

ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING

Thursday, December 9, 2021 – 5:30 P.M.

REMOTE ACCESS MEETING

AGENDA

Please be advised that all of the Environmental Sustainability Committee members will be remotely attending this meeting by electronic means, in compliance with the recent amendments to the Open Meetings Act. The Chairman of the Committee has determined that it is not prudent or practical to conduct an in-person meeting due to the COVID-19 pandemic and that it is not feasible to have the Committee members or members of the public physically present at the meeting due to the pandemic disaster.

The City will be providing members of the public with various opportunities to watch or attend this meeting, as well as provide public comment at the meeting. For example, members of the public can participate remotely in the meeting by following the public audience link below which will provide both video and audio means to attend the meeting.

Public audience link:

<https://us02web.zoom.us/j/87296610303?pwd=Z0NJeUFKN1lKbHFaKzIQdkVKNmFnQT09>

Or dial by phone at: 312-626-6799

Webinar ID: 872 9661 0303

Passcode: 1861

- I. CALL TO ORDER AND ROLL CALL**
- II. INFORMATIONAL ITEMS (:05 – :15 per item)**
 - a. REVIEW OF COMMUNICATIONS EFFORTS RELATED TO ENVIRONMENTAL INITIATIVES**
– Layla Werner, Management Analyst
 - b. UPDATE ON GRANT OPPORTUNITY FOR LAKE FRONT AT FOREST PARK BEACH – Mike Strong, Assistant City Manager**
- III. ACTION ITEMS (:10 - :15 per item)**
 - a. APPROVAL OF OCTOBER 20, 2021 MEETING MINUTES**
 - b. APPROVAL OF REGULAR MEETING CALENDAR FOR 2022**
- IV. DISCUSSION ITEMS (:15 - :20 per item)**
 - a. DISCUSSION ON NEW SOLAR GENERATION FACILITIES ON CITY FACILITIES – Mike Strong, Assistant City Manager**
 - b. DISCUSSION ON SUSTAINABILITY INITIATIVES & PRIORITIES – Mike Strong, Assistant City Manager**
- V. PUBLIC COMMENT**
- VI. NEXT MEETING DATE(S)**
- VII. ADJOURNMENT**

INFORMATIONAL ITEMS

UPCOMING #SUSTAINABILITYSUNDAY POSTS

December

- Dec. 12: Energy Conservation in the Winter
- Dec. 19: Icing tactics to avoid using salt
- Dec. 26: Holiday Tree Pick-up/Recycling

January

- Jan. 2: New Years' resolution to go green!
- Jan. 9: Plastic bag recycling at the Compost Center
- Jan. 16: Winter tree pruning
- Jan. 23: Vehicle Idling Reminders
- Jan. 30: Sharing Content from Bart the Cart

PREVIOUS #SUSTAINABILITYSUNDAY POSTS

 **City of Lake Forest, Illinois**
Published by [Dana Olson](#) · December 5 at 2:27 PM · 🌐

Did you know you can recycle strands of broken holiday lights at the Lake Forest Compost & Recycling Center? It's true!
#SustainabilitySunday

The Compost & Recycling Center has all of your holiday recycling needs! Drop off broken holiday lights (which aren't recyclable curbside), gift wrapping, and large broken down boxes. Remember - the Compost & Recycling Center is switching to winter hours, so it is open on Saturdays from 8 am to 3 pm now through March 15. Learn more about... [See more](#)



 **City of Lake Forest, Illinois**
Published by [Layla Werner](#) · November 21 at 1:58 PM · 🌐

With Thanksgiving only four days away, here are some tips to have a fun and sustainable holiday!

- When shopping for Thanksgiving groceries, bring your own bag to the store.
- Use mason jars or glass containers to store your leftovers.
- Clean out all items that can be recycled before placing them in your recycling.
- Check with [Bart the Cart LF](#) or visit www.bartthecart.com to confirm what you're tossing in your recycling cart is recyclable curbside in Lake Forest.

#SustainabilitySunday



 **City of Lake Forest, Illinois**
Published by [Dana Olson](#) · October 24 · 🌐

Protect your ravines! Did you know ravines provide valuable services to our community? They help by reducing flooding, improving water quality discharging into Lake Michigan, and providing homes to migratory birds.

However, our ravines can only work this way when they are healthy. Learn how you can help protect ravines on your property or in the community:
<https://www.cityoflakeforest.com/.../envir.../RavineCare.php>

#SustainabilitySunday



ACTION ITEMS

1 ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING
2 Wednesday, October 20, 2021 – 5:00 P.M.
3 REMOTE ACCESS MEETING
4

5 ROLL CALL/CALL TO ORDER
6

7 Chairman Melanie Rummel called the meeting to order at 6:30 P.M. Aldermen
8 Jim Preschlack and Eileen Weber were present.
9

10 Staff in attendance included Mike Strong, Assistant City Manager; Cathy
11 Czerniak, Director of Community Development; Michael Thomas, Director of
12 Public Works; Chuck Myers, Superintendent of Parks and Forestry; Jim Lockefefer,
13 Assistant to the Director of Public Works; and Layla Werner, Management Analyst
14

15 There were approximately 6 members of the public that attended the meeting
16 remotely.
17

18 Chairman Rummel made the following statement as required by the Open
19 Meetings Act. In accordance with state statute, Chairman Rummel has made a
20 determination that it was not practical or prudent to schedule an in-person
21 Committee meeting because of the COVID-19 pandemic, which is why this
22 October 20, 2021, Environmental Sustainability Committee meeting is being held
23 remotely.
24

25 INFORMATIONAL ITEMS
26

27 I. UPDATE ON LAKE COUNTY FOREST PRESERVE BUCKTHORN CAMPAIGN –
28 Brandon Hayes, Bold Bison Communications & Consulting
29

30 Assistant City Manager, Mike Strong introduced Brandon Hayes, Bold Bison
31 Communications & Consulting to provide an overview of the Lake County
32 Forest Preserve buckthorn campaign currently in process. Mr. Hayes
33 presented background including details of the campaign, specifically
34 targeting the Middlefork area. Additionally, he provided information
35 regarding the County's work with home and landowners, outside of the
36 focus of the campaign, however, Mr. Hayes emphasized what they are
37 currently working to accomplish with the campaign.
38

39 Chairman Rummel asked if there were any additional comments from the
40 Committee.
41

42 The Committee asked clarifying questions regarding the timeline of the
43 campaign, and the target areas.
44

45 Chairman Rummel asked if there were any additional questions or
46 comments from the Committee or members of the public.
47

48 Seeing none, she moved to the next agenda item.

49
50 **II. RECAP OF SUMMER CURBSIDE RECYCLING AUDITS – Dan Martin,**
51 Superintendent of Public Works

52
53 Superintendent of Public Works, Dan Martin provided an update to the
54 Committee regarding the summer recycling audit that was conducted by
55 two internship positions. Mr. Martin provided further details regarding the
56 platforms used to notify residents of the ongoing audit, and the
57 educational tools used in various pop-up locations and summer camps.
58 Additionally, he displayed data stating 1,300 audits were completed with
59 an 18% contamination rate. Although initial goals were not met, Mr. Martin
60 explained the increase of single use items during COVID-19 and how that
61 has impacted the audits.

62
63 Chairman Rummel asked if there were any additional comments from the
64 Committee.

65
66 The Committee thanked Mr. Martin for his detailed presentation and
67 tactics to encourage residents to change recycling habits.

68
69 Chairman Rummel asked if there were any additional questions or
70 comments from the Committee or members of the public.

71
72 Judy Kernahan provided comments to the Committee regarding the
73 previous agenda item.

74
75 Chairman Rummel asked if there were any additional questions or
76 comments from the Committee or members of the public.

77
78 Seeing none, she moved to the next agenda item.

79
80 **ACTION ITEMS**

81
82 **I. APPROVAL OF AUGUST 18, 2021 MEETING MINUTES**

83 Alderman Weber moved to approve the August 18, 2021, Environmental
84 Sustainability Committee meeting minutes. Alderman Preschlack
85 seconded the motion. The following voted "Aye": Chairman Rummel,
86 Aldermen Preschlack and Weber. The following voted "Nay": None. 3-
87 Ayes, 0 Nays, motion carried.

88
89 **II. REVIEW AND RECOMMEND APPROVAL TO CITY COUNCIL**
90 **SUSTAINABILITY ENHANCEMENTS TO CIP PROJECTS FOR FY2023 –**
91 **Introduced by Mike Strong, Assistant City Manager**

92
93 Assistant City Manager, Mike Strong, provided a brief background
94 regarding the City's capital project funding process, noting the similarities
95 from previous City Council capital budget workshops. He further
96 explained the process staff conducted to identify projects that could

include sustainable elements, and the change in cost that would be impacted.

The projects that were discussed included the purchase of a hybrid vehicle for the Fire Department and Ravine design updates.

The Committee asked clarifying questions regarding the enhancements in the Seminary Ravine design project.

Additional projects that were discussed were parking lot improvements, including water quality structures being placed in new or updated parking lots, and the addition of a new electric vehicle charging station.

The Committee asked for further information and data regarding the usage of electric vehicle charging stations.

There were further presentations regarding projects include, Forest Park bluff stabilization, native planting at Forest Park beach and Waveland Park resurfacing.

Following further discussion, Mr. Strong provided potential next steps for the Committee to move forward with a recommendation to City Council

Chairman Rummel asked if there were any questions or comments from the public.

Yuh Schabacker-Koppel offered comments to the Committee

Chairman Rummel asked the Committee if there were any addition questions

Seeing none, she asked for a motion.

Alderman Preschlack made a motion to recommend sustainability enhancements to CIP projects for FY2023, Alderman Weber seconded the motion. The following voted "Aye": Chairman Rummel, Aldermen Preschlack and Weber. The following voted "Nay": None. 3-Ayes, 0 Nays, motion carried.

DISCUSSION ITEMS

I. **UPDATES ON SUSTAINABILITY INITIATIVES & PRIORITIES – Mike Strong, Assistant City Manager**

Assistant City Manager, Mike Strong updated the Committee regarding reestablishing the communications and marketing plan. He provided a potential outline for a schedule the last quarter of 2021. In addition to the social media communications campaign, Mr. Strong discussed new

Wednesday, October 20, 2021

signage that would be designed to place near sustainable projects, explaining the background and benefits, and the investigation of solar panels to supply electricity to City accounts.

Chairman Rummel asked if there were any additional questions or comments from the Committee.

Seeing none, she moved to the next agenda item.

PUBLIC COMMENT

Chairman Rummel asked if there were any public comments on any non-agenda items.

Wiebke Droege provided comments to the Committee regarding the proposed athletic field improvements at Deerpath Community Park.

Yuh Schabacker-Koppel provided comments to the Committee regarding the proposed athletic field improvements at Deerpath Community Park.

Chairman Rummel asked if there were any additional public comments. Seeing none, Chairman Rummel moved to the next agenda item.

NEXT MEETING DATE(S)

Assistant City Manager, Mike Strong stated that the next meeting would be held on November 17, 2021, if that meeting date worked for the Committee. They discussed potentially shifting the date if necessary.

ADJOURNMENT

Alderman Weber moved to adjourn the meeting of the Environmental Sustainability Committee at 6:46 P.M. seconded by Preschlack. The motion carried unanimously by voice vote.

Respectfully Submitted,

Layla Werner
Management Analyst

Reviewed by,

Mike Strong
Assistant City Manager



Environmental Sustainability Committee 2022 Meeting Schedule

Day	Date	Time	Location
Wednesday	January 19	5:30 p.m.	TBD
Wednesday	February 16	5:30 p.m.	TBD
Wednesday	March 16	5:30 p.m.	TBD
Wednesday	April 20	5:30 p.m.	TBD
Wednesday	May 18	5:30 p.m.	TBD
Wednesday	June 15	5:30 p.m.	TBD
Wednesday	July 20	5:30 p.m.	TBD
Wednesday	August 17	5:30 p.m.	TBD
Wednesday	September 14	5:30 p.m.	TBD
Wednesday	October 19	5:30 p.m.	TBD
Wednesday	November 16	5:30 p.m.	TBD
Wednesday	December 14	5:30 p.m.	TBD
Wednesday	January 18, 2023	5:30 p.m.	TBD

***Meeting locations TBD for 2022 due to the COVID-19 Pandemic**

DISCUSSION ITEMS

NEW SOLAR GENERATION FACILITIES DISCUSSION

Environmental Sustainability Committee

December 9, 2021

PROCESS OVERVIEW



SOLAR DEVELOPMENT OPTIONS BEING EXPLORED

Direct Purchase

Benefits

- On-site solar solely benefits owner
- Autonomy over location, size, etc.

Limitations

- Significant capital outlay
- Responsible for all procurement, construction and O&M (can contract)
- Tax credits not monetized

Solar Lease Agreement

- No Capital outlay
- Simple transaction to lease over a fixed term
- Offers immediate energy cost savings through avoided costs and SREC credits

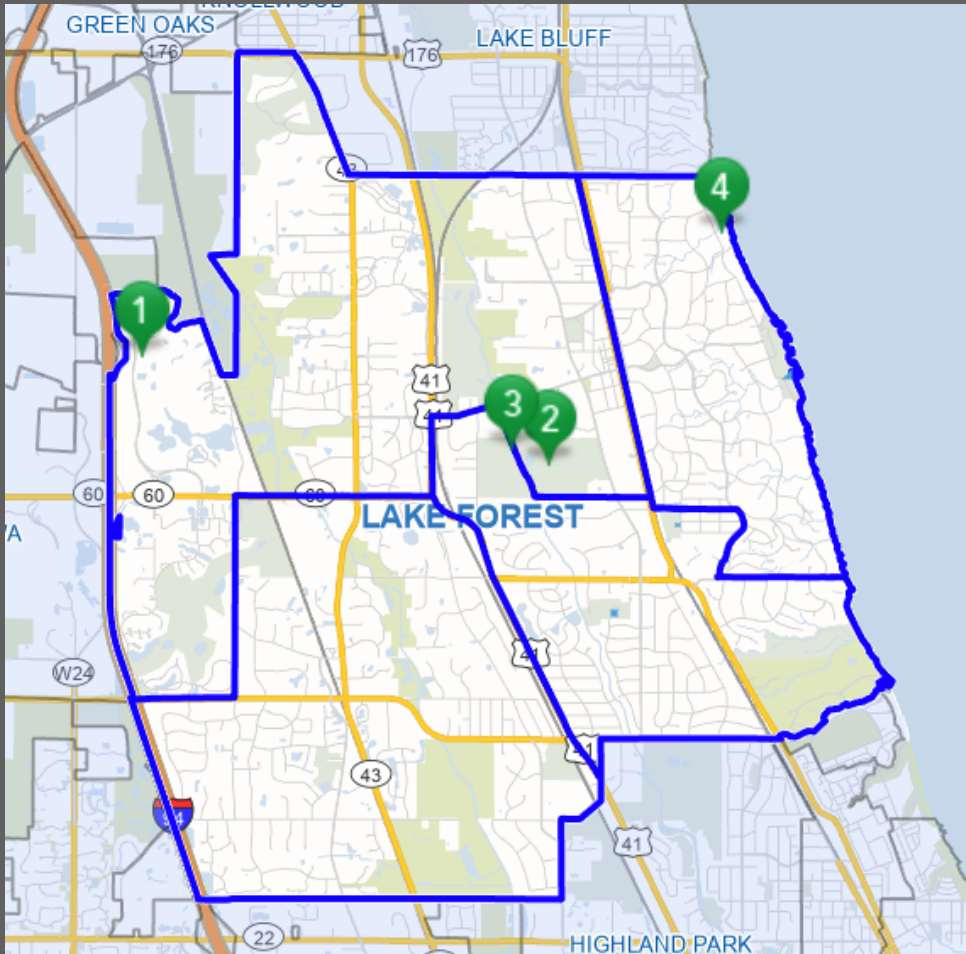
- Must assure energy production service guarantee is part of lease agreement
- Responsible for O&M of solar array (can contract)

Power Purchase Agreement (PPA)

- No Capital outlay
- Payments for energy go to the developer, not utility
- Developer responsible for design, permitting, construction & O&M

- Arrangements can be complex
- High transaction costs, legal complexities
- Utility rates must be high for positive cash-flow

SOLAR ARRAY OPPORTUNITIES



- **Roughly 44** electricity accounts analyzed
- **7 sites found to be economically viable**

Recommended Sites:

1. Municipal Services (800 N. Field Drive)
2. Recreation Center (400 Hastings)
3. Public Safety Building (255 Deerpath)
4. Water Plant (1441 Lake Road)

MUNICIPAL SERVICES



Capital Cost of Array: \$1,391,382

- Avg. Annual Consumption: **1,214 MWh/Year**
- Current Avg. Annual Cost: **\$83.05/MWh**
- Annualized Value of Energy Consumption: **\$100,821**
- Projected Solar Generation: **1,132 MWh/Year**
- Solar Offset Potential: **93.3%**
- Financial Impacts (20 year period) of non-purchase

Mechanism	\$/MWh	Annualized Savings
Lease	\$20.15	\$76,358
PPA	\$49.32	\$40,949

RECREATION CENTER



- Avg. Annual Consumption: **628 MWh/Year**
- Current Avg. Annual Cost: **\$131.61/MWh**
- Annualized Value of Energy Consumption: **\$82,713**
- Projected Solar Generation: **434 MWh/Year**
- Solar Offset Potential: **69.1%**
- Financial Impacts (20 year period) of non-purchase

Mechanism	Avg. \$/MWh	Annualized Savings
Lease	\$30.91	\$63,285
PPA	\$81.28	\$31,632

PUBLIC SAFETY BUILDING



- Avg. Annual Consumption: **772 MWh**
- Current Avg. Annual Cost: **\$85.86/MWh**
- Annualized Value of Energy Consumption: **\$66,257**
- Projected Solar Generation: **283 MWh/Year**
- Solar Offset Potential: **36.7%**
- Financial Impacts (20 year period) of non-purchase

Mechanism	Avg. \$/MWh	Annualized Savings
Lease	\$63.69	\$17,102
PPA	\$73.71	\$9,374

WATER TREATMENT FACILITY – GROUND MOUNT



- Avg. Annual Consumption: **3,157 MWh**
- Current Avg. Annual Cost: **\$81.99/MWh**
- Annualized Value of Energy Consumption: **\$258,830**
- Projected Solar Generation: **475 MWh**
- Solar Offset Potential: **13.1%**
- Financial Impacts (20 year period) of non-purchase

Mechanism	Avg. \$/MWh	Annualized Savings
Lease	\$69.92	\$38,116
PPA	\$81.99	\$16,719

WATER TREATMENT FACILITY – ROOFTOP



- Avg. Annual Consumption: **3,157 MWh**
- Current Avg. Annual Cost: **\$81.99/MWh**
- Annualized Value of Energy Consumption: **\$258,830**
- Projected Solar Generation: **151 MWh**
- Solar Offset Potential: **4.6%**
- Financial Impacts (20 year period) of non-purchase

Mechanism	Avg. \$/MWh	Annualized Savings
Lease	\$79.21	\$8,769
PPA	\$80.31	\$5,307

AVERAGE ANNUALIZED SAVINGS POTENTIAL

	Lease	PPA
Municipal Services	\$76,358	\$40,949
Recreation Center	\$63,285	\$31,632
Public Safety Building	\$17,102	\$9,374
Water Plant – Ground	\$38,116	\$16,719
Water Plant – Rooftop	<u>\$8,769</u>	<u>\$5,307</u>
Total	<u>\$203,630</u>	<u>\$103,981</u>

DISCUSSION QUESTIONS

1. Is the Committee comfortable with the City facilities identified?
2. Is there consensus on the proposed Solar Development procurement options (e.g. Purchase, Lease, PPA)?

DIRECTION REQUESTED

- Staff is seeking direction from the Committee to proceed with a formal solicitation process (RFP) pursuant to Committee discussion during the Committee meeting on December 9, 2021
- The solicitation process would take place between December 2021 – January 2022, that would include site visits and interviews prior to a recommendation to the Committee in March 2022 (Tent.)

THANK YOU

City of Lake Forest Sustainability Survey Summary Results
Ascending List of Projects Based on Weighted Average (City Council)

		Weighted Average Score		City Council Sentiment		Council v. Staff	Status
Project/Initiative		City Council	City Staff	Positive	Neut./Neg.	Score Diff.	
Top Tier	Continue to educate Lake Forest residents on recycling practices to reduce the City's recycling contamination rate (i.e. Rethink Recycling Campaign)	1.22	1.22	9	0	0	In Process
	Communications and education campaign to make best practices in water conservation, outdoor irrigation and water reuse easily understandable to residents	1.33	1.67	9	0	-0.34	
	Seek ways to further educate riparian (ravine) owners regarding ravine and bluff maintenance	1.44	1.22	8	1	0.22	In Process
	Increase access to open spaces through walking/bike trail connections throughout the City	1.56	1.67	8	1	-0.11	
	Develop strategies to further reduce the City's use and collection of single-use plastics	1.67	1.78	8	1	-0.11	
	Develop programs to further reduce the City's use and collection of Styrofoam and polystyrene products	1.67	1.89	8	1	-0.22	
	Identify special events, such as a bike festival and community bike ride, to showcase the City's natural assets	1.78	2.11	8	1	-0.33	
	Investigate ways to promote the use of permeable pavers, rain gardens or other "green infrastructure" implements such as bioswales and wetlands to reduce stormwater entering sewers	1.89	1.89	6	3	0	
The "Middle"	Enroll municipal utility accounts in solar or renewable energy certificates (RECs)	1.89	2.11	7	2	-0.22	
	Explore incentives to encourage the use of electric-powered landscape equipment, especially among the City's licensed landscaping firms	2.00	2.22	5	4	-0.22	
	Discourage vehicle idling on City properties through communications, marketing, and signage campaign	2.00	2.44	6	3	-0.44	
	Encourage and expand rain barrel usage among residents	2.11	2.33	5	4	-0.22	
	Provide residents greater access to renewable energy credits (RECs) or renewable energy alternatives through bulk energy purchases by the City	2.11	1.78	6	3	0.33	
	Install solar facilities on municipal facilities	2.11	2.44	6	3	-0.33	In Process
	Accelerate the conversion of City Fleet to gasoline-alternative fuel vehicles	2.11	2.67	6	3	-0.56	
	Discourage (and possibly license or ban) the use of Coal tar based sealants, which contribute to elevated levels of carcinogens found in local waterways	2.22	2.44	6	3	-0.22	
	Promote the installation and use of full-cutoff light fixtures that cast little or no light upward in public areas that are adjacent to environmentally sensitive open spaces (e.g. bluffs, parks, habitat areas, etc.)	2.33	2.22	4	5	0.11	
	Provide greater access to Composting programs or services for residents and businesses by permitting private companies to provide curb-side composting material pick-up	2.33	2.22	6	3	0.11	
	Measure and monitor Lake Forest's greenhouse gas (GHG) emissions contributing to global warming	2.33	2.67	5	4	-0.34	In Process
	Create a Climate & Resilience plan to quantify associated risks and opportunities	2.33	2.44	6	3	-0.11	
	Expand access to local health foods by seeking partnerships to implement a community gardening program or initiative	2.44	2.56	5	4	-0.12	
	Discourage (potentially ban or assess fees) the use of single-use plastics (e.g. grocery bags, takeout containers), Styrofoam, and/or polystyrene containers in the City	2.44	2.78	5	4	-0.34	
	Encourage (and possibly require) periodic inspection of riparian (ravine) property to detect ecological or infrastructure threats to bluff and slope integrity	2.44	2	6	3	0.44	In Process
Bottom Tier	Offer rebates and incentives for residential and business solar opportunities	2.44	2.56	5	4	-0.12	
	Develop air quality standards and a plan to support the achievement of a greenhouse gas emission reduction target	2.44	2.89	5	4	-0.45	
	Encourage, incentivize or require EV Charging Stations for new construction of residential and/or commercial properties	2.56	2.67	5	4	-0.11	
	Seek opportunities to convert existing greenspaces (mowed lawn areas owned by the City) or incentivize residential and commercial owners to expand natural land areas and habitats on their property	2.67	2.33	4	5	0.34	
	Utilize sustainable landscaping practices such as natural fertilizers and weed control products while monitoring and controlling for invasive species in the City's natural areas	2.67	2.33	4	5	0.34	
	Investigate alternatives to fund stormwater infrastructure improvements (i.e. potential stormwater utility fee)	2.78	2.67	5	4	0.11	
	Explore incentive program for promoting the use of gasoline-alternative fuel electric (e.g. vehicle sticker cost reduction)	2.89	2.89	3	6	0	
	Discourage (potentially ban) the use of gas-powered leaf blowers during the summer season from May to mid-October	2.89	3.33	5	4	-0.44	
	Require solar for new construction or major renovations of residential and/or commercial properties	3.78	4.00	0	9	-0.22	