat											
					Improve Water Quality											
					Improve Government Resilience											

STRATEGY #9

EDUCATION

The question will be, are we willing to form a different view and establish new practices to save money, reduce energy consumption, and reduce emissions?


Effective employee education is vital to the City’s success in meeting emissions reduction targets. Many of the policies and behaviors that will reduce emissions are not currently a part of American cultural norms. The program’s success depends on employees’ and leaders’ ability to objectively look at policies and practices with a critical eye and separate norms from factual information to determine best practices that both get the job done and are good for the environment, which sustains our community.

For example, many can probably agree, given adequate information, that lawn care practices which resemble vacuuming and cleaning a living room are not healthy for the living things in and visitors to the lawn. The question will be, are we willing to form a different view and establish new practices to save money, reduce energy consumption, and reduce emissions?

Emissions reduction is often a solitary job with one small success by one individual employee at a time. That makes it critical for every employee to understand why their participation in this Climate Action Plan is necessary to achieve emissions reductions. It will be the efforts of many people that equate to success. As we are willing to try new things, take the small steps, and then work into larger ones, the City will succeed.

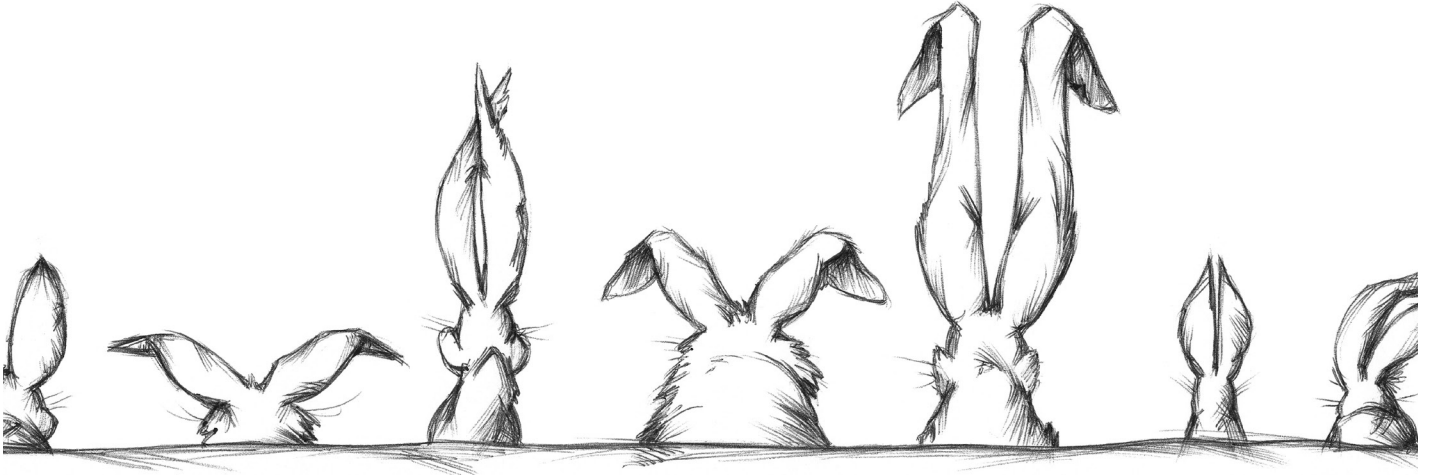


STRATEGY # 9 EDUCATION

Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Co-Benefits				
					Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience
Education 	Develop eco-literacy across all city staff. Work to ensure employees can identify emissions reduction strategies and their benefits.	9.1	Develop and implement employee training on green infrastructure, low-impact development, climate action mitigation, and adaptation practices. Implement pre and post surveys, when possible.	1st Year and on-going	✓	✓	✓	✓	✓
		9.2	Include front line employees in problem solving processes involving reduction of GHG and development and implementation of mitigative practices.	1st Year and on-going	✓	✓	✓	✓	✓
		9.3	When appropriate, provide flexible hours to allow employees to participate in other environmental education programs, such as Indiana Master Naturalists, Master Gardeners, Tree Stewards, etc. Create guiding policy on what kinds of education are sanctioned.	1st Year	✓	✓	✓	✓	✓
		9.4	Continue employee newsletters promoting environmental and climate awareness. Develop other media sources (video) for internal awareness raising.	1st Year and on-going	✓	✓	✓	✓	✓
					Improve Government Resilience	Improve Water Quality	Improve Wildlife Habitat	Improve Quality of Life & Workplace	Reduce GHG
					Staff time	0	0	0	0
					Environmental Resilience with assistance and participation from all Departments				
					Employee Development	Employee Development	Employee Development	Employee Development	Employee Development
					\$1,500	0	0	0	0
					Annual Savings				
					Related Community Plans				
					Goshen Comprehensive Plan 2025 (C-5); Expand Opportunities for lifelong learning				
					Notes				

EQUITY

Climate change will impact all of us in Goshen, but it will especially affect those already the most vulnerable and underserved.



One of the most important aspects and outcomes of creating and following a climate action plan is equity.

Equity is a term that sounds a lot like “equality” and certainly has a similar aim, but equity has to do with the structures and systems that allow equality to either flourish or fail. An oversimplified example might be to imagine that all the households in Goshen are allocated an equal amount of clean water each day – this sounds fair; but there is an equity problem because not all households have the same number of residents, meaning that some people actually receive more clean water and some receive less. Of course, we intend to solve this problem by allowing each household to pay an equal rate for as much water as they need. What if there is an equity issue regarding the funds necessary to pay for equal access to clean water?

Our government operations climate action plan seeks to move us towards equity – that is, towards operations that benefit all people in an equitable fashion. That’s a really high bar, and just like many of the goals in this plan, equity will not be met quickly or necessarily with ease. This is in part because we are used to thinking about “equal” – which is a lot

easier to measure and distribute than equity. Equity means putting the resources where they are most needed, which does not always mean equal distribution. For example, flood relief funds should go to those who experience flood damage, not to those who are high and dry.

How might a focus on equity within the context of this climate action plan change the nature of our government operations? If cost savings and reduction in greenhouse gas emissions are the metrics of success for our plan, then equity – an appropriate distribution of resources – should become an instinctive partner in working toward that success. In fact, there are ways in which we do this instinctively already – sharing equipment, sharing work hours, sharing funds, even sharing sick hours. We should understand that reducing our energy consumption, for instance, is part of what it means to equitably distribute resources appropriately: energy which we don’t use saves us money; the money can be used effectively for some other service; the energy can be used effectively for some other service; the other service benefits a broader swath of our public in incremental (but accumulative) ways; the service itself can be targeted equitably, brought to residents whose need is greatest; the

reduced emissions from lower energy consumption incrementally (and accumulatively) reduce the impacts of climate change, in Goshen and far away, which further conserves an array of resources, which can be equitably allocated.

Climate change will impact all of us in Goshen, but it will especially affect those already the most vulnerable and underserved – the people for whom equity matters most. At its heart, responding to climate change is about equity. The essential mission of the City is to serve our residents well. This climate action plan will help us do so by allocating our resources in an increasingly equitable manner to offer optimal services that build quality of life for all of us.