TOWN OF CORNELIUS

BOARD OF COMMISSIONERS

Town Hall, Room 204
February 6, 2020
Agenda

TOWN BOARD SPECIAL MEETING - 5:00 PM

1. CALL TO ORDER

A. **Opening Remarks - Mayor Washam, Town Manager Grant**

2. DETERMINATION OF QUORUM

3. STRATEGIC PLANNING SESSION

A. **Land Use Plan Discussion and Potential Updates to the Land Use Plan**
B. **IT Assessment**
C. **Housing Development Plan**
D. **Public Works**
E. **Admin/Finance**
F. **Police Department**
G. **PARC Goals**
H. **Fire Department**

4. ADJOURNMENT

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Wayne Herron, Deputy Town Manager

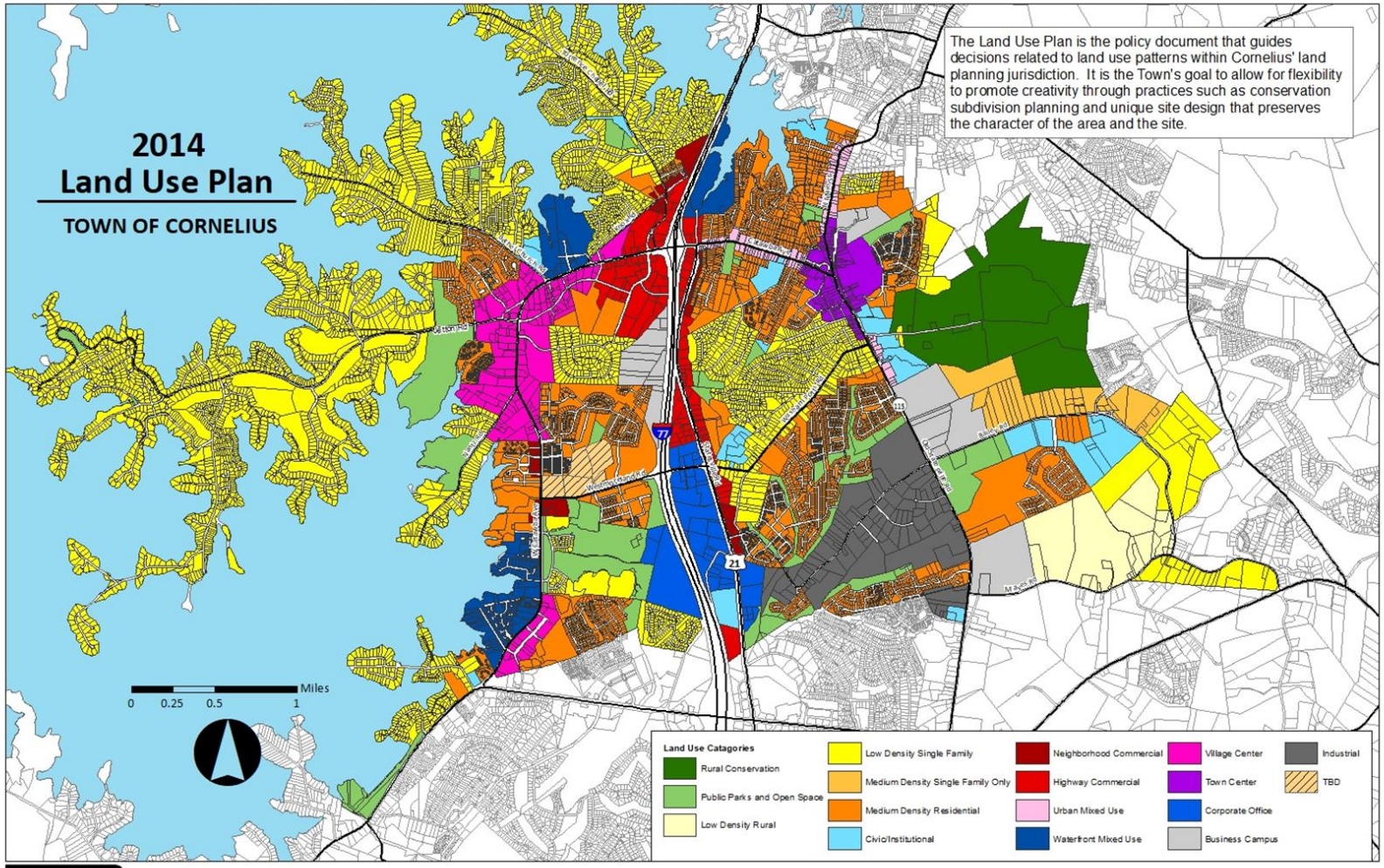
Action Requested:

Hear presentation on the current Land Use Plan and discuss potential updates to the Plan.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
Land_Use_Plan.pdf	LUP	Presentation
Land_Use_Plan_Rose_Assoc.pdf	LUP-Rose Assoc	Presentation

Land Use Plan Discussion and Potential Updates to the Land Use Plan

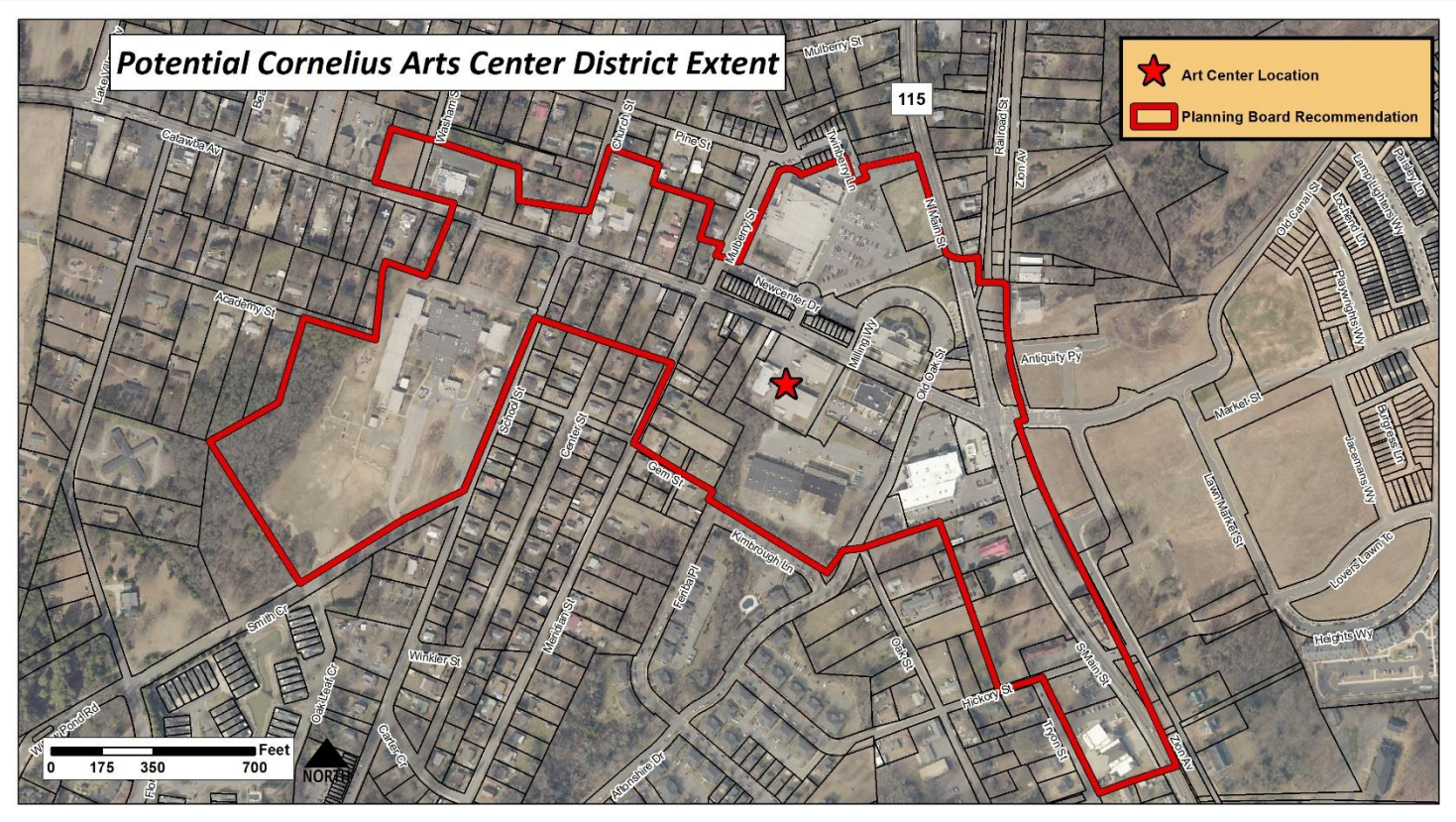

2014
Land Use Plan
TOWN OF CORNELIUS
The Land Use Plan is the policy document that guides decisions related to land use patterns within Cornelius' land planning jurisdiction. It is the Town's goal to allow for flexibility to promote creativity through practices such as conservation subdivision planning and unique site design that preserves the character of the area and the site.
Miles
0 0.25 0.5 1
Land Use Catagories
Rural Conservation
Public Parks and Open Space
Low Density Rural
Low Density Single Family
Medium Density Single Family Only
Medium Density Residential
Civic/Institutional
Neighborhood Commercial
Highway Commercial
Urban Mixed Use
Waterfront Mixed Use
Village Center
Town Center
Corporate Office
Business Campus
Industrial
TBD
CLARION
January 6, 2014 Revised: January 7, 2019

- It is common after a five year period, to revisit and re-evaluate target areas.
  - Arts District

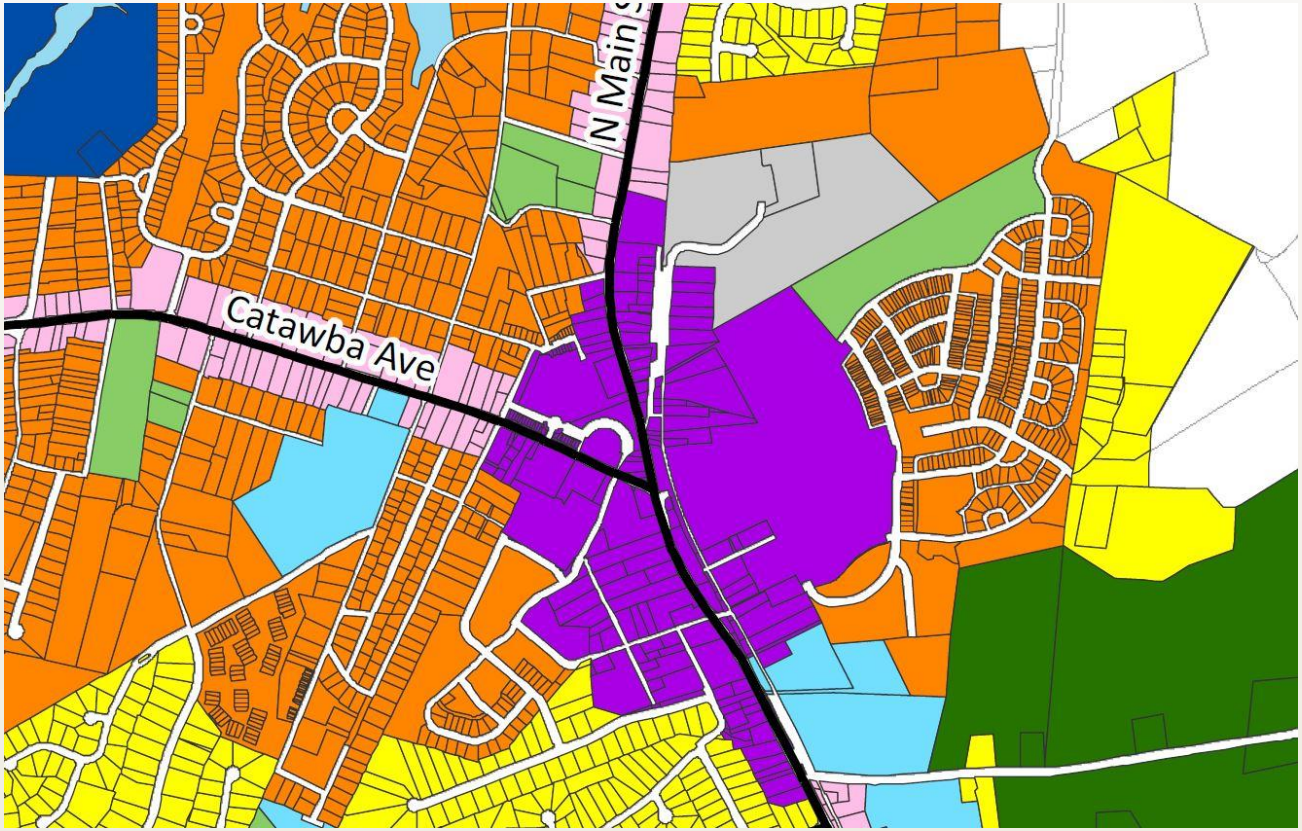
    The Planning Board has been exploring recommendations to create the Cornelius Arts District and support the Cain Center for the Arts. It has been determined that in order to fully support the and promote the success of the Cain Center, a new way of thinking about land use should be considered. The primary land use issue revolves around increased density and additional roof tops to support the Center and the new restaurants and breweries that would like to locate in the new Arts District.

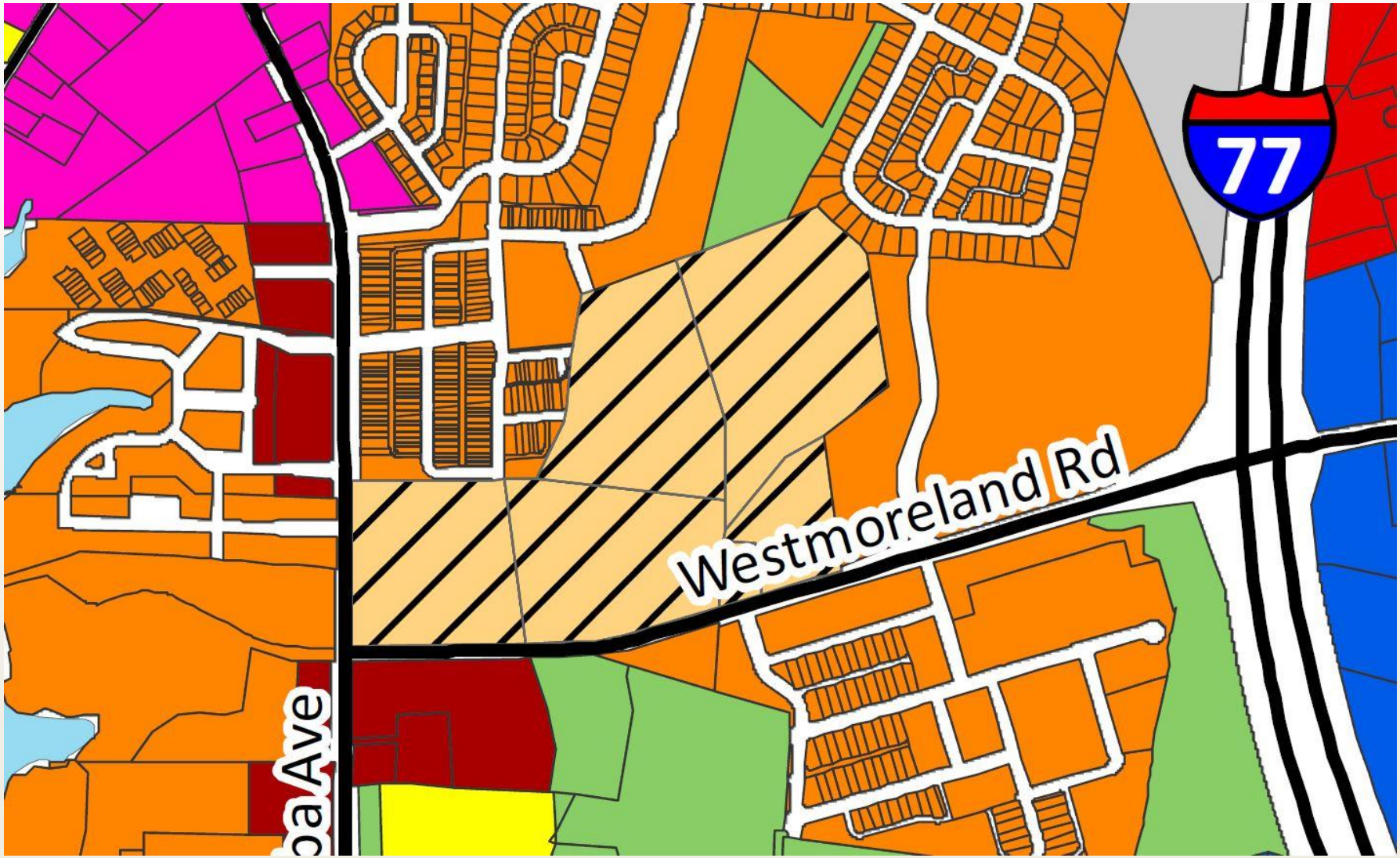
    - $18,000 budget request to revise existing small area plan.

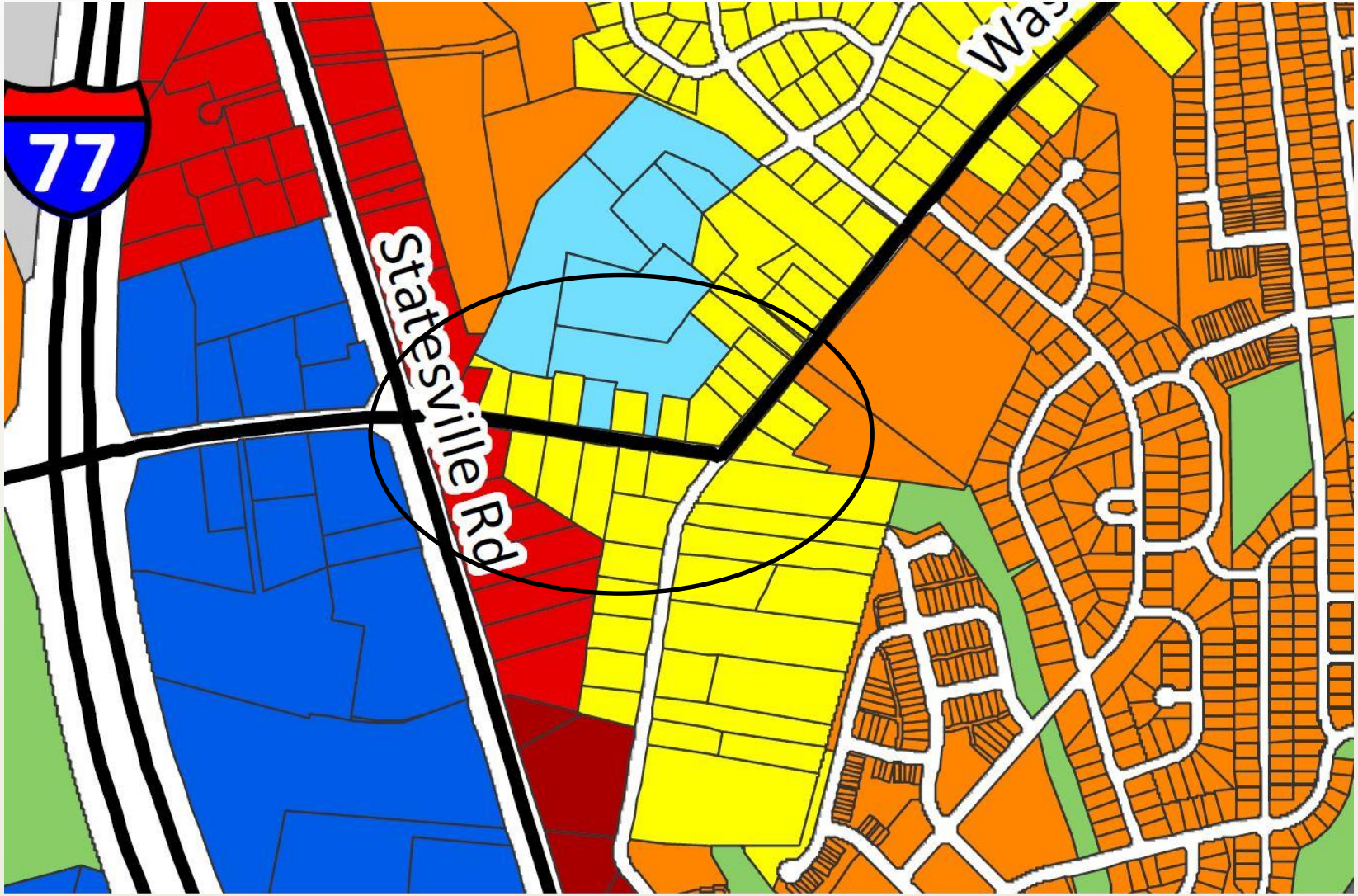
Arts District Boundary

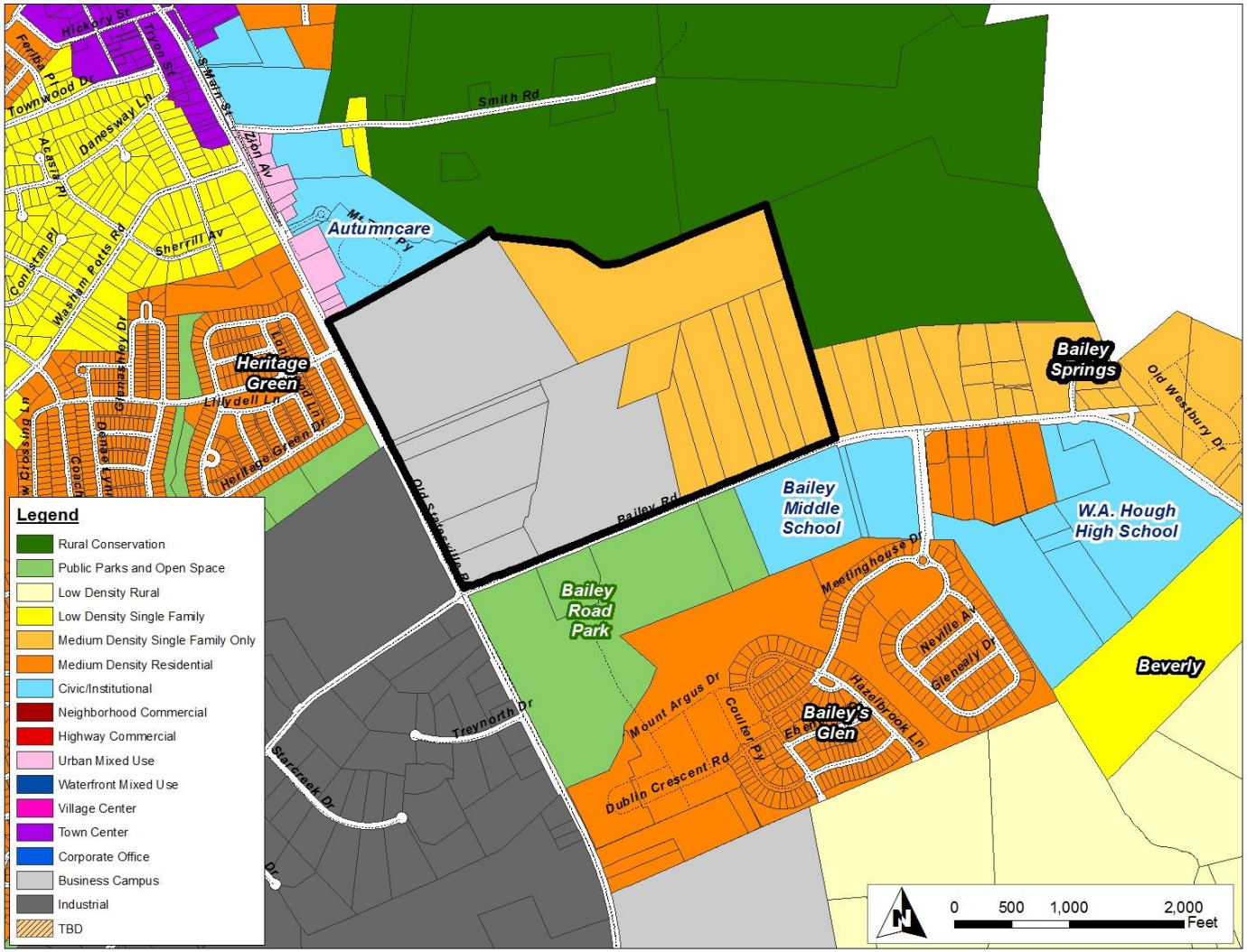


Arts District Land Use




77
Westmoreland Rd
oa Ave


77
Statesville Rd


Legend
Rural Conservation
Public Parks and Open Space
Low Density Rural
Low Density Single Family
Medium Density Single Family Only
Medium Density Residential
Civic/Institutional
Neighborhood Commercial
Highway Commercial
Urban Mixed Use
Waterfront Mixed Use
Village Center
Town Center
Corporate Office
Business Campus
Industrial
TBD
Smith Rd
Autumncare
Heritage Green
Bailey Springs
Old Westbury Dr
Bailey Middle School
W.A. Hough High School
Bailey Road Park
Bailey Rd
Old Statesville Rd
Meetinghouse Dr
Neville Av
Glenealy Dr
Beverly
Mount Argus Dr
Coulter Pl
Bailey's Glen
Hazelbrook Ln
Dublin Crescent Rd
Treynorth Dr
Sarcrack Dr
Hickory St
Ferriba Pl
Townwood Dr
Danesway Ln
Acasta Pl
Sherrill Av
Washam Potts Rd
Constan Pl
Zion Av
Smith St
Lillydell Ln
Heritage Green Dr
0 500 1,000 2,000 Feet

Nei

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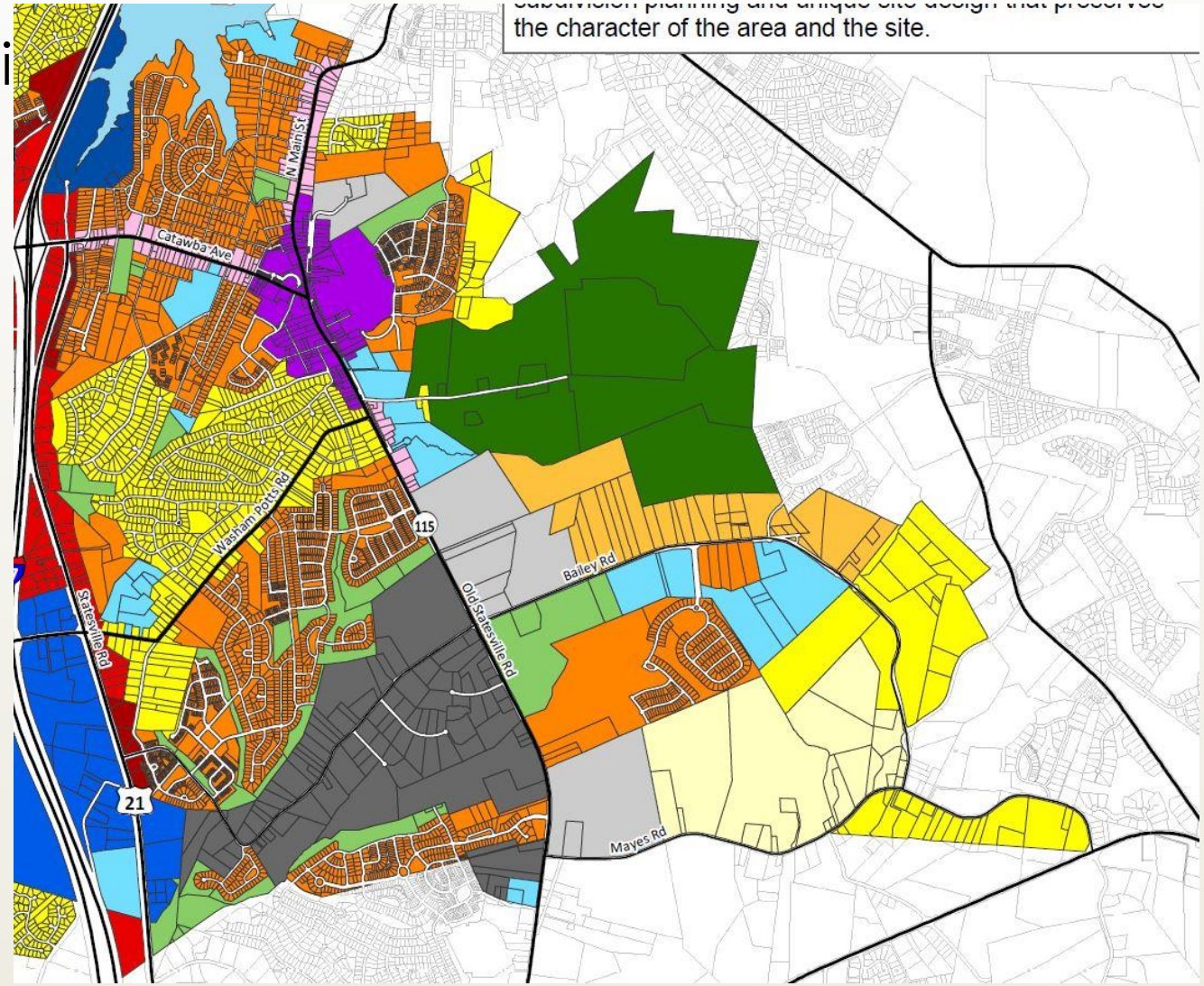
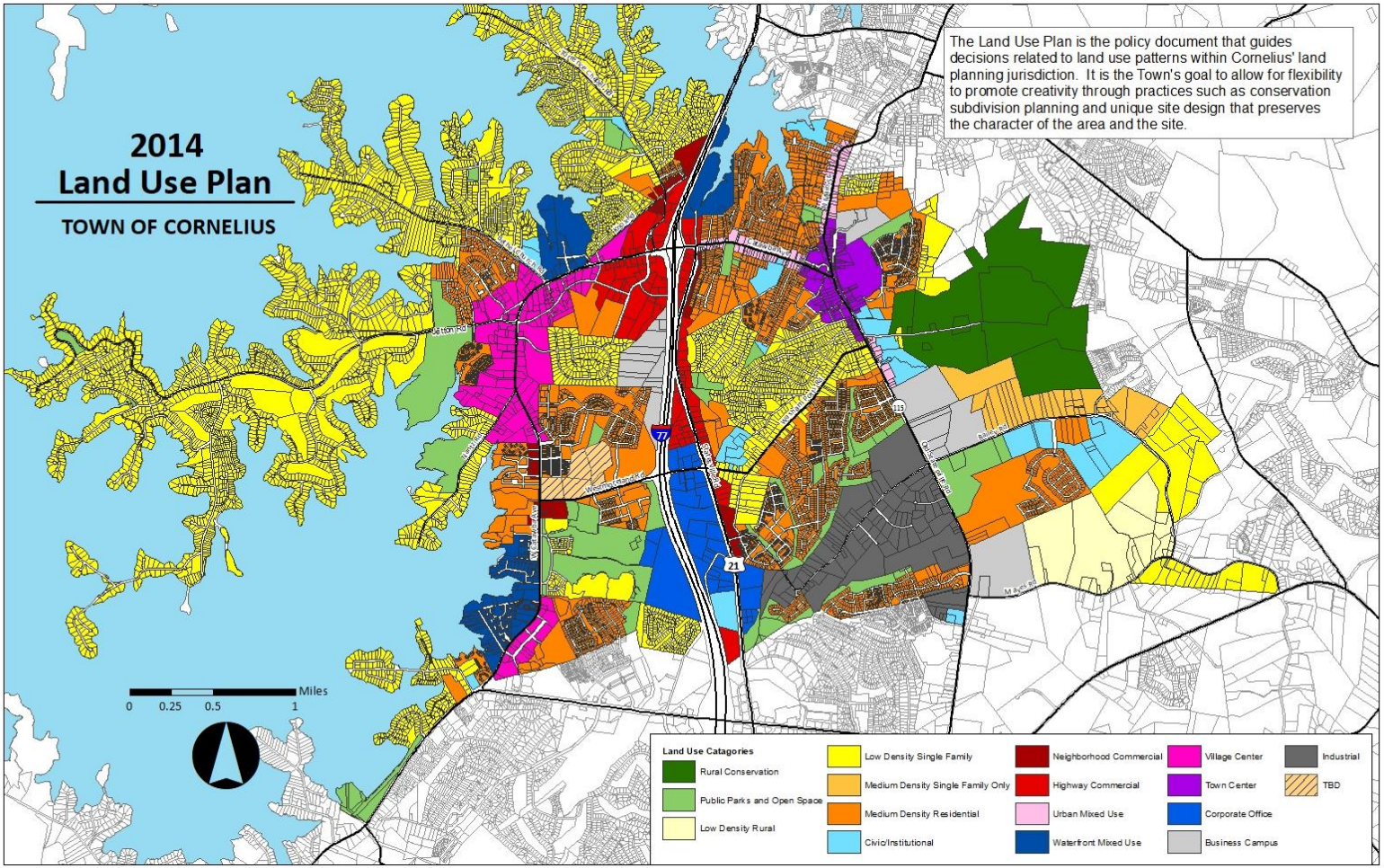

the character of the area and the site.
N Main St
Catawba Ave
Washam Potts Rd
115
Statesville Rd
Old Statesville Rd
Bailey Rd
21
Mayes Rd



CLARION

January 6, 2014 Revised: January 7, 2019

Other Code Related Issues

- Major/Minor Subdivision Definition
- Minimum lot size requirements
- Open space standards
- Buffer standards
- Mixed use allowances and associated densities

- Land Development Code Advisory Board is currently studying subdivision definitions

VICTORIA'S SECRET
VICTORIA'S SECRET
VICTORIA'S SECRET
Juicy

JULIE

Le Boulangerie

The UPS Store
Bethel Church

OSAKA

restaurant
retail
retail

BISTRO
PERK CAFE

ROSE ASSOCIATES

Cornelius, NC

Market Analysis & Economic Development

2020 Town Board Strategic Discussion

Market Analysis Economic Development Land Planning Implementation

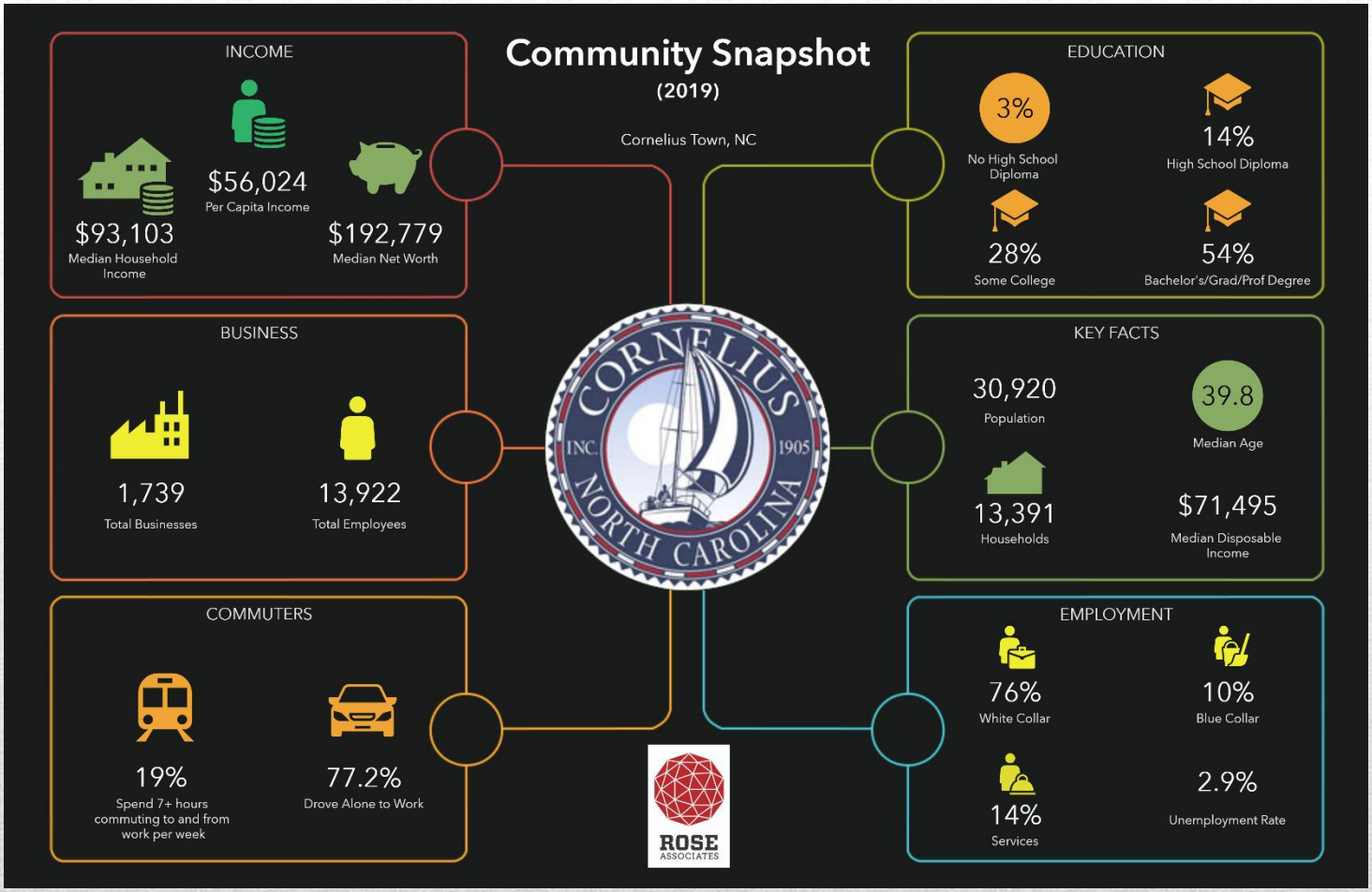
“The role of change is increasing exponentially. The world is literally being reinvented.

It took 68 years after the invention of the airplane to reach 50 million users. For the Pokémon go game, it took just *19 days*. This kind of growth is possible because of internet networks.”

-- Geoffrey Kasselman, Executive Managing Director, Newmark Knight Frank; Founder/CEO, Op2mize Energy; and “Pragmatic Futurist.”

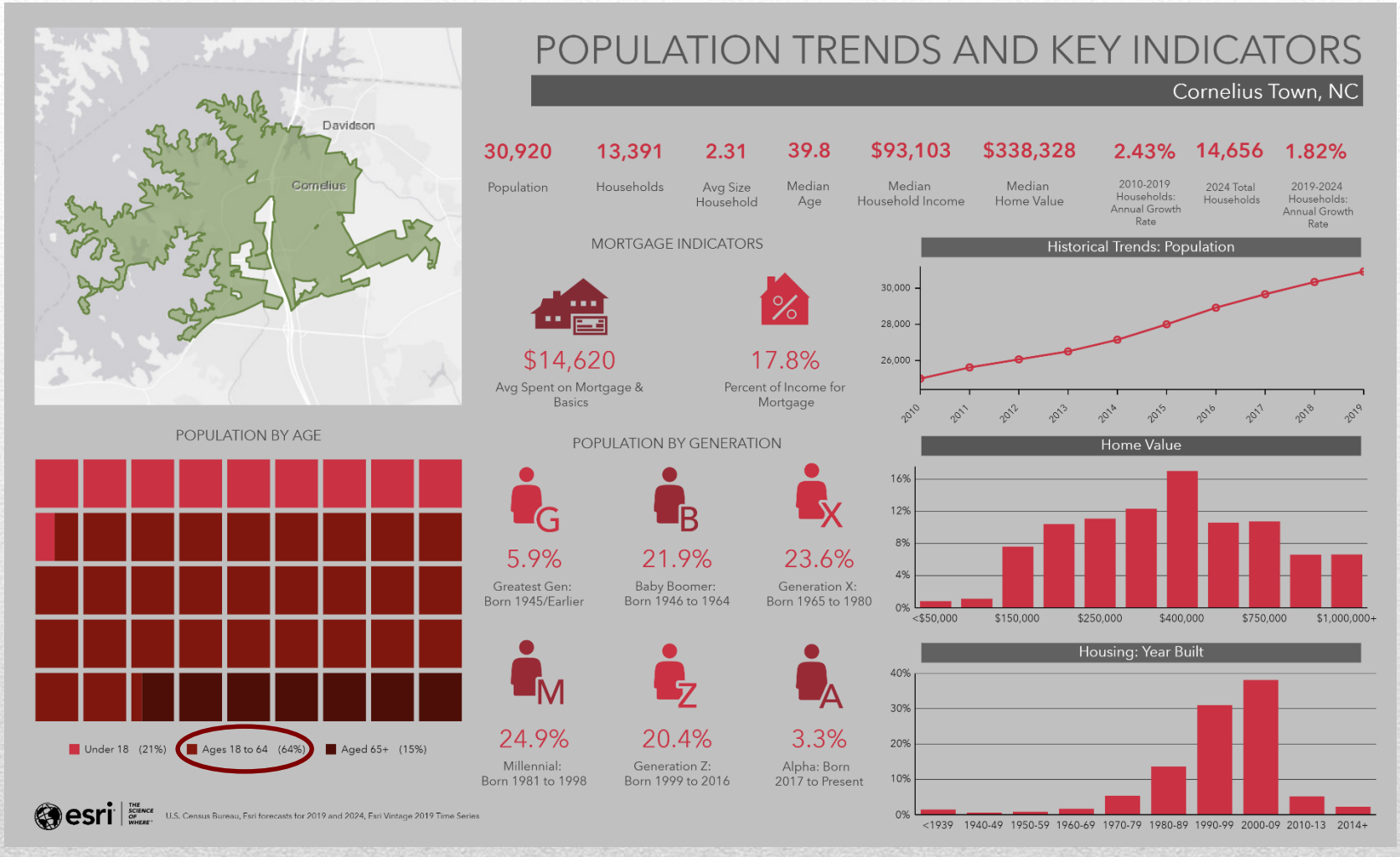
Rose Associates Process

Change



Community Snapshot

ROSE
ASSOCIATES



Community Snapshot

ROSE ASSOCIATES

Residential Migration

Tourism

Community Capital

Imports/Exports

Community Wealth

ROSE ASSOCIATES

Basic Employment (Imports/Exports)

Total Employment

Total Population

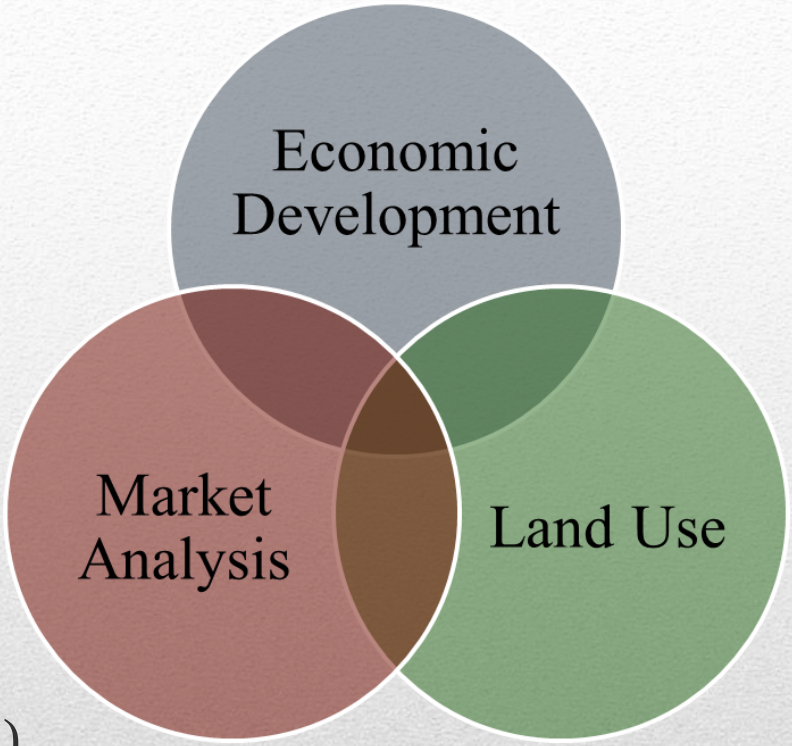
Total Income

Total Demand

Demand Drivers

ROSE ASSOCIATES

- **Demand Drivers**
  - Employment
  - Demographics & Lifestyle
  - Tourism
- **Targeted Sites/Areas**
  - Development (vacant land)
  - Re-development
  - Adaptive Re-Use
- **Economic Development**
  - Attraction
  - Retention & Expansion (BRE)
  - Small Biz & Entrepreurship (SBE)
  - Tourism



Integration

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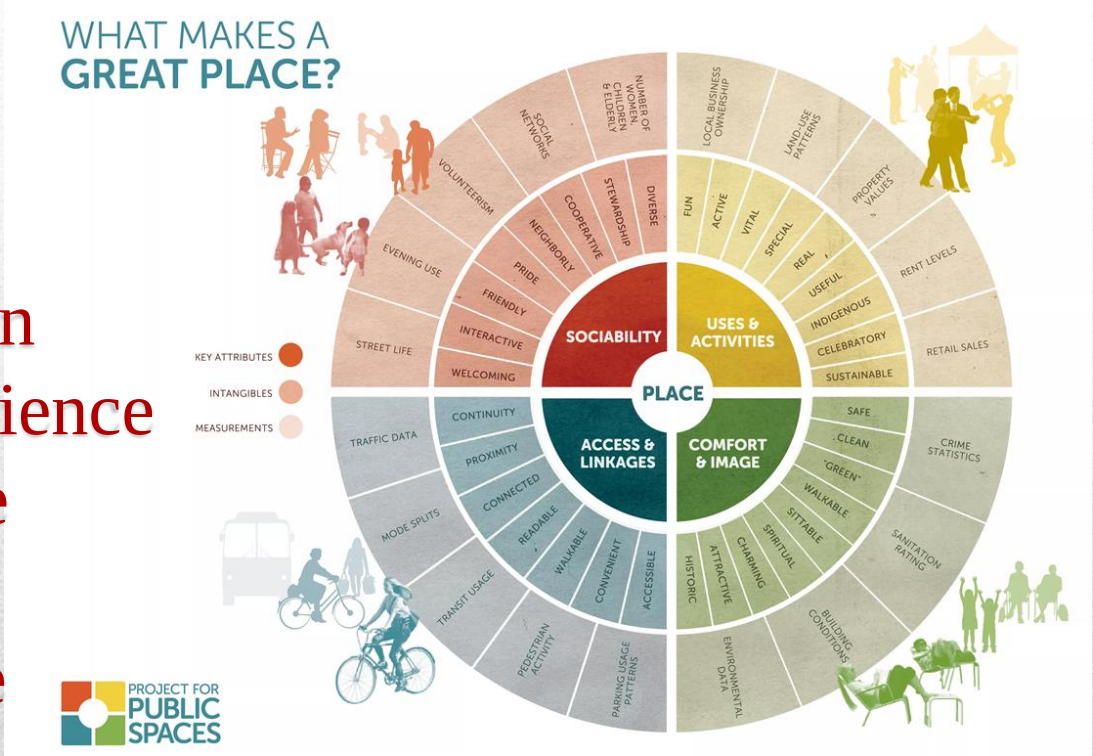
- Quality of Life
  - Education
  - Lifestyle
  - Cultural/Recreation
- Authenticity & Experience
- Attainable/Affordable
- Connected & Social
- Reasonable Commute



Changing Nature of Location

ROSE ASSOCIATES

Amazon HQ2 RFP

- SITE/BUILDING
- CAPITAL & OPERATING COSTS
- INCENTIVES
- LABOR FORCE & EDUCATION
- LOGISTICS (TRANSPORTATION)
- TIME TO OPERATIONS (FAST TRACK)
- CULTURAL COMMUNITY FIT
- COMMUNITY QUALITY OF LIFE

"WE WANT TO INVEST IN A COMMUNITY WHERE OUR EMPLOYEES WILL ENJOY LIVING, RECREATIONAL OPPORTUNITIES, EDUCATIONAL OPPORTUNITIES AND AN OVERALL HIGH QUALITY OF LIFE"

Amazon HQ2 RFP

Changing Nature of Site Selection

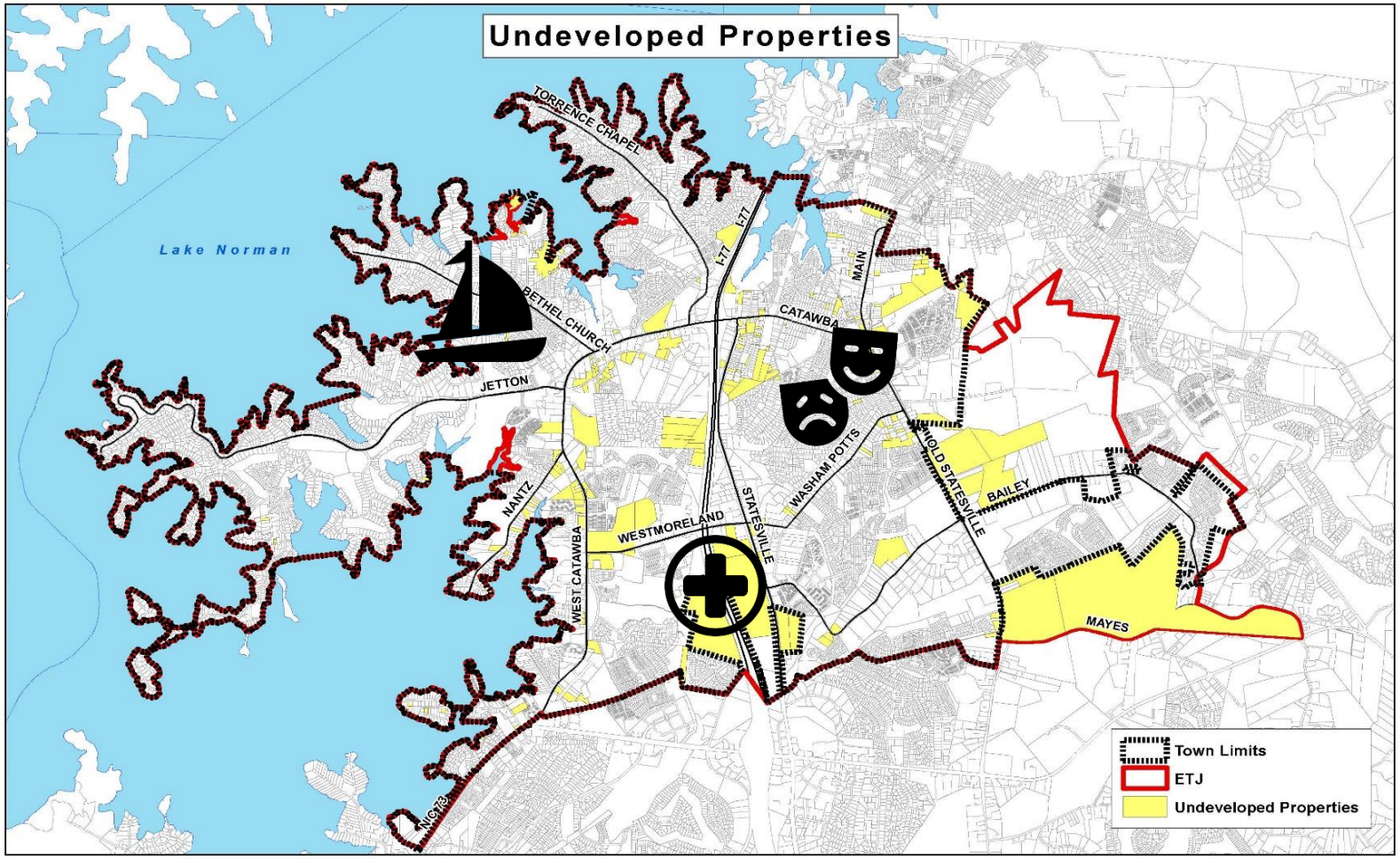
ROSE ASSOCIATES

- Market Reality
  - Consumer & Employer/Employee Demands
- Economic Development Priorities
  - Balanced Tax Base (Residential vs. Commercial)
- Land Use Policies
  - Vision Enabling, Goal Supportive & Design Focused

- **Intensity vs. Capacity**
- **Highest & Best Use**
- **Placemaking**
- **Experiential Design**
- **Mixed-Use Development**

The Intersect

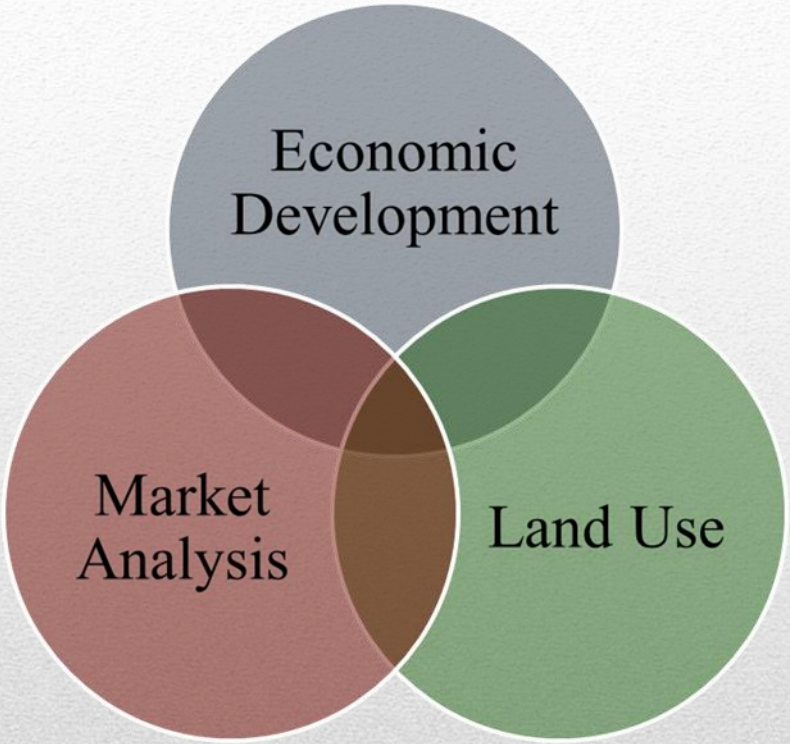
ROSE ASSOCIATES



Future Development

ROSE ASSOCIATES

- Questions?
- Next Steps?



Thank You!

ROSE ASSOCIATES

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Justin Ashe

Action Requested:

Hear IT Assessment presentation.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
IT_Assessment.pdf	IT Assessment	Presentation

IT Assessment

& Budget

Town of Cornelius

IT Priorities:

1. *EVORAIL Replacement*
2. *2003 Exchange/DC Decommissioning*
3. *Microsoft Licensing & Audits*
4. *Windows 2003/2008 R2 Server Upgrades*
5. *Microsoft Office 365 Hybrid Configuration*
6. *Windows 7 to Windows 10 Workstation Upgrades*
7. *Cyber Security: Pen Testing, Intrusion Detection and Employee Security Awareness Training*

IT Priorities:

EVORAIL Replacement $200,000 one time plus $24,000 recurring

- *What does it do and why are we replacing it?*
  - *Primary hardware appliance hosting Town's infrastructure*
  - *Currently at 97 percent disk capacity*
  - *Hardware controller doesn't support new software upgrades*
  - *Node failure 1 of 4*
  - *Future growth and reliable hardware*

- *Evaluated 3 suitable replacement products*
  - *Dell VXRail*
  - *Nutanix*
  - *Cisco*

- *Downtime?*

- ***Managed Services?***

- ***Next Steps…***

IT Priorities:

2003 Exchange/DC Decommissioning $5,000

- ***What is a Exchange and Domain Controller Server?***
- ***Why is it important?***

- ***Exchange 2003 roles transitioned to Exchange 2010***

- ***Domain Controller roles need to be removed and existing DC2 and DC3 upgraded***

- ***Windows 2003 servers are no longer supported***

IT Priorities:

Microsoft Licensing & Audits $34,000 one time plus $4,000 recurring

- ***Currently the Town is not in compliance with our Microsoft Enterprise Agreement***
- ***Need to purchase additional server datacenter and workstation licenses to maintain our EA.***
- ***Microsoft Datacenter?***
- ***Windows 10 Enterprise?***
- ***Software Assurance?***
- ***What happens if we don't purchase additional licenses?***

IT Priorities:

Windows 2003/2008 R2 Server Upgrades $5,000

- ***Out of date Windows Server Operating Systems***
  - ***Windows Server 2003 – End of Life – July 2015***
  - ***Windows Server 2008 R2 – End of Life – January 2020***

- ***Microsoft Licensing must be purchased prior to upgrading as outlined in a previous CIP***
  - ***Windows Datacenter***

- ***Why does this matter?***
  - ***No longer supported by Microsoft***
  - ***No new updates or security patches will be released***
  - ***Increased potential for performance issues, security vulnerabilities and loss of third party applications***

IT Priorities:

Microsoft Office 365 Hybrid Configuration $10,000

- ***Currently in a Microsoft Office 365 hybrid configuration***
  - ***On-Premise Exchange 2010 server***
  - ***Cloud based Office 365***

- ***Exchange 2010 server performance issues***
  - ***No longer supported***
  - ***Eliminate a potential point of failure***
  - ***No longer require additional steps (mailbox migrations)***
  - ***Decommission Exchange 2010 server***
  - ***Increased backup and security protections***

IT Priorities:

Windows 7 to Windows 10 Workstation Upgrades $5,000

- ***Out of date Windows Operating Systems***
  - ***Windows 7– End of Life – January 2020***

- ***Microsoft Licensing must be purchased prior to upgrading as outlined in a previous CIP***
  - ***Windows 10 Enterprise***

- ***Why does this matter?***
  - ***No longer supported by Microsoft***
  - ***No new updates or security patches will be released***
  - ***Increased potential for performance issues, security vulnerabilities and loss of third party applications***

- ****After upgrades replace any computers with hardware not supported by Windows 10***

IT Priorities:

Cyber Security: Pen Testing, Intrusion Detection and Employee Security Awareness Training $35,000 one time, $15,000 recurring

- ***Security Penetration Testing***
  - ***Recommend yearly Pen Testing performed by reputable IT consulting firm in order to mitigate cyber risk***
  - ***Expose and remediate any potential vulnerabilities***

- ***Network Monitoring***
  - ***Proactive approach for resolving issues and downtime***

- ***What is a Intrusion Detection System and why is it needed?***

- ***Security Awareness Training for Employees***
  - ***Mandatory yearly training***
  - ***First line of defense***
  - ***Recommend product called KnowBe4***

IT Priorities:

Any additional questions or concerns?

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Wayne Herron, Deputy Town Manager

Action Requested:

Hear a presentation on a housing development plan.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
Housing_Development_Plan.pdf	Housing Development	Presentation

HOUSING REDEVELOPMENT PLAN

- In 2018, the Lake Norman EDC, contracted with the UNC Charlotte Urban Institute, to conduct a demographic and housing assessment for North Mecklenburg
- Population is getting older
- 90% of people who work here, live elsewhere
- 54% of people who work here earn less than $40,000

General Perspectives from LNEDC Plan

- Not enough available housing in the needed price range for purchase or rent for persons working in Cornelius.
- Availability impacted by increasing land values, land use policy, lack of transit availability.
- No focused funding, such as consistent down payment assistance programs
- Lack of a plan and direction

REGIONAL VS. TOWN

- Regional approach certainly can be evaluated. Like any project, there could be cost savings and economies of scale for similar solutions and tasks.
- Issues that every jurisdiction must grapple with, that will promote a Cornelius specific plan:
  - Specific neighborhoods needing specialized plans: Smithville, Meridian, etc.
  - Housing within walking distance for service industry employees
  - Lack of transit/public transportation
  - Differentiation in property values
  - Housing plans that simply have different goals and objectives

- Staff is excited about the possibility of working on a housing redevelopment plan, but a task of this magnitude is beyond our scope and knowledge. A housing redevelopment plan will require the use of a consultant.
- The Town will need to utilize the RFQ process. Staff has had preliminary conversations with several consultants and area local governments about the potential costs for such a plan, timetable and potential tasks.
- While the RFQ process requires the Town to select the most qualified candidate and negotiate, the ball park for such a plan has been estimated between $170,000 and $200,000, for budgeting purposes.

- The time frame should be between 18 and 24 months. Assuming start date of July 1, 2020, this would have final draft plan presentation to the Town Board between January 2022 and July 2022.
- Tasks could include the following:
    1. Establishment of task force or stakeholder committee to oversee and provide direction to Staff and consultant during process
    2. Evaluation of existing housing
    3. Evaluation of public property availability
    4. Potential for public acquisition of property
    5. Potential to amend Land Use Plan for varying housing types
    6. Potential to consider increased densities

- Tasks continued
  7. Development partnerships
  8. Funding potential (grants, tax credits, Mecklenburg County, Town of Cornelius)
  9. Defining the target (affordable, workforce, senior, first time home buyer, millennial).
  10. Preservation priorities
  11. Average Median Income(AMI) Targets
  12. Incentive based development regulations
  13. Down payment assistance programs
  14. Evaluate entire Town (east and west)
  15. Evaluate appropriate implementation oversight, ie: housing authority, redevelopment commission or existing established Boards or Commissions.

Within the evaluation of these tasks, it will be imperative to explore the following:

1. Impact/benefit
2. Need/priority
3. Feasibility
4. Leveraging resources
5. Capacity and history
6. Sustainability

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Tyler Beardsley, Asst. Town Manager

Action Requested:

Hear a presentation on Public Works goals.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
Public_Works.pdf	Public Works	Presentation

Public Works

Leaf Collection
Current Status

- The Town owns 4 leaf vacuums.
  - 3 Pull-behind trailers
  - 1 Truck/vacuum
- Staffing
  - 3 Pull-behind trailers (Ideally 3 men, but usually operate with 2)
  - 1 Truck (2 men)
  - PW only has 7 FT maintenance workers, either hire 2 temporary seasonal employees or 2 contract employees to assist with collection.
  - Work 45-50 hours per week.
  - All PW manpower is used during leaf vacuuming. No other maintenance throughout Town occurs. Rain days can be used to do other tasks, but these days are often used for maintenance on vacuums and trucks.

Issues

- Most residents expect consistent weekly/bi-weekly service.
- Service is very weather and volume dependent.
  - Cannot suck wet leaves
  - High volume between Thanksgiving and Christmas
- Difficulty hiring Part-Time workers.
- Cannot release a schedule, as it will be unreliable.
- Allocating additional resources does not guarantee better service.
- Town pays for bagged leaf collection.

NOVEMBER 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11 Veteran's Day	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28 Thanks-giving	29 Thanks-giving	30

DECEMBER 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24 Christmas Eve	25 Christmas Day	26	27	28
29	30	31	1	2	3	4

JANUARY 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1 New Year's Day	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20 MLK Day	21	22	23	24	25
26	27	28	29	30	31	1

Capital Investment

- 1997 Pull-behind trailer - $22,000
- 1999 Pull-behind trailer - $22,000
- 1998 Truck/vacuum - $24,000 (purchased in 2014)
- 2018 Pull-behind trailer - $54,000

Operating Cost

- Staff Overtime - $15,000 (does not include regular salary, because Town would be paying that normally)
- Part-time/Contract workers - $15,000 (this year worked 6 weeks)
- Fuel - $5,000 (normal month PW fuel is $1,250, leaf season $3,000 per month)
- Maintenance - $7,500 (this year: clutch, radiator, control panel, switches, hoses, etc.)

- Total - $42,500

Options to increase service

- Additional Crew/Equipment:
  - Truck/Vacuum - $150,000 capital for truck plus 2 PT workers ($15,000 recurring)
  - Pull behind trailer - Need new truck ($75,000) + Vacuum Trailer ($54,000) = $129,000 capital plus 2 PT workers ($15,000 recurring)
- Contract with Garbage Company:
  - $7.29/unit x 10225 = $75,000/month=$225,000 for 3 months

    *based on Davidson's 2018 Solid Waste bid
- Contract with Landscape Company(one crew):
  - $150-$300/hour x 50 hours/week x 4 weeks = $30,000 - $60,000/month=$90,000-$180,000 for 3 months

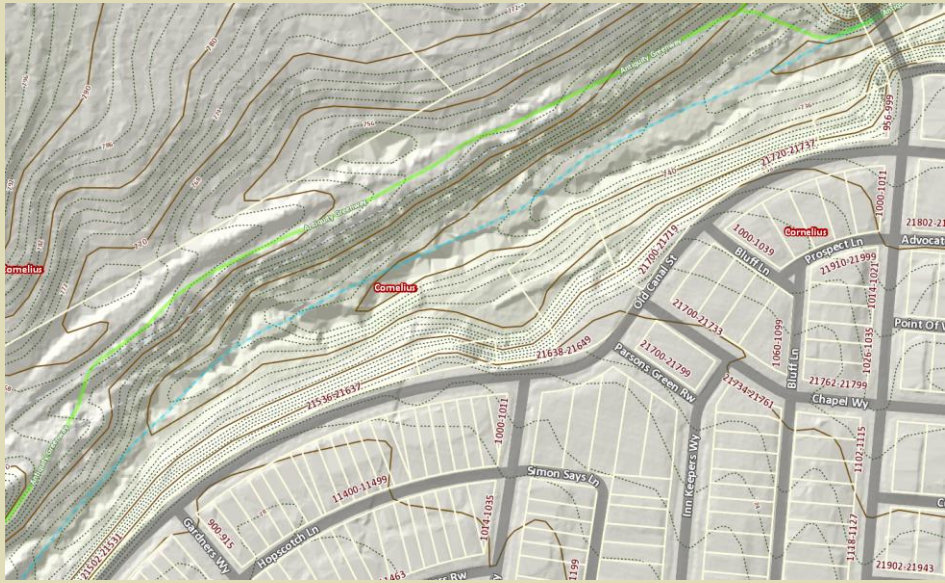
Other Communities

- Cornelius is the only municipality in Mecklenburg County to vacuum leaves. Solid Waste contractor also collects bagged leaves.
- Kannapolis – every other week
- Concord – once a month based on trash day
- Rock Hill – Collection every other week
- Raleigh – 2 collections per year
- Winston-Salem- 3 collections per year
- Greensboro - two rounds of leaf collection

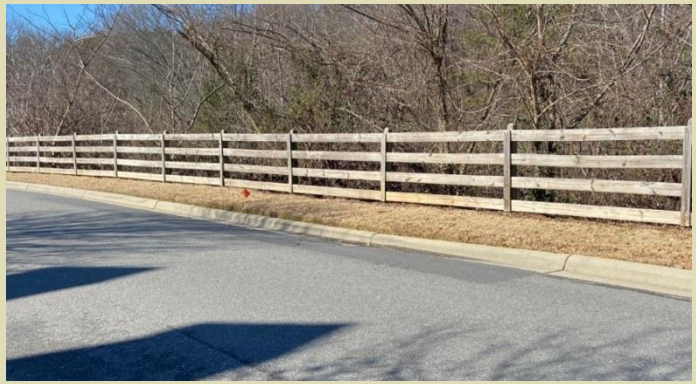
Recommendations

- Educate public on realistic expectations of 3 collections per season.
  - Minimum Goal of 1 collection per month (collection may occur more or less frequently than that, depending on weather, volume, staffing, mechanical issues)
  - Help public understand that it is not a weekly service.
  - Reinforce bagged leaf service.
- Equip trucks with AVLs (Automatic Vehicle Locators) and have a map on Town's website that staff can update daily on location of trucks.
  - This can give people a general idea of when their leaves will be collected

Old Canal Street Stabilization and South St. Bridge

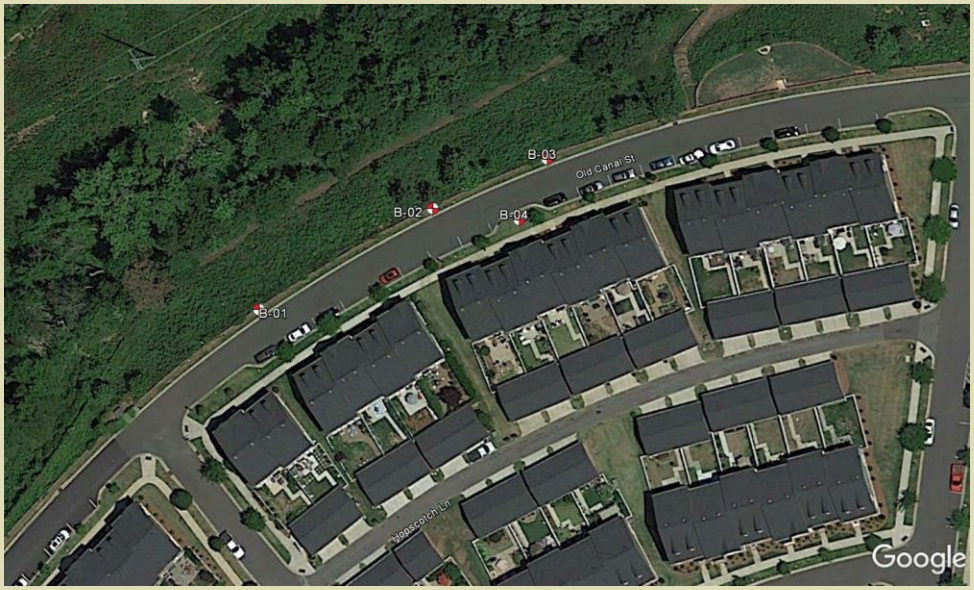


Old Canal Street Stabilization and South St. Bridge



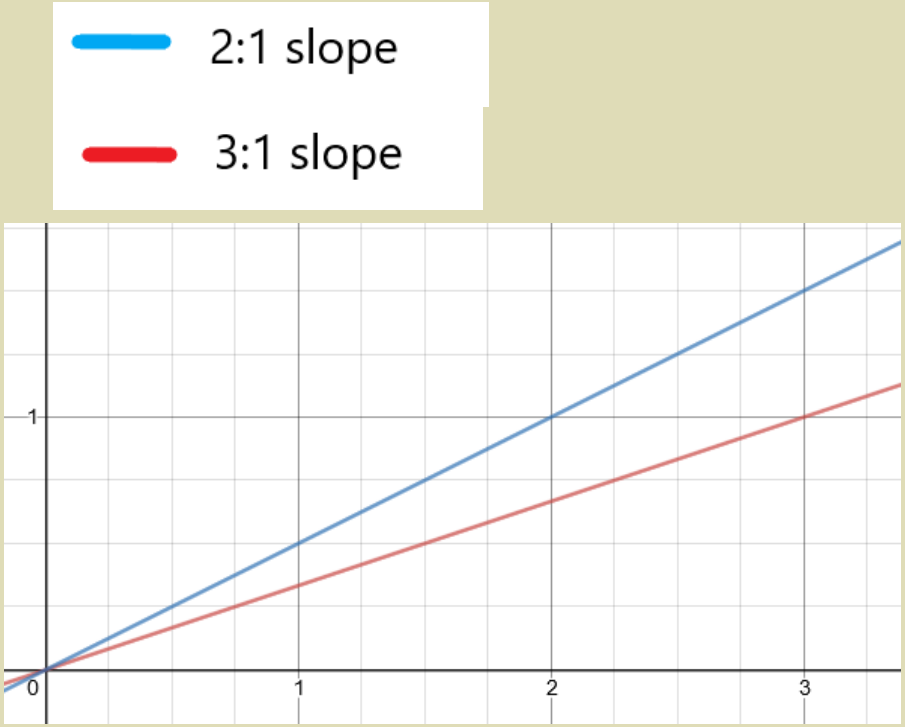
Old Canal Street Stabilization and South St. Bridge

- June 2016, Town installed 4 slope inclometers to measure subsurface movement.
- Since installation and measurement started, there has been subsurface movement in B-01, B-02, and B-03. (no movement in B-04)



Old Canal Street Stabilization and South St. Bridge

- Town staff has been working with Civil and Geotechnical Engineers to determine the best solution. Design is currently underway.
- The best and most economical solution is to make the lessen the steepness of the slope (at least a 3:1 slope)
- The work will require removing vegetation from the slope and bringing in dirt to make the slope not as susceptible to erosion or movement.
- Address erosion at South St. Bridge.
- Engineer's Preliminary Estimate is $800,000. Town can use Powell Bill funds for this project. Town can skip a paving cycle in FY21 to cover this cost.



Existing Buildings (6)

- Town Hall
  - Built 1999
  - 27,110 square feet
  - Elevator
- Fire Station 2
  - Built 2001
  - 9,550 square feet
  - Elevator
- Police Department
  - Built 2002
  - 17,566 square feet
  - Elevator
- Fire Station 1
  - Reconstructed 2007
  - 11,004 square feet
- Animal Shelter
  - Built 2009
  - 3,938 square feet
- Public Works
  - Built 2018
  - 11,988 square feet

*Each building has parking lot maintenance (105,670 total square feet)

*Total Square footage Building Space-81,146

Upcoming Major Maintenance Items (next 1-5 years)

- Town Hall Cooling Tower Replacement - $150,000
- PD Air Handling Units - $90,000
- PD Roof - $125,000
- Fire Station 2 Roof- $195,000
- Fire Station 2 Window Replacement- $40,000

- TOTAL=$600,000

Future Maintenance

- All buildings will eventually need a new:
  - Roof - 20-25 years
  - HVAC – 15-20 years
  - Carpet – 15-20 years
  - Paint – 10-20 years
  - Parking Lot Resurfacing – 15-30 years

Recommendation: Establish Town Hall/Public Safety/Public Works Building Maintenance Reserve Fund

- Maintenance Reserve Fund for large scale maintenance items on all six existing Town owned buildings.
  - Only fund major maintenance items or building upgrades
    - Roof Replacement
    - HVAC Units Replacement
    - Renovate Bathrooms, new paint and carpet, etc.
- Use the proceeds from sale of Hyde Park Storage units ($287,000) and Old Public Works building (currently $671,050 bid) as money to start the fund.
- Continue to fund at a rate of $0.75 per square foot of building. ($60,000/year)
- Fund will be earmarked for this sole purpose in general fund fund balance.
- Expenditures approved by Town Board via General Fund Budget approval or Budget amendment.

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Andrew Grant, Town Manager

Action Requested:

Hear a presentation on Finance goals.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
Admin_Finance.pdf	Admin/Finance	Presentation

Admin./Finance

- Salary Study $8,500
  - Market Study for salary and benefits
  - 2 years since last study
  - Labor market still tight and historically low unemployment
  - Study to commence summer/fall 2020
  - Personnel Committee – Citizens and HR Director

Admin./Finance Continued

- Staffing Study $50,000
  - Evaluate current departmental work load and staffing structure.
  - Recommendations will be centered around departmental structure, job classification and succession planning.
  - Possible phased departmental approach

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Kevin Black, Police Chief

Action Requested:

Hear a presentation on Police Department goals.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
CPD.pdf	CPD	Presentation

Cornelius Police Department FY21 Budget

Body Worn Cameras

- Body worn cameras protect our officers who place their lives on the frontline of defense each day.
- Cornelius Police Dept currently has 38 body worn cameras deployed .
  - 12 additional cameras are needed.
  - 50 total cameras equips all front-line officers and reduces device sharing.
- $17,000.00 will provide 12 cameras and one year of cloud storage.

Part-time Animal Control Officer

- The Public Safety Study indicated the need of a part-time office in animal control to alleviate the constant work of weekends and holidays of our current officers.

- Volunteers serve in the shelter but are limited in their ability to serve.
  - Liability prevents them from serving in the controlled area.

Part Time Animal Control Officer

- Current Staffing
  - Shelter Manager
  - Animal Control Officer
  - Citizen Volunteers

- Licensed Facility
  - The Shelter is licensed through the North Carolina Department of Agriculture
  - Licensing requires servicing of the animals twice a day, every day
    - Animals removed from the kennel and released into one of the outdoor runs
    - Kennel cleaned
    - Food and water dishes washed and refilled

Part Time Animal Control Officer

- Operating Issues
  - Volunteers are limited to servicing ONLY the adoption section of the shelter
  - Servicing requires at least one of the Animal Control staff to be present every day including all weekends and holidays
  - Volunteer staff is committed to the shelter but most have families, often limiting their availability on weekends and holidays when we need them most.
  - Full time staff rarely have an entire weekend off
  - Full time staff rarely have an entire holiday off
  - Sickness or injury of one of the full time staff requires the remaining staff member to work seven days a week

Part Time Animal Control Officer

- Advantages
  - Prevents burnout of existing staff
  - Provides entire weekends off for full time staff
  - Opportunity to have Holiday time off
  - Fills a need identified in the CPSM public safety study
- FY21 Budget Impact
  - $17,000

CIP Requests

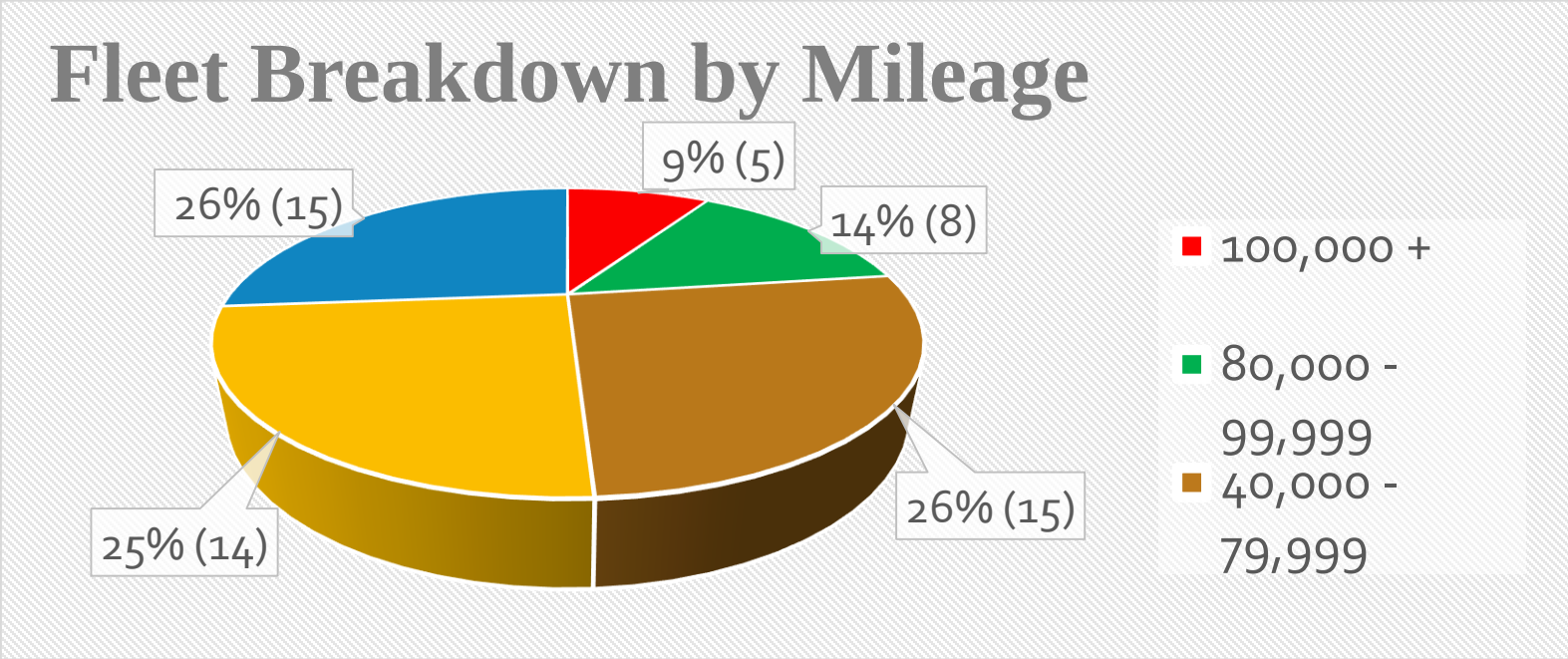
- Fleet Vehicle Replacement (Continuation)

- FY21 Request - $540,000

Fleet Vehicle Replacement

- The Fleet Vehicle Replacement program began in FY08
- Adopted a practice of replacing vehicles when they reached or exceeded 100,000 miles
- Replacing at 100,000 miles enables the department to maintain the most cost-effective fleet while attaining the highest resale value on surplus vehicles

Current Fleet Status



Factors Affecting Vehicle Life Cycle

- Exterior Car Wear and Tear:
  - Suspension and Brake Components
  - Vehicle Engines
    - Idling of engines
  - Vehicle Doors
    - Hinges
    - Panels and handles
  - Age
- Interior Car Wear and Tear:
  - Car Seating

Fleet Age

- 7+ years: 21%
- 6 years: 7%
- 5 years: 5%
- 4 years: 9%
- 3 years: 7%
- 2 years: 10%
- 1 year : 23%
- New(2019): 18%

Replacement Calculations

- Mileage ÷ Target Replacement Miles(100,000)
  - Example for the past three budget years (17, 18, and 19)
    - Average yearly mileage for the fleet 753,726
    - 753,726 ÷ 100,000 = 7.537 vehicles mileage out each year

- A consistent vehicle replacement plan
  - Makes future costs predictable
  - Fewer costly repairs
  - Impact on officer morale
  - Professional public image

One Officer to One Vehicle

- Currently "hot seating" 7 vehicles, double mileage and idle hours, creates excessive wear and tear and shortens life of the fleet
- This is a recommendation from the CPSM study
- Improves officer satisfaction and is a recruitment/retention tool
- Improves vehicle appearance and mechanical condition over the life of the vehicle
- Extends the service life of the vehicle
- Current Fleet – 54 Vehicles
- Current number needed for a one vehicle to one officer ratio – 13

Four Year Projection

Budget Year	Surplus	Purchase	Net
FY20	8	9	1
FY21	5	9	4
FY22	2	9	7
FY23	8	9	1
Total	23	36	13

Questions?

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Troy Fitzsimmons, PARC Director

Action Requested:

Hear a presentation on PARC goals.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
PARC.pdf	PARC	Presentation

PARC Major Operating Budget Goals and Capital Need Requests for FY21

Town Board Budget Planning Session
February 6, 2020

FY 21 PARC Proposed Capital Budget Request $720,000 Bailey Road Park Athletic Facility Lighting Replacement - Issues Defined

- Existing system has been failing
- System is nearly 20 years old
- Routinely spend $15,000 per year repairing lights
- CPSC issued pole failure warning in 2009
- Consulted with ElectriCities, electrical engineer, contractors and GE to assess failure frequency with no clear resolution
- PARC has acquired what is believed to be last 12 compatible ballasts in the U.S.
- PARC replaces an average of 6 ballasts/year
- 38% of PARC programs occur at night

NEWS from CPSC

U.S. Consumer Product Safety Commission

Office of Information and Public Affairs — Washington, DC 20207

FOR IMMEDIATE RELEASE
August 24, 2009
Release #09-321

CPSC Recall Hotline: (800) 638-2772
CPSC Media Contact: (301) 504-7908

CPSC Alert: Whitco Co. LP Stadium Light Poles Can Fall Over, Posing Risk of Serious Injury and Death

Dewberry

December 26, 2018

RE: Bailey Park Lighting Review

Dewberry Project# 50109262

FY 21 PARC Proposed Capital Budget $720,000 Bailey Road Park Athletic Facility Lighting Replacement – Phased Replacement Approach

- Design entire project and replace baseball and tennis in FY21 ($720K)
- Replace soccer and football in FY22 ($810K)
- Add basketball in FY23 ($90K)
- Total project/capital cost $1.62M
- 25-year warranty included
- Operating and maintenance costs <u>avoided</u> due to warranty and energy savings over 25-year life cycle (+/-$900K)

FY 21 PARC Proposed Operating Budget Goal: Add one full time park maintenance technician

- Increase park maintenance team from 4 to 5 full time employees
- One time start up cost $2,000
- Recurring cost $45,200
- Offsetting cost savings and revenue ($45,200)
  - Part-time maintenance cost savings ($11,000)
  - Add'l revenue from programs, fees and sponsorships (avg. 3-5% increase) ($34,200)
- Net $0 recurring budget request

PARC Growth 2009-2019

2009 — 2019

2011

Robbins Park Phase I

2012

Westmoreland Athletic Complex

2015

Robbins Park Phase II

2017

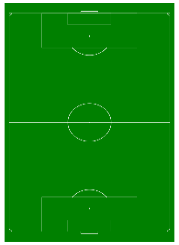
James Hoyt Wilhelm Park

114%

7 » 15

60%

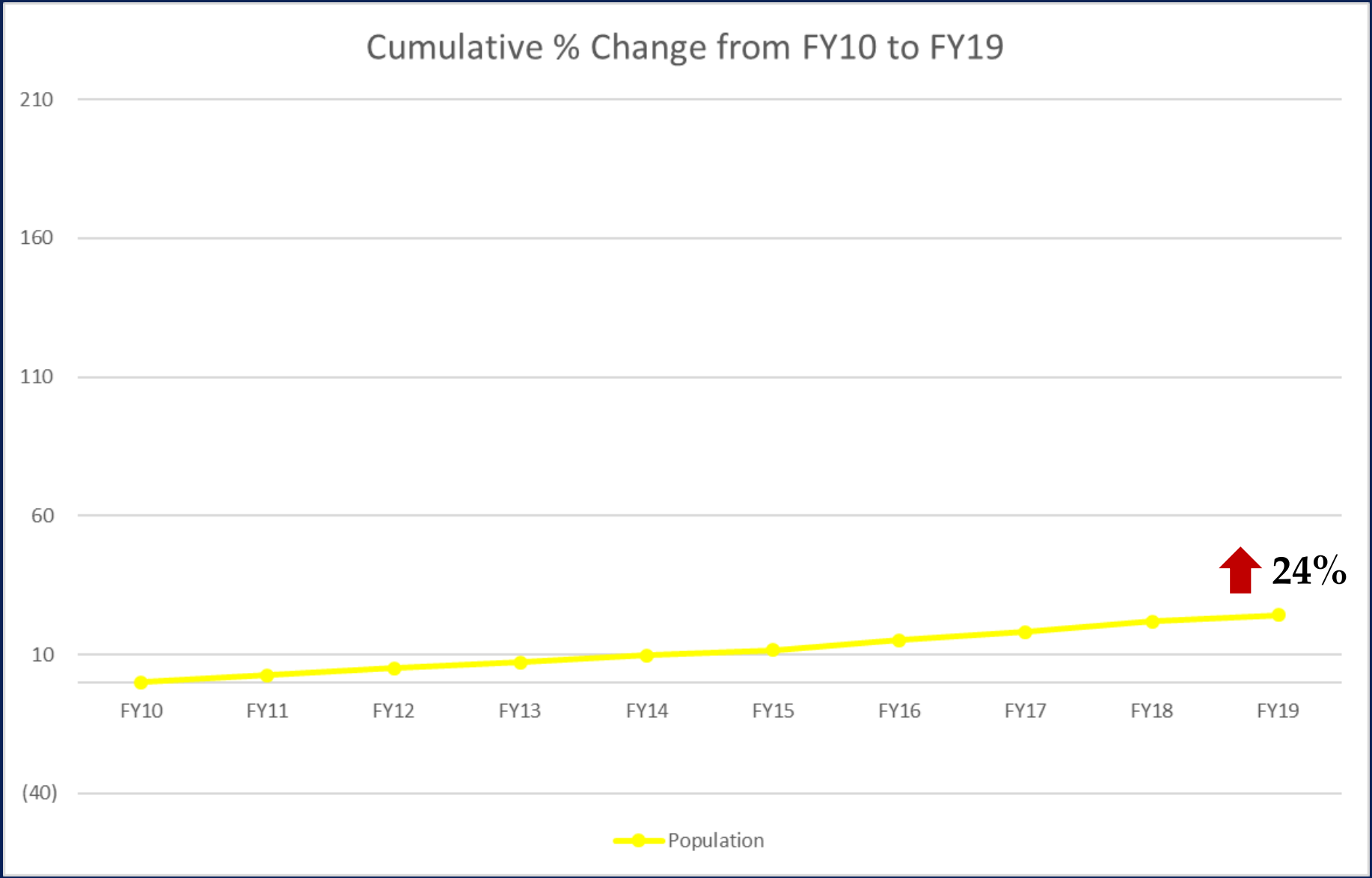
5 » 8



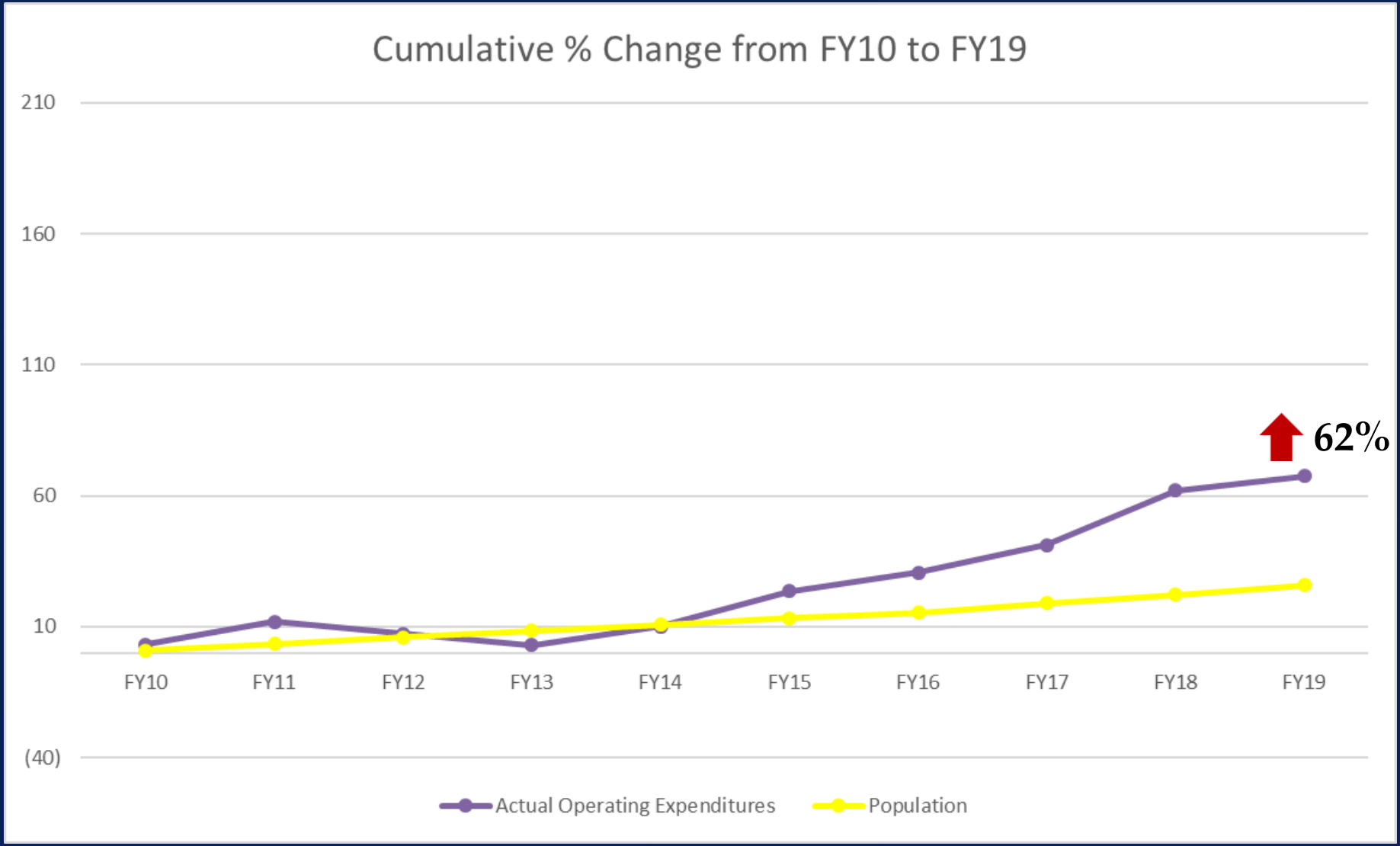
60%

5 » 8

10-Year Key Metric Growth



10-Year Key Metric Growth



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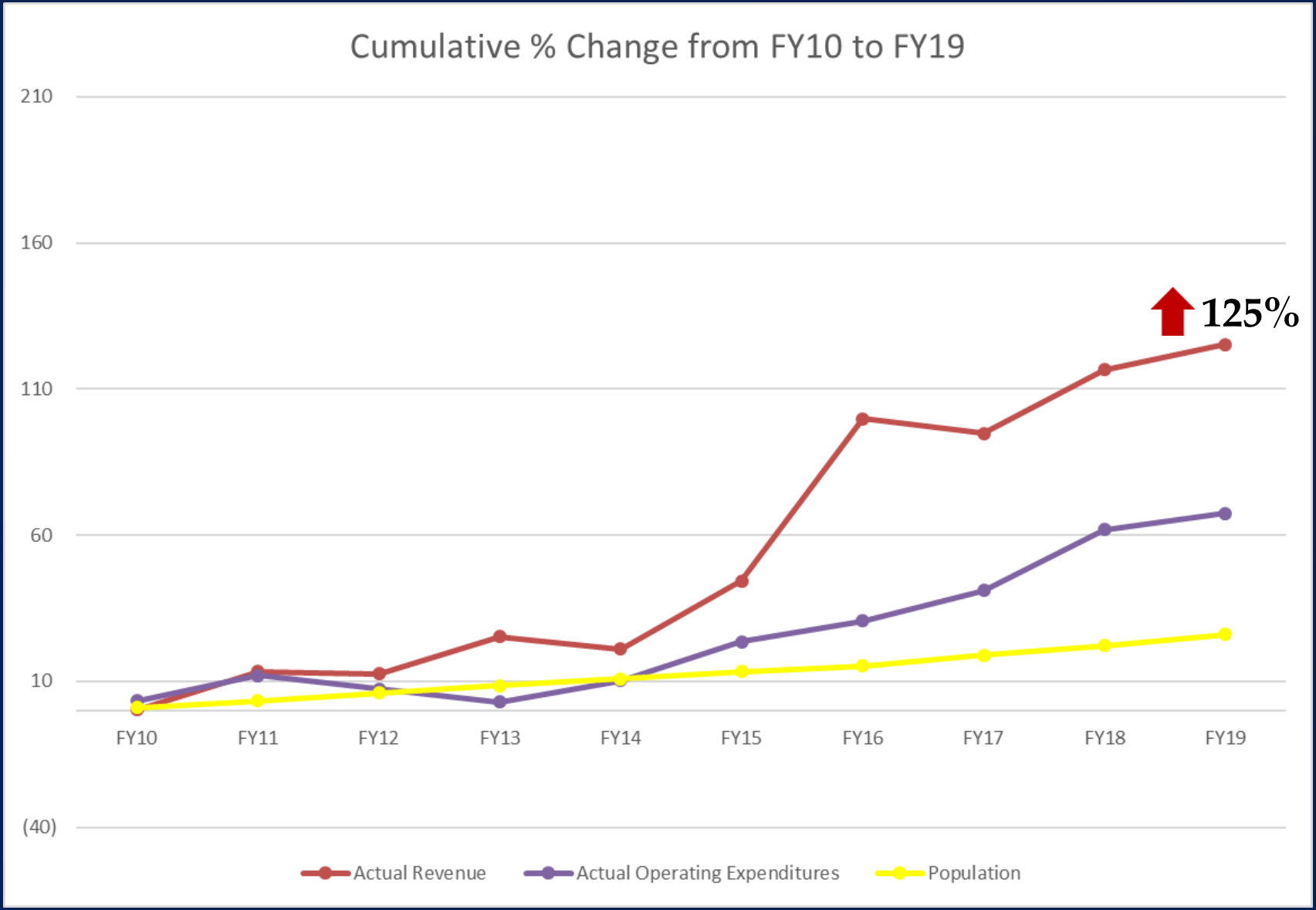
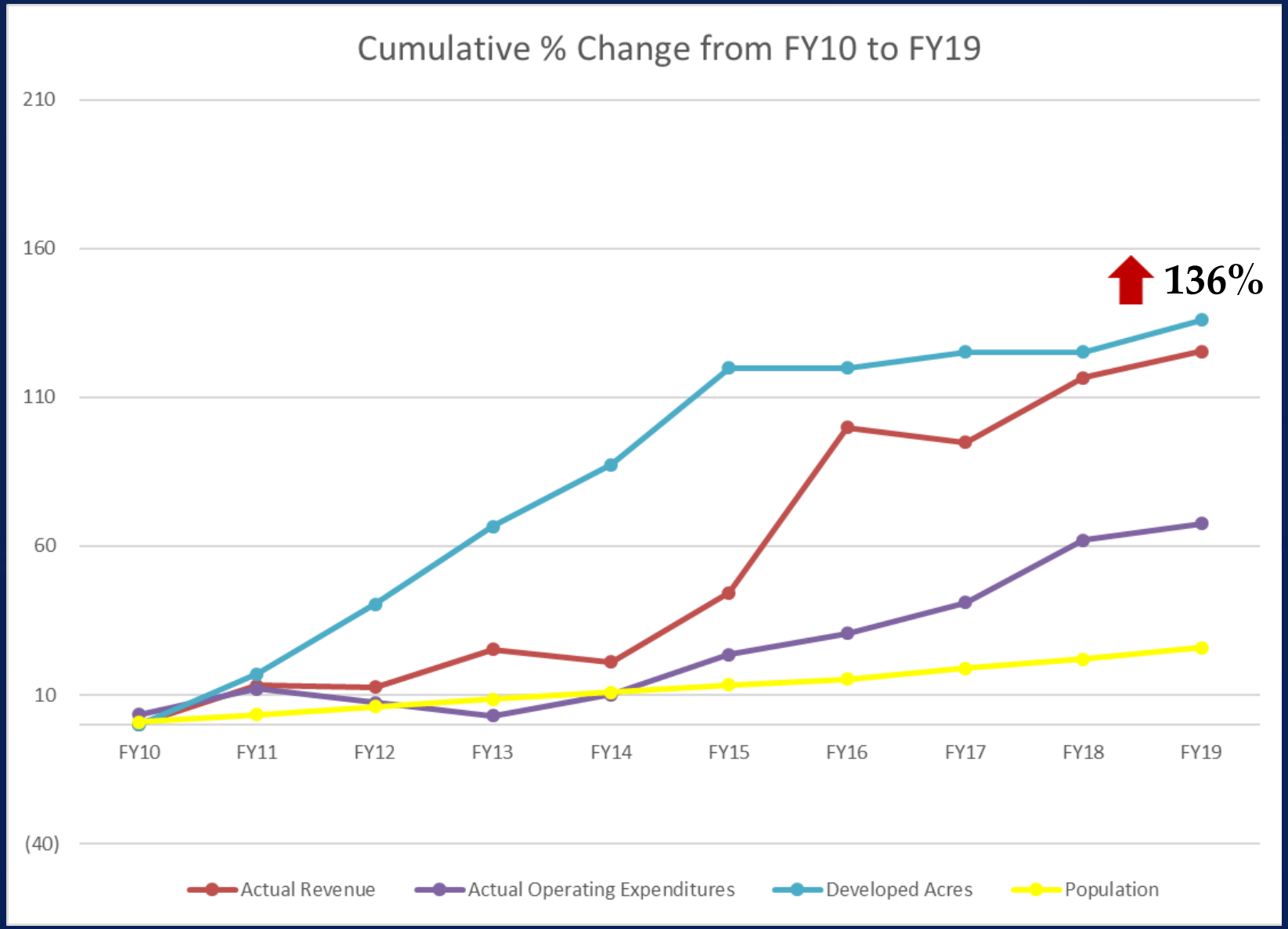
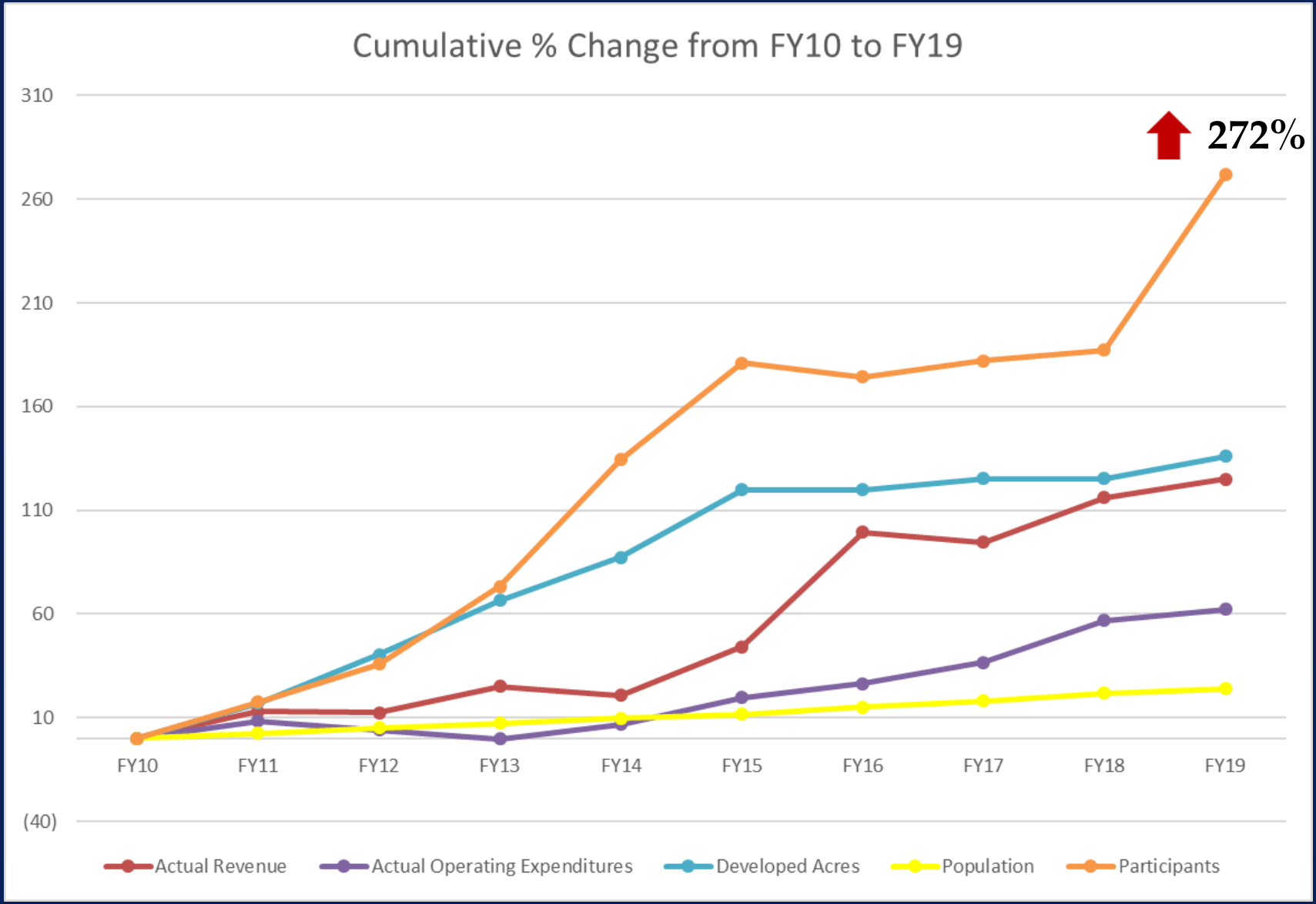


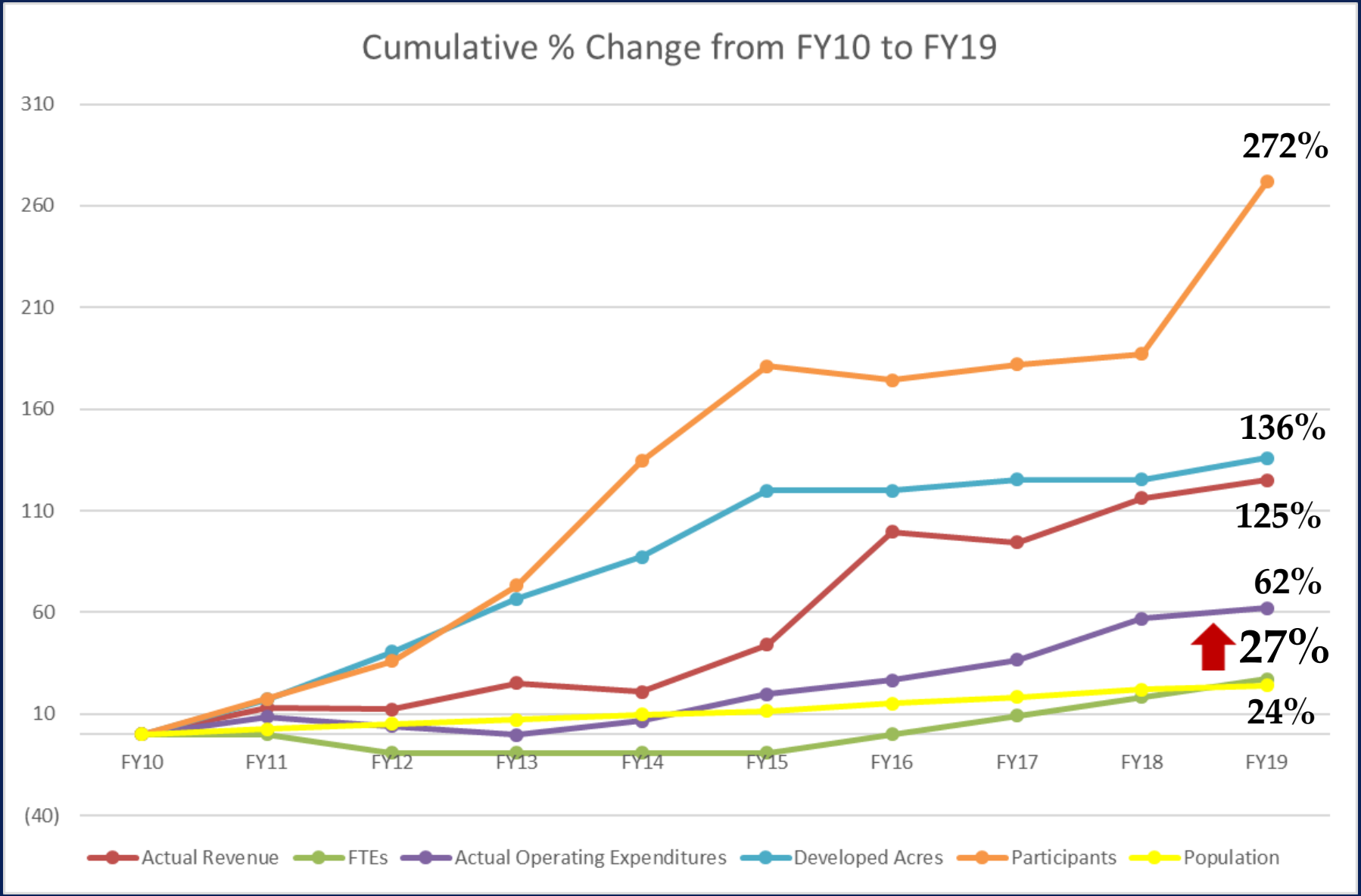
10-Year Key Metric Growth



10-Year Key Metric Growth



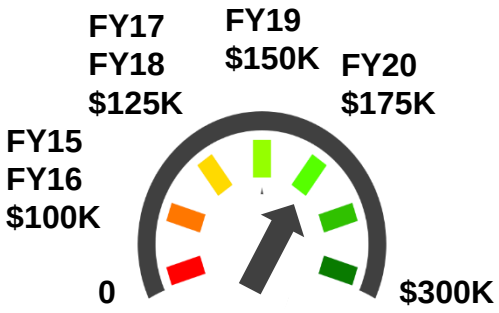
10-Year Key Metric Growth

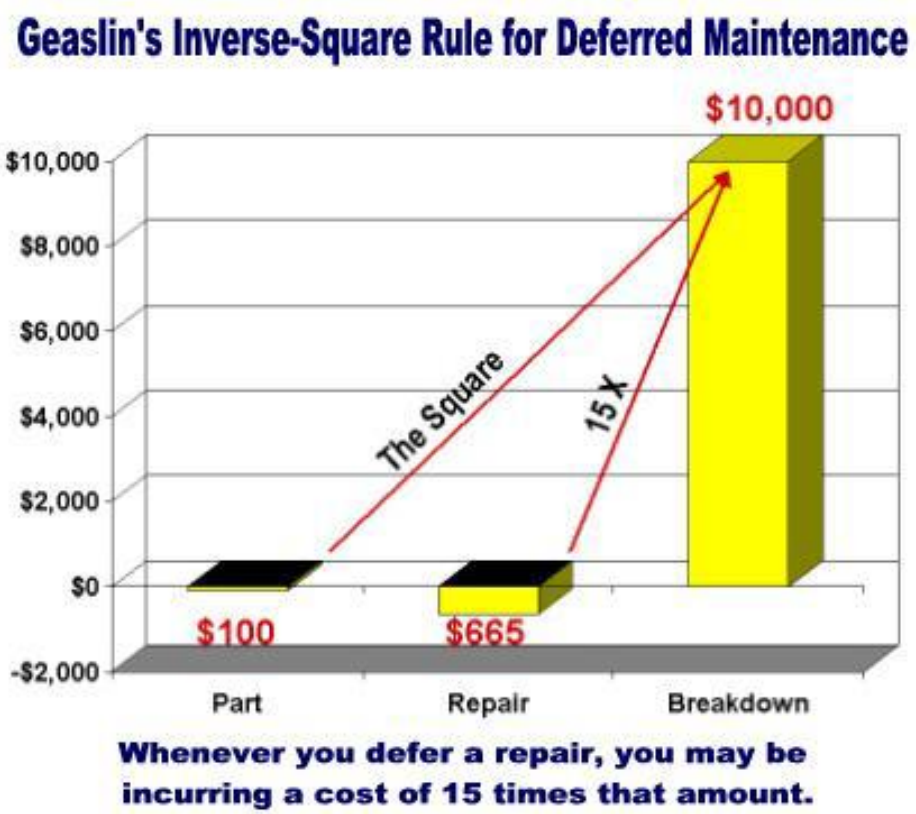


FY 21 PARC Proposed Operating Budget Goal: Increase Park Maintenance and Improvements budget by $125,000

- Increase park improvements budget from $175,000 to $300,000/year
- Continue addressing maintenance management plan
- Address Facility Improvements identified in the CIP

Deferred Maintenance and Park Improvements





Athletic Field Turf Renovations

- 5-year rotation
- $40,000/year

- Sodding, overseeding
- Top dressing

Infield Renovations

- 3-year rotation
- $30,000/year
- Add infield mix
- Regrade for positive drainage

Court Resurfacing

- 5-year rotation
- $16,000/year
- Patch crack, fill “bird baths”
- Acrylic surface court area

Paint and Staining

- 10-year rotation
- $8,000/year

- Picnic shelters
- Restrooms
- Hand Rails

- Foul poles
- Benches
- Trash Cans

Landscape and Lawn Renovation

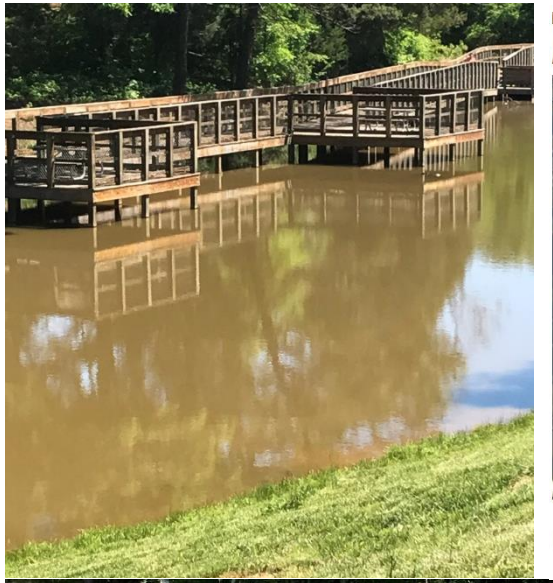
- Annual
- $60,000/year

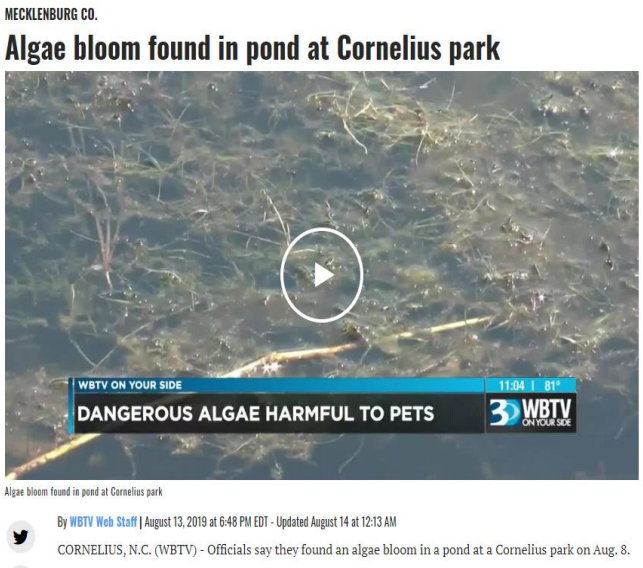
- Tree and shrub replacement/ additions
- Tree canopy maintenance
- Lawn renovation

Forest Management

- Annual
- $13,000/year
- Stop spread of invasives
- Eradicate invasives
- Add native plant species to improve wildlife habitat

Pond Management





MECKLENBURG CO.

Algae bloom found in pond at Cornelius park

Algae bloom found in pond at Cornelius park

By WBTV Web Staff | August 13, 2019 at 6:48 PM EDT - Updated August 14 at 12:13 AM

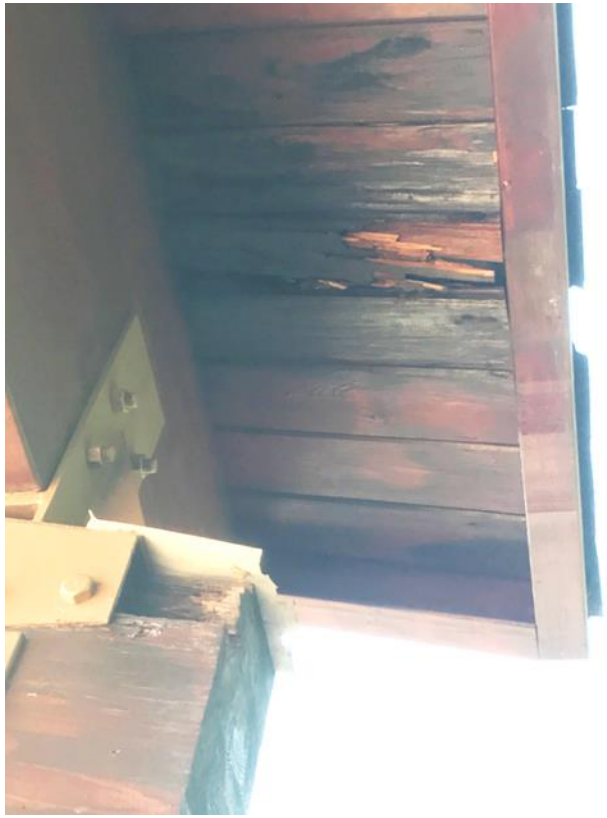
CORNELIUS, N.C. (WBTV) - Officials say they found an algae bloom in a pond at a Cornelius park on Aug. 8.

- Annual
- $8,000/year
- Deter toxic algae blooms
- Improve oxygen levels for aquatic wildlife
- Reduce turbidity
- Improve aesthetics
- Encourage more wildlife to inhabit pond areas
- Provide interpretative signage on the value of aquatic habitats

Park & Replacement Improvements

Rank	Location	Description	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26+	Grand Total
1	Bailey Road Park	Replace bandshell roof deck and truss	$ 50,000						$ 50,000
2	Glen Oak Green Park	Entrance sign planter bed w/low retaining wall and landscaping	$ 5,000						$ 5,000
3	Smithville Park	Relamp Athletic Field Lights	$ 15,000						$ 15,000
4	Westmoreland Athletic Complex	Add fencing around transformer and landscape	$ 25,000						$ 25,000
5	Westmoreland Athletic Complex	Spectator seating pads	$ 40,000						$ 40,000
6	Westmoreland Athletic Complex	Shade and landscape	$ 50,000						$ 50,000
7	Westmoreland Athletic Complex	Add energy efficient AC unit to concession stand.	$ 15,000						$ 15,000
8	Legion & SMV restrooms	Rework restroom drains to ensure positive drainage. Resurface floors.		$ 25,000					$ 25,000
9	TCP, BRP 1&2	Rework restroom drains to ensure positive drainage. Resurface floors.		$ 40,000					$ 40,000
10	Bailey Road Park	Relamp Athletic Field Lights		$ 50,000					$ 50,000
11	Westmoreland Athletic Complex	Phase I add curb & gutter to control erosion & eliminate sedimentation of the BMPs		$ 50,000					$ 50,000
12	Robbins Park	Convert irrigation from wells to Charlotte Water. Add Smart Irrigation Controller		$ 35,000					$ 35,000
13	Westmoreland Athletic Complex	Phase II add curb & gutter to control erosion & eliminate sedimentation of the BMPs			$ 35,000				$ 35,000
14	Walter Henderson Park	Trail and drainage improvements			$ 25,000				$ 25,000
15	Glen Oak Green Park	Update playground			$ 70,000				$ 70,000
16	Walter Henderson Park	Update playground			$ 70,000				$ 70,000
17	BRP	Add multi-section batting cages				$ 22,000			$ 22,000
18	Torrence Chapel Park	Add LED lights to basketball courts				$ 60,000			$ 60,000
19	WAC	Add multi-section batting cages				$ 33,000			$ 33,000
20	Yacht Club	Update playground				$ 70,000			$ 70,000
21	Robbins Park	Add Musco Control Link to restroom doors				$ 15,000			$ 15,000
22	Wilhelm Park	Add spectator seating for baseball					$ 50,000		$ 50,000
23	Bailey Road Park	Replace sewer lift station pump					$ 15,000		$ 15,000
24	Smithville Park	Add additional playground equipment					$ 40,000		$ 40,000
25	Bailey Road Park	Add shade structure and seating at tennis courts					$ 40,000		$ 40,000
26	Wilhelm Park	Add spectator seating for football					$ 35,000		$ 35,000
27	Glen Oak Green Park	Repave trails						$ 30,000	$ 30,000
28	Westmoreland Athletic Complex	Phase III & IV add curb & gutter to control erosion & eliminate sedimentation of the						$ 65,000	$ 65,000
29	Glen Oak Green Park	Add exercise area						$ 30,000	$ 30,000
30	Torrence Chapel Park	Develop a small fenced area for a dog park with water fountain						$ 20,000	$ 20,000
			$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 180,000	$ 145,000	$ 1,125,000

Park & Replacement Improvements



Repair Bailey Road Park Bandshell to deter wood rot

Add curb and gutter to reduce soil erosion at WAC

Add seating area for WAC baseball fields to prevent erosion

FY 21 PARC Proposed Capital Budget
$1,000,000 for
Smithville JV Washam Linear Park
land acquisition

FY 21 PARC Proposed Capital Budget
Linear Park Conceptual Example

PARC Operating Budget Goal and Capital Need Requests for FY21

?

REQUEST FOR BOARD ACTION

Print

Date of Meeting: February 6, 2020

To: Mayor and Board of Commissioners

From: Guerry Barbee, Fire Chief

Action Requested:

Hear a presentation on the fire department goals.

Manager's Recommendation:

ATTACHMENTS:		
Name:	Description:	Type:
Fire.pdf	Fire Department	Presentation

CORNELIUS-LEMLEY FIRE RESCUE FY21 REQUEST

FY2021 Operational Goals

- 1. Add two Full Time positions to daily staffing bringing the total number of firefighters on duty to ten = $300,000 to $400,000
- 2. Fund Overtime to maintain minimum staffing of eight firefighters on duty daily = $19,404
- 3. Fund 12 hour shifts to cover staffing gaps created by staggered ten-hour shifts = $23,608.20
- 4. Fund the non-capital fire equipment replacement program to a reoccurring = $20,000

Challenges

- MANPOWER
  - Pool of Firefighters available for Part Time positions is not growing – market is saturated with part time departments
  - Firefighter Burnout – All members have a career job and average 60/80hrs per week between two jobs
  - State Required Training is almost unattainable for an adult with a family and full time job
  - Overtime at Career Dept. far more lucrative than working part-time
  - Career Departments require Firefighters to work Overtime (Weather Related Events, Rookie School, Natural Disaster Deployments, RNC)
  - Medical Leave & Injuries cause staffing shortages
- Sustainability of Current Model
  - Part Time Personnel performing tasks that require full time commitments
  - Membership is not growing – Very Little Recruitment Tools – Generational Problem
  - Affordable / Workplace Housing Not Available - Members cannot afford to live in Cornelius – 13 members have moved in last two years. We are forced to accept new members that are not residents, therefore they are unable to perform “on call” tasks

Daily Shift Schedule – 40hr Work Week

14hrs per day – 8 on duty, 6hrs per day 6 on duty, 4hrs per day – 4 on duty

HALF HOURS	0:00	0:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30
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FF PER STA	4	4	4	4	4	4	3	3	3	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	4	3	3	3	3	3	4	4	4	4	4	4
TOTAL ON DUTY	8	8	8	8	8	8	6	6	6	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	6	6	6	6	8	6	6	6	6	6	8	8	8	8	8	8

STAFFING DATA

- Closed Shifts – 5840 Possible shifts – 266 not filled
- Weekends and Holidays continue to challenge the part-time staffing model
  - Saturdays 128 Vacancies – 704 filled out of 832 possible shifts
  - Sundays 69 Vacancies – 763 filled out of 832 possible shifts
  - 197 Vacancies on the weekends – out of 1664 possible shifts

  - Holidays – 263 filled out of 304 possible shifts
    - Holidays with openings – Holiday Pay $22.50
      - New Years Day – 3 w/ Holiday Pay
      - Valentines Day – 3
      - St. Patrick's Day – 1 - the Saturday when St. Patrick's Day was celebrated had 7 openings
      - Mother’s Day – 3
      - Fathers Day – 3
      - July 4th – Thursday - Fully Staffed – the Saturday following July 4th had 9 openings
      - Thanksgiving – 2 w/ Holiday Pay
      - Christmas Eve – 4 w/ Holiday Pay
      - Christmas Day – 6 w/ Holiday Pay

      ***The Week of Christmas Sunday Dec. 22 thru Sunday Dec. 29 – 21 openings out of 128 shifts – 83%

STAFFING CHALLENGES

- What does a vacant shift really mean?
  - When one shift is vacant that means daily staffing goes down, normal is as follows
    - 14hrs per day – 8 on duty
    - 6hrs per day 6 on duty
    - 4hrs per day – 4 on duty
  - If one shift is open total staffing for the entire town suffers
  - Two open shifts is even more detrimental, potentially catastrophic, depending on the time of day
    - 14hrs per day – 8 on duty – Two open shifts = 6
    - 6hrs per day 6 on duty – Two open shifts = 4
    - 4hrs per day – 4 on duty – Two open shifts = 2 firefighters on duty for the entire town.

Day Light Hours from 0600 to 1800. Highlighted section represents one Vacant Shift from 0700 to 1700. Drastically Reduces staffing throughout the day.

HALF HOURS	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00
HALF HOURS	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00
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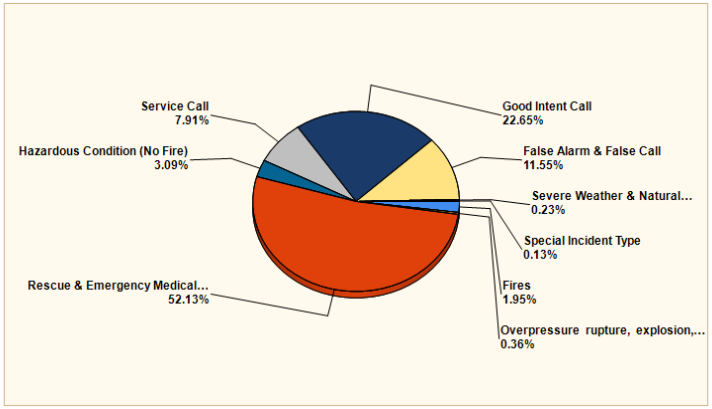
			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
																							X	X	X
																									X
	X	X																							
FF PER STA	2	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	4

TOTAL ON DUTY	4	4	3	3	3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	6	6	8
FULL STAFFING	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	6	6	6	6	8

INCIDENT STATISTICS

- Run Statistics – 3073 Calls for service 2019
  - Fire 1471
  - EMS 1602

MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	60	1.95%
Overpressure rupture, explosion, overheat - no fire	11	0.36%
Rescue & Emergency Medical Service	1602	52.13%
Hazardous Condition (No Fire)	95	3.09%
Service Call	243	7.91%
Good Intent Call	696	22.65%
False Alarm & False Call	355	11.55%
Severe Weather & Natural Disaster	7	0.23%
Special Incident Type	4	0.13%
TOTAL	3073	100.00%



INCIDENT STATISTICS

- Run Statistics – 3073 Calls for service 2019
  - Fire 1471
  - EMS 1602
  - Overlapping Calls 782 Calls – 25%
  - 3 or more calls at once – 62 times – 17% of the year (% of days of the year)
    - Causes for Multiple Calls at once
      - Missing Persons / Drownings Lake Norman
      - Prolonged Hazardous Materials Calls
      - Serious Medical Emergencies
      - Weather Related Events – Thunderstorms
      - Structure Fires

Multiple Apparatus Required for calls – 621 Calls – both staffed trucks required to successfully mitigate the incident.

Detailed Breakdown by Incident Type		
INCIDENT TYPE	# INCIDENTS	% of TOTAL
111 - Building fire	21	0.68%
113 - Cooking fire, confined to container	10	0.33%
134 - Water vehicle fire	2	0.07%
138 - Off-road vehicle or heavy equipment fire	1	0.03%
221 - Overpressure rupture of air or gas pipe/pipeline	1	0.03%
242 - Blasting agent explosion (no fire)	1	0.03%
251 - Excessive heat, scorch burns with no ignition	9	0.29%
322 - Motor vehicle accident with injuries	79	2.57%
323 - Motor vehicle/pedestrian accident (MV Ped)	3	0.10%
341 - Search for person on land	2	0.07%
342 - Search for person in water	4	0.13%
350 - Extrication, rescue, other	1	0.03%
352 - Extrication of victim(s) from vehicle	2	0.07%
357 - Extrication of victim(s) from machinery	1	0.03%
361 - Swimming/recreational water areas rescue	3	0.10%
365 - Watercraft rescue	4	0.13%
411 - Gasoline or other flammable liquid spill	6	0.20%
412 - Gas leak (natural gas or LPG)	52	1.69%
413 - Oil or other combustible liquid spill	1	0.03%
420 - Toxic condition, other	1	0.03%
421 - Chemical hazard (no spill or leak)	2	0.07%
422 - Chemical spill or leak	1	0.03%
424 - Carbon monoxide incident	6	0.20%
440 - Electrical wiring/equipment problem, other	4	0.13%
441 - Heat from short circuit (wiring), defective/worn	1	0.03%
442 - Overheated motor	1	0.03%
445 - Arcing, shorted electrical equipment	6	0.20%
461 - Building or structure weakened or collapsed	1	0.03%
531 - Smoke or odor removal	9	0.29%
651 - Smoke scare, odor of smoke	21	0.68%
652 - Steam, vapor, fog or dust thought to be smoke	6	0.20%
653 - Smoke from barbecue, tar kettle	2	0.07%
671 - HazMat release investigation w/no HazMat	6	0.20%
700 - False alarm or false call, other	38	1.24%
710 - Malicious, mischievous false call, other	3	0.10%
714 - Central station, malicious false alarm	1	0.03%
715 - Local alarm system, malicious false alarm	3	0.10%
730 - System malfunction, other	8	0.26%
731 - Sprinkler activation due to malfunction	1	0.03%
732 - Extinguishing system activation due to malfunction	1	0.03%
733 - Smoke detector activation due to malfunction	23	0.75%
734 - Heat detector activation due to malfunction	3	0.10%
735 - Alarm system sounded due to malfunction	43	1.40%
736 - CO detector activation due to malfunction	17	0.55%
740 - Unintentional transmission of alarm, other	13	0.42%
741 - Sprinkler activation, no fire - unintentional	2	0.07%
743 - Smoke detector activation, no fire - unintentional	47	1.53%
744 - Detector activation, no fire - unintentional	14	0.46%
745 - Alarm system activation, no fire - unintentional	123	4.00%
746 - Carbon monoxide detector activation, no CO	15	0.49%
813 - Wind storm, tornado/hurricane assessment	3	0.10%
814 - Lightning strike (no fire)	4	0.13%

Station Availability

- Table 13 below was produced by CPSM after studying data from May 1, 2018 to April 30, 2019.
- 1,147 calls in Station 1's area. Station 1 units arrived at that call 93.1% of the time.
- 1,113 calls in Station 2's area. Station 2 units arrived at that call 90.7% of the time.

TABLE 13: Station Availability to Respond to Calls

Station	Calls in Area	First Due Responded	First Due Arrived	Percent Responded	Percent Arrived
1	1,147	1,072	1,068	93.5	93.1
2	1,113	1,010	1,009	90.7	90.7
Total	2,260	2,082	2,077	92.1	91.9

Note: For each station, we count the number of calls occurring within its first due area. Then, we count the number of calls to where at least one CLFR unit responded. Next, we focus on units from the first due station to see if any units responded, arrived, or arrived first.

- *1. Add two Full Time positions to daily staffing bringing the total number of firefighters on duty to ten =* $300,000 to $400,000

- Full Time Employees – 24hr shifts – 3 shifts (A,B,C) – Two Firefighters Per Day = $300,000 to $400,000

- We will be competing with other local municipalities for career firefighters
  - East Lincoln
  - Denver
  - Boger City
  - Lincolnton
  - Davidson
  - Mooresville
  - Harrisburg
  - Kannapolis

Justification

- Ensures 2 Personnel on duty 24hrs a day, 365 days a year.
  - Full Time staffing ensures personnel to work Weekends & Holidays
  - Coupled with current part time staffing model provides full time coverage at a fraction of the cost
  - Ensures Personnel during Major Weather events such as Winter Weather or Hurricane Activity when part-time personnel may be required to work at career depts.
  - Helps replace “on call” firefighters not responding from home
    - 42 Residents – 13 Firefighters have moved OUT of Cornelius due to cost of living, lack of affordable/workplace housing.
  - Assist with FF Burnout of current part time model – Firefighters average working seven part-time shifts a month in addition to Full-time responsibilities – this is a decline from an average of ten shifts 5 years ago.
  - Current staffing model is “not sustainable” (CPSM preliminary findings) due to tight labor market and reliance upon career firemen who work for other agencies. The increase in part time pay (FY 2018) was not effective in substantially increasing our part time staff.

Justification for Career Personnel

- Ladder Company staffed at Station 1.
  - Ensures Ladder Company Response
  - Reduces out of chute time – personnel do not have to switch trucks
  - Adds an additional truck to combat overlapping calls and first due coverage gaps
  - Allows for Station 1 to remained staffed during Mutual Aid calls (333 Mutual Aid calls in 2019)
- NFPA 1710 Industry Standard for Career Fire Departments
  - Low Hazard Single Family Dwelling – Minimum 15 firefighters
  - Strip Mall / Commercial / Multi Family Dwellings – Minimum 28 firefighters

Justification for Career Personnel

- Fire Boat Staffing – 2 personnel for boat for water supply & LKN Coverage
- Critical Infrastructure – Fire/EMS/Haz-Mat Coverage on the water as well as a water supply for land based apparatus.
- Lake Norman is the second most dangerous body of water in NC only behind the Intercostal Waterway (2018 NC Wildlife Boating Accidents and Fatalities Report)
  - The preliminary findings of the study states - Main sizes throughout the "finger areas" are often 6 inches and pressures/volume do not meet what is required to extinguish a structure fire. Fire extinguishment relies on adequate volume and pressure of water to overcome the fire load in a building.
  - If the pressure and volume are insufficient, water must be located from somewhere else. The fireboat is an excellent example of compensating for insufficient water capacity. ***CPSM looked at cross-staffing the rescue and fireboat as part of the final system design***.
  - The road network (narrow, winding roads), dead-end lines, and inability to loop or otherwise improve the water delivery requires additional planning, staffing, and equipment from Cornelius and the other Towns.

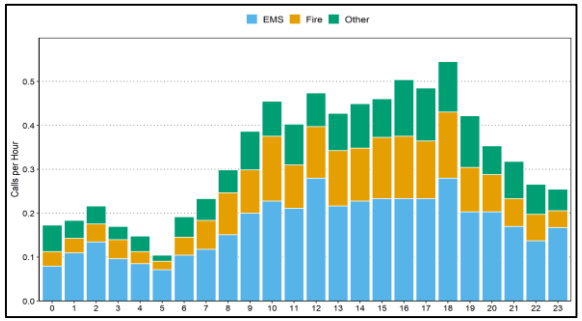
2. Fund Overtime to maintain minimum staffing of eight firefighters on duty daily = $19,404

- 20 OT shifts per month = $7.50x10hrs = $75 per shift
  - $75x20 shifts/month = $1500 x 12 months = $18,000 +7.8% = $1404 = $19,404
- OT is necessary due to limited personnel available

2019	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Available Shifts per Month	496	448	496	480	496	480	496	496	480	496	480	496	5840
Total Shifts Covered W/O OT	475	427	454	456	449	438	464	486	446	463	462	445	5465
Overtime Worked	5	5	13	4	10	17	7	10	18	20	18	20	147
Total Shifts Covered	480	432	467	460	459	445	471	492	455	481	467	465	5574
Unfilled/ "Open" Shifts	16	16	29	20	37	35	25	4	25	15	13	31	266

3. Fund one 12 hour shift to cover staffing gaps created by staggered ten-hour shifts = $23,608.20

- Firefighters are only allowed to work 40hrs per week
- 10 hours shifts staggered throughout the day
- The current schedule is set up to have eight firefighters on duty during peak call hours
- During off peak hours manpower falls to 6, 4 and then 2 from 0400 to 0600.



Fund 12 Hour Shifts

- A 12hr shift was implemented in June 2019 as a trial. The shift that starts at 1800hrs became a 12 hour shift to ensure 4 firefighters (2 at each station) were on duty from 0400 to 0600.
- An unfunded 12 hour shift means from the hours of 0400 to 0600 there is only one firefighter on duty at each station. A total of 2 for the entire town
- Fund 12 hour shifts to cover staffing gaps created by staggered ten-hour shifts = $23,608.20
  - 2hrs x 2 positions = 4hrs per day = 1460hrs per year x $15.00 = $21,900
- $21,900 +7.8% = $23,608.20

Daily Shift Schedule – 40hr Work Week

HALF HOURS	0:00	0:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30
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FF PER STA	4	4	4	4	4	4	3	3	3	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	4	3	3	3	3	3	4	4	4	4	4	4
TOTAL ON DUTY	8	8	8	8	8	8	6	6	6	4	4	4	4	4	4	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	6	6	6	6	8	6	6	6	6	6	8	8	8	8	8	8

4. Fund the non-capital fire equipment replacement program = $20,000

- This increase will allow replacement of small capital items that have aged out over time. Reasons to replace equipment
  - Replacement for damaged equipment beyond repair
  - Extreme wear and tear
  - Age
  - New Technology
- In FY 20, $20,000 was added. The additional $20,000 will take this item to a fully funded $60,000.

CIP FY2021

- Purchase Two Engine Companies - $1,500,000
  - Replace 1995, 2001, 2005 Engines with two new Engines
  - Push FY22 Ladder Truck replacement out to “future” replacement saving 1.5mil
  - Maintenance Cost
    - 1995 – 110,195 Miles, 8740 engine hours, $22,759 M&R last 3 years
    - 2001 – 108,304 Miles 11,802 engine hours $56,208 M&R last 3 years
    - 2005 – *35,221 miles, 6394 engine hours, $72,900 M&R last 3 years
      - Odometer ruined in rollover wreck 2010
      - $330,000 in damages

CIP FY2021 – Engine Company Replacement

- American Public Works Association (APWA) Vehicle Replacement Guide for Fire Apparatus
  - The score card for fire apparatus considers age, mileage and engine hours, severity of service, reliability, maintenance and repair cost and overall condition.
  - All three Engine Companies scored above a 28 which qualifies them as a Condition 4 – Needs Immediate Replacement Consideration.

- NFPA 1901, the National Standard for Automotive Fire Apparatus states that Engine Companies can be used in front line status for 20 years and reserve status for five additional for a total life of 25 years.

CIP FY2021 – Training Center Land - $500,000

- ISO requires that all firefighters receive training in an ISO rated “Facility” 18 hours per year for maximum credit. A facility is described as a live fire training structure including smoke room, at least three stories in height with a training area of at least 2 acres.
- This need was identified in the 2013 ICMA Study (performed for Cornelius) as recommendation #11.
- Currently No designated area for Cornelius Firefighters to train
- The Training Tower would be a multi-story Conex container facility will provide an area to complete a number of fire evolutions

CIP FY2021 – Training Center Land

- The Training Center needs to be located in a predominately commercial area that is not near any residential. Firefighters will train during daylight and evening hours and can create a noise and smoke issue for nearby neighborhoods.