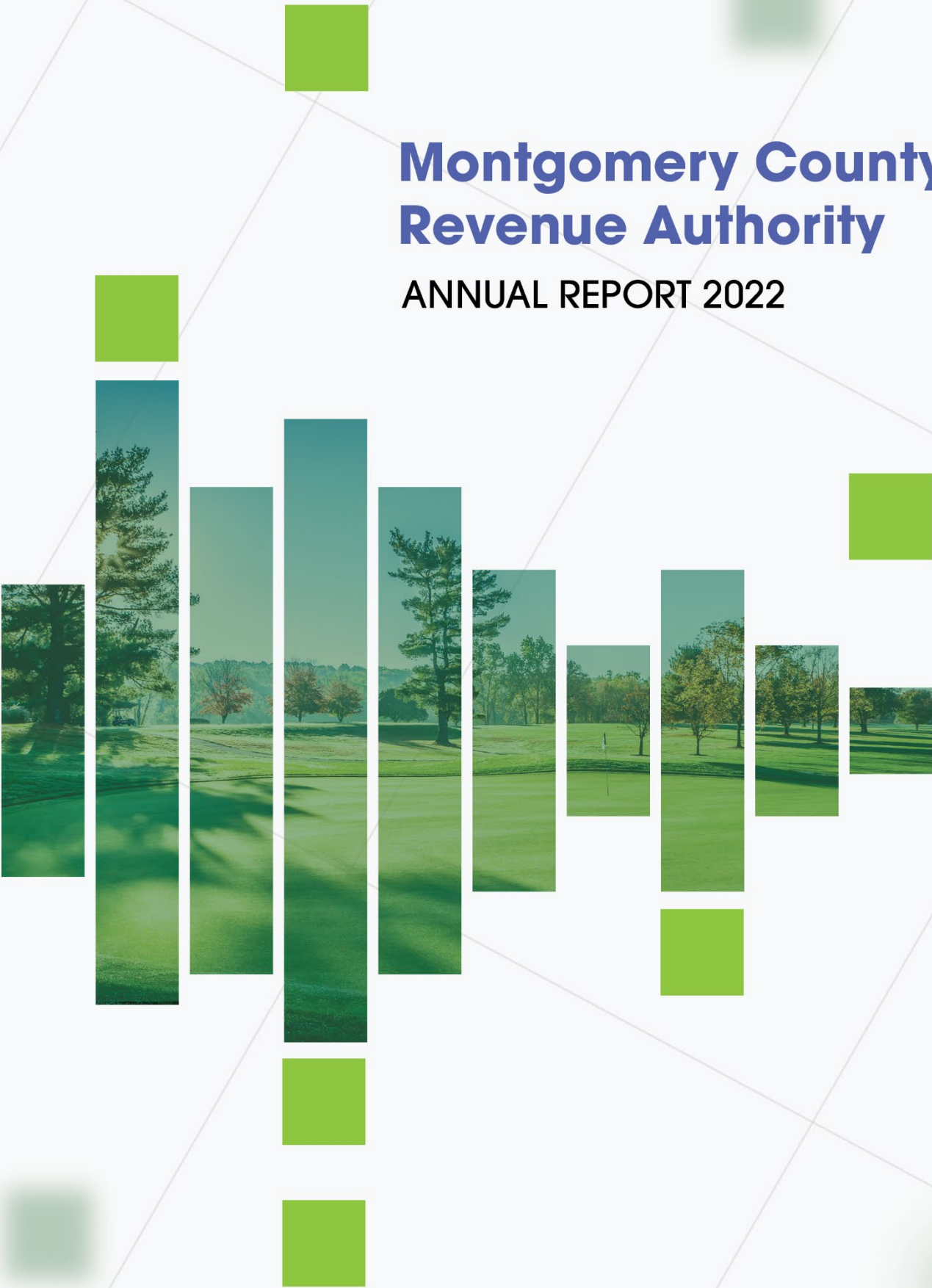


Montgomery County Revenue Authority

ANNUAL REPORT 2022



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Vision Statement

Montgomery County Revenue Authority (MCRA) is committed to growing a sustainable network that:

- Is nationally, regionally, and locally recognized for its offerings and performance.
- Is dedicated to achieving higher environmental standards.
- Continues to offer new and innovative programs and services for the benefit of the community and our team.

**MCRA IS COMMITTED TO THE
FOLLOWING CORE VALUES:**

1. Genuine Smile

2. Do-Anything Attitude

3. Deliver Excellence



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MCRA - OVERVIEW

The Montgomery County Revenue Authority (MCRA), created in 1957, is an instrumentality of Montgomery County, Maryland, and a public corporation. The MCRA was established to construct, improve, equip, furnish, maintain, acquire, operate, and finance projects devoted wholly or partially to public use, good, or general welfare. A six-member Board governs the MCRA, with five members appointed by the County Executive and confirmed by the County Council. The sixth member – the Chief Administrative Officer of Montgomery County, or a designee – serves in a non-voting, ex-officio capacity.

The two primary activities of the MCRA are operating self-supporting facilities and financing public facilities. On the operations side, the MCRA manages its golf course system, comprised of nine golf courses, along with the Montgomery County Airpark. The operated facilities generate various forms of revenue, which are used to fund MCRA operations and provide for facility improvements. A portion of the revenues is used to retire any debt associated with the operated facilities.

On the public financing side, the MCRA issues bonds to raise capital, acquire land or other property, or pay construction costs for Montgomery County facilities. Through a financing partnership with a broad range of county agencies, the MCRA has supported important public purposes as far-reaching as economic development, education, transportation, health and human services, recreation, and the arts. The agencies' lease payments are used by the MCRA to retire the debt obligations.

Montgomery County Revenue Authority – 2022 Highlights

The Montgomery County Revenue Authority (MCRA) remained committed to its mission to grow through new initiatives and continued partnerships. The golf industry saw a decrease in rounds of 3.7% nationally in 2022. Rounds of golf decreased by 7.4% locally, according to industry data. The MCRA golf courses experienced a decrease in rounds of 7.3%.

Key Market Indicators



The golf industry saw a decrease of rounds played by 3.7% nationally in 2022.



The MCRA golf courses experienced a decrease in rounds of 7.3%.



Rounds of golf decreased by 7.4% locally.

MCRA Golf Initiatives

The MCRA's golf courses, hosted 416,367 rounds across its nine venues in 2022, marking a decrease of about 34,000 rounds from the prior year.



MCRA Golf Initiatives

Community Assistance and Event Programs

- The MCRA maintains its commitment to the Salute Military Golf Association, which focuses on rehabilitating local wounded warriors through the game of golf, by offering clinics and reduced fees throughout the year for members of the organization.
- Over 700 rounds of golf were donated to the Montgomery County Public Schools program.
- Sligo Creek Golf Course's free-to-attend "Music in the Park" drew record crowds this year, offering the community a safe and fun event every Friday throughout the summer.

Family Golf

The MCRA's popular Family Golf program - offered at all nine MCG Golf courses throughout the summer - was an overwhelming success for community members interested in activities suitable for the whole family. This program consisted of:

- \$15 rates for all families offered Monday – Friday at any time at our 9-hole courses and after 5 pm on our main 18-hole courses. Weekend Family Golf rates were available after noon at our 9-hole courses and after 5 pm at the 18-hole courses.
- A “course within a course” is set up for juniors and new players to the game to make it much more fun and enjoyable, along with family friendly scorecards.

FootGolf

Northwest and Sligo Creek Golf Courses were the first FootGolf courses established in the DC Market in 2016:

- FootGolf is a combination of soccer and golf whereby a player kicks a soccer ball and follows the rules of golf. This has proven to be a tremendous success at the two facilities.
- In 2022 this program continued to grow. Many soccer leagues used the venues for fun outings as did numerous soccer enthusiasts.

MCG Academy

- The MCG Academy's six-tiered lesson program offers Golf 101 and 102 for beginners, 103 for beginners who want to learn how to play on the course, and 104 for golfers who are already playing and would like to learn more in a group setting. Golf 201 and 202 are for private instruction and playing on the course. These programs create an instructional plan for all levels of players.
- 2022 resulted in a tremendous increase in golf lessons and all camps were sold out.

Robust Junior Golf Programs

- All Junior Summer Camps were sold out in 2022. MCG Golf Academy contributed to another successful year with our long-standing partner, The First Tee of Greater Washington, DC. This program uses golf to teach life skills to underprivileged kids. MCG Academy instructors host hundreds of juniors each session and added a program at Little Bennett in 2022. We currently have programs at Laytonsville, Needwood, Northwest, Sligo Creek, and Little Bennett.

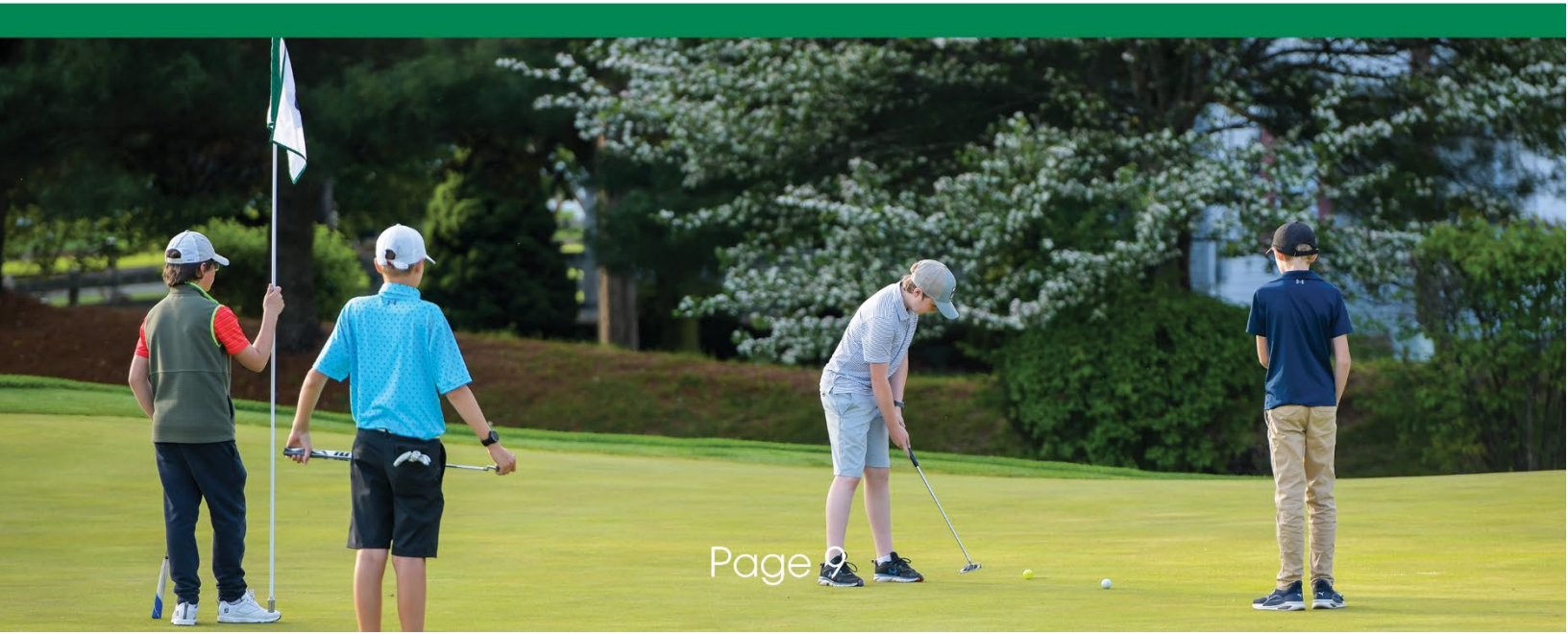


Golf Industry Supported Initiatives

- The MCG Academy has developed its own version of the Get Golf Ready class and created a more affordable and enjoyable opportunity to allow community members to give golf a try. These programs continued to grow in 2022, with many clinics sold out. Currently, these programs are hosted at Falls Road, Needwood, Northwest, and Little Bennett.
- An estimated over 5,000 participants have taken advantage of this great program since its inception. We are continuing to grow these programs and the number of participants year-over-year.

Junior PGA Teams

- MCG Junior Teams totaled 380 juniors who were involved in the 7-9, 10-13, and the 17U divisions. The MCG Junior Teams participated in competitions at Needwood, Falls Road, Northwest, and Little Bennett. With the MCG Academy broadening its initiatives, offering divisions in both spring and fall, the program has fostered a sense of unity and team spirit, making it an immensely enjoyable experience for numerous juniors.





Agronomy and Environmental Stewardship at MCRA Golf Courses

In 2022, MCRA golf courses upheld their commitment to vital environmental initiatives, while delivering excellent playing conditions largely attributed to maintenance practices developed over the years. We consistently applied key agronomic strategies and launched several projects that promise long-term advantages for both playability and the environment.

The key agronomic programs that allow our superintendents to deliver appealing playing surfaces while reducing pesticide and fertilizer use are as follows:

Core Aeration:

- Core aeration, essential to our practices, involves removing turf, thatch, and soil plugs to bolster root growth and air exchange while aiding with water infiltration. On greens, holes are filled with specially-angled sand, ensuring prolonged turf health, surface firmness, and breathability. While temporarily inconvenient for golfers, this method is key to upholding ideal playing conditions.

Topdressing:

- Light amounts of sand are applied to the greens weekly or bi-weekly and brushed in, often going unnoticed by golfers. This crucial procedure maintains surface firmness and helps dilute the naturally accumulating thatch and organic matter from turf growth. Reducing organic matter buildup in soil is vital as thatch retains moisture, heightens disease risk, and serves as a habitat or food source for insect pests.



Rolling:

- We typically use lightweight (800-lb) motorized rollers 3-5 times weekly on greens. University research has consistently shown that this practice reduces the occurrence of diseases like dollar spot (*Claviceps homeocarpa*), to which our greens are particularly susceptible. Using these machines allows us to also increase green speed when necessary, as well as smooth the playing surface. We continue to utilize this practice to eliminate mowing 2-3 days per week by simply rolling greens in the morning to prepare them for play; this practice not only reduces disease pressure but also reduces fuel emissions. On these days, we reduce by 75% the amount of fuel used to prepare greens for play.



Venting/Spiking:

Every 2-4 weeks, superintendents conduct venting, a vital, yet minimally intrusive practice. Using equipment that creates tiny holes (0.2-0.25 inch) at 1.25-inch spacing, the turf is then rolled smooth. Spiking, a swifter process, involves special units on a greens mower that leave small slits, beneficial for shorter durations as they close quickly. Both methods are essential, aiding in drying wet greens and oxygenating the upper root zone to promote turf health.

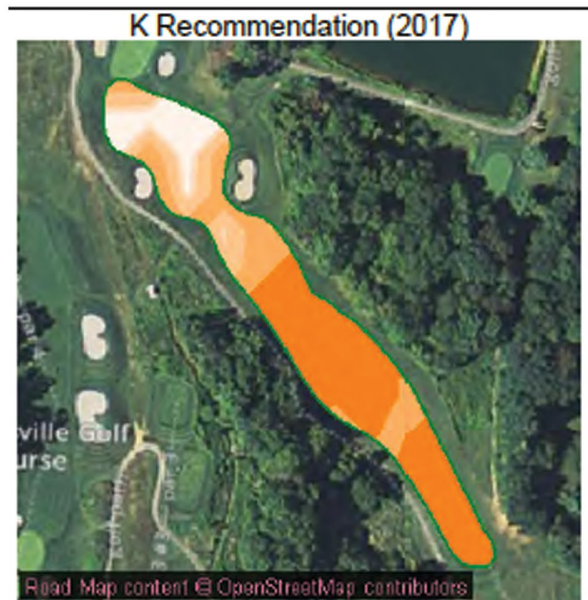
Soil Testing:

Balanced soil is pivotal for effective turf maintenance. Through soil sampling of greens, tees, fairways, and roughs, we pinpoint what the grass requires. This targeted approach conserves labor, fuel, and resources, applying nutrients or amendments like gypsum only where needed. Optimized nutrient ratios not only enhance grass performance but also bolster soil microbiology and drainage properties.

In 2016, we began to implement MLSN (Minimal Levels of Sustainable Nutrition) guidelines (<https://goo.gl/Tzu0PI>), a sustainable approach to managing turfgrass nutrition developed by PACE Turf and the Asian Turfgrass Research Center. We continued to successfully utilize this approach in 2022.

Soil Texture Mapping:

In an effort to optimize fertilizer use in late 2016, we employed a Veris machine to map soil textures across all 9 of our golf course fairways using electrical conductivity. The accompanying image showcases potassium recommendations for Laytonsville's #6 fairway. Lighter areas won't need potassium, leading to about a 50% fertilizer reduction for this hole. The image underscores the soil's variability and our dedication to precision in turf management.



Soil Texture Mapping:

Following the mapping of soils, we collect soil samples from analogous zones across all fairways to formulate recommendations. Like most standard soil tests, our analysis offers nutrient advice for P, K, Mg, Ca, S, Zn, Mn, Fe, Cu, and B. We can look at this data combined with MLSN guidelines to provide an innovative new way to further reduce nutrient use.

Water Conservation:

To ensure healthy turf, it's vital to manage water effectively. Keeping soils dry, particularly in spring and fall, encourages deep root growth, allowing the turf to access water and nutrients efficiently. Our irrigation systems employ efficient sprinkler heads to address larger areas, while more precise needs, like greens, often require hand watering. This targeted approach prevents over-watering and the consequent turf decline. Through hand watering and strategic irrigation, we save an estimated 10-20 million gallons of water annually across our nine golf courses.



Wetting Agents:

At our facilities, we utilize wetting agents to enhance irrigation efficiency and conserve water. These agents ensure even soil water infiltration, optimizing plant health to withstand external stresses. They can be applied to specific dry spots or broader areas, and their adjustable rates cater to various soil types, from sand to clay.

Technology:

The MCRA continued its use of tools that we now consider indispensable: TDR 300 and 350 Field Scout Soil Moisture Meters. These devices are located at every facility and allow the superintendents to instantly see moisture levels on a digital display. With this information, they can more accurately pinpoint areas that are deficient in water, or that are too wet. This has enabled us to use even less water as we manage our greens, and by ensuring proper moisture levels (not too wet, not too dry) throughout the entire green, plant health is consistently better, and the grass requires fewer inputs in the way of pesticides or fertilizers.

Scouting:

As a part of our Integrated Pest Management (IPM) strategy, scouting the golf courses daily for dozens of insect and disease pests that can significantly damage turf is performed. One example of a pest that is causing significant turf damage in the Mid-Atlantic region is the Annual Bluegrass Weevil (ABW). The ABW has been a pest to the northern states such as Massachusetts and New York for many years and has now migrated south as far as North Carolina and adapted to the slightly warmer climate where it is difficult to control with as many as 4 generations throughout one growing season.





We spend a significant amount of time talking with university researchers and other experts about ideal control strategies that will allow us to minimize chemical inputs and maximize control of this pest. There are multiple methods to scout for the ABW. A “soap flush” with lemon scented dish soap is applied with water to host turf (primarily *Poa annua*) which makes the adults rise from cover to the tops of grass blades to be identified and counted. A “salt flush” is used other times of the year to draw larvae from grass stems and is done by simply adding salt to a jar with water and adding a small turf plug and shaking. Cutting into the turf, then pulling apart the thatch to identify larger, older larvae can also be done. There are other monitoring techniques, such as vacuuming, to identify ABW numbers and develop a control plan if needed. After scouting data is collected, the turf manager will implement a control strategy to targeted areas, if needed, based on their findings. This is just one example of the lengths our teams go to monitor one of many insects and turf diseases that can impact playing conditions.

Environment:

MCRA courses continue to work within the guidelines of the Audubon International Cooperative Sanctuary Program for Golf Courses, as well as the Groundwater Guardian Greensite Program. These effective programs play a crucial role in managing green spaces, including golf courses, implementing safe groundwater practices to prevent chemical pollution, and establishing impactful conservation and wildlife enhancement initiatives.

Poolesville, Little Bennett, Needwoodc, and Northwest Golf Courses have achieved Audubon International certification. In 2022 we celebrated Laytonsville also earning this achievement! Through the end of 2022, all MCRA golf courses continued to work toward achieving Audubon certification by completing requirements in the six focus areas of this program:

- Wildlife & Habitat Management
- Water Conservation
- Environmental Planning
- Water Quality Management
- Chemical Use Reduction & Safety
- Environmental Planning

Projects:

In 2022, several important projects were completed at our golf courses:

- **Bunker Rebuilds:** As a part of our ongoing bunker rebuild program, we choose a small number of bunkers to rebuild in-house each winter to prevent the need for a large-scale project. This year, we rebuilt bunkers at Falls Road, Laytonsville, Rattlewood, Northwest and Hampshire Greens.
- **Cart Path Edging:** Pavers were added along edges of many holes at Little Bennett to help combat the wear patterns of golf carts near select greens and tees.
- **Netting Replacement:** Falls Road replaced several sections of netting along the property perimeter.
- **Turfgrass Conversions:** Tee boxes at Falls Road, Little Bennett, Laytonsville, Rattlewood, and Needwood, along with Falls Road's 7th fairway, were switched to eco-friendly grasses like Tahoma 31 bermudagrass and HGT Kentucky bluegrass, significantly reducing pesticide use.
- **Asphalt Work:** The ongoing repair/replacement of deteriorated asphalt continued in 2022 with cart path replacement work at Laytonsville.
- **Bridge Deck Replacement:** Wood decking was replaced on all the cart path bridges at Northwest.
- **Drainage Projects:** Several minor yet crucial drainage improvements were made across our golf courses to remove bird baths in fairways and roughs, enhancing playability and reducing turf loss during summer rains.
- **Irrigation Upgrade:** Field controllers at Hampshire Greens were updated with more modern technology and improved electrical grounding to help reduce downtime and promote improved control over the irrigation system. This should not only help reduce water use but also reduce the time required for irrigation events at this facility.



Montgomery County Airpark

The Montgomery County Airpark (Airpark), acquired in 1960, is owned and operated by the MCRA through a 99-year lease dating back to 1959. The MCRA maintains sole control over 30 acres on the northwest end of the Airpark property and is exploring ideas on how to best develop that land. Currently, the MCRA subsidizes the annual operating losses for the benefit of the county and the community. The goal of this new development, and the revenue streams it would provide, is to make the Airpark self-sustaining.

As owner and federal grant sponsor, the MCRA secures state and federal funding for the Airpark and is responsible for the runways, taxiways, navigation aids, and other common areas. The fixed base operator (FBO) offers services to support aeronautical activities including fueling, aircraft storage, aircraft maintenance, flight training, and related services. After an 18-year lease with an aviation services company ended, DC Metro Aviation Services took over as the FBO. Since then, they've significantly improved operations and facilities, introducing new hangars and a self-fueling service for pilots.

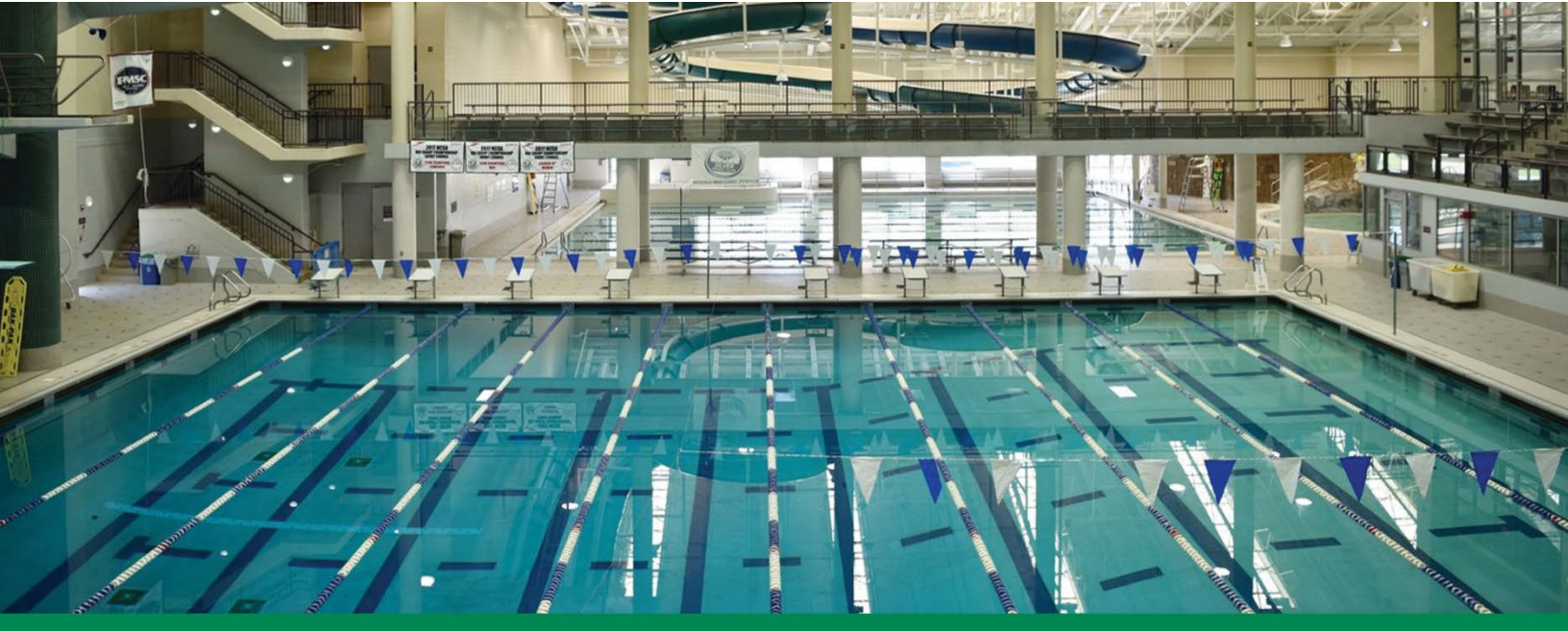
Currently, 140 aircraft are based at the property. The Montgomery County Airpark's 4,200-foot runway has three instrument approaches and is the closest "jetport" to the nation's capital. A portion of the traffic is of the commercial type or air taxis consisting of a variety of modern-day aircraft such as Cessna Citation, Lear Jet, Beechcraft (both jet and turbine), and Falcon Jet. The Airpark is also home to an air taxi firm that specializes in transporting air travelers to various destinations in the east coast and the mid-west on a regular on-demand basis.

In 2016, the MCRA secured a \$5.477M FAA grant with a \$310K matching grant to refinish and relight the taxiway with LED lights at the Airpark. This is the first of a two-phase project. In 2018, a second grant for \$2.913M was acquired to finish the work. This project is now complete. The next stages of the Airport Capital Improvement Plan will focus on land acquisitions that will remove hazards to the navigable airspace. This will create a safer flight path for aircraft on approach to the runway. The property is set to be purchased in 2023 and closed in fiscal year 2024.



According to 2018 economic data supplied by the Maryland Aviation Administration, the Airpark provides the following direct, indirect, and induced benefits to Montgomery County:

- 193 jobs
- \$9,661,000 million in personal income
- \$5,753,000 million in business revenues
- \$1,468,000 million in tax revenues



Financing Activities

The MCRA remains committed to long-term sustainability. Beyond diligent budget management, a major strategy is reducing overall liabilities. In January 2018, leveraging a favorable interest rate landscape, The MCRA replaced its interest rate swaps on a \$17,168,000 principal balance. This will save MCRA approximately \$32,000 per year in debt service payments through the remaining life of the bonds. Final maturity occurs in December of 2027. In addition to its own debt, the MCRA carries more than \$60.6 million in debt related to projects around the county, which is not considered part of the county's debt service calculation.

Additional projects include:

- Bethesda North Conference Center
- Health and Human Services Building
- Germantown Indoor Swim Center and other county swim facilities
- Montgomery College Arts Center
- Montgomery College Silver Spring Parking Facility
- Montgomery College Goldenrod Building