

Improving R4 – High Density Residential Zoning in Ferguson Township

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Executive Summary

Ferguson Township is experiencing a growing demand for housing, particularly for workforce and high-density residential developments. The current R4 zoning regulations limit the number of housing units that can be developed due to height restrictions, low building coverage allowances, and outdated parking requirements. These constraints have contributed to rising housing costs, limited housing availability, and increased commuting distances for workers.

To address these challenges, the proposed R4 zoning improvements introduce modernized land use policies, increased housing density, and enhanced transportation integration. These changes aim to support sustainable development, improve affordability, and encourage efficient use of land while maintaining livability and environmental responsibility.

Key Features of the Proposed R4 Zoning Amendments

- **Increased Housing Capacity:** Raising the maximum building height to 55 feet (5 stories) and allowing 100% lot coverage, compared to the current 40 feet (4 stories) and 30% lot coverage. This would quadruple the number of housing units per acre, directly addressing housing shortages.
- **Parking & Transit Incentives:** Adjusting parking requirements to reduce reliance on personal vehicles, with a minimum of $1 + (N/2)$ spaces per unit. Developments near transit hubs will be eligible for reduced parking requirements to encourage public transit usage.
- **Sustainability & Stormwater Management:** Allowing 100% impervious coverage with modern stormwater mitigation strategies such as green roofs, underground storage tanks, and permeable surfaces, reducing environmental impact.
- **Expanded Accessory Uses:** Permitting grocery pick-up centers, co-working spaces, wellness centers, transport logistics hubs, and entertainment spaces to create self-sufficient, walkable communities that reduce the need for external travel.
- **Support for Economic Growth:** Increasing the availability of workforce housing, helping local employers attract and retain skilled workers, while supporting businesses and commercial activity in Ferguson Township.

Projected Impact of the Proposed Changes

Regulation	Current R4	Proposed R4
Housing Units per Acre	52 apartments	217 apartments
Residents per Acre	104 residents	434 residents
Maximum Building Coverage	30% of lot	100% of lot
Maximum Building Height	40 feet (4 floors)	55 feet (5 floors)
Parking Requirement (2-bedroom unit)	2.5 spaces/unit	Minimum of 2 spaces/unit with transit incentives

The proposed R4 zoning updates align with regional goals for sustainable growth and housing affordability. By implementing these changes, Ferguson Township can modernize its land-use policies, improve housing accessibility, and strengthen its position as a leader in sustainable urban development.

Need for R4 – High-Density Zoning in Ferguson Township

The Need for More Housing in Centre County

Ferguson Township, like much of Centre County, is facing a growing housing shortage that affects both residents and the local economy. As part of the Centre Region, which includes State College and surrounding townships, Ferguson Township plays a key role in providing housing for a diverse population, including students, young professionals, families, and retirees. However, the demand for housing continues to outpace supply, particularly for affordable and workforce housing. This imbalance has led to rising housing costs, increased commuting distances, and workforce shortages in essential industries.

As home to Penn State University and major employers in education, healthcare, retail, and public services, Centre County attracts thousands of workers who struggle to find affordable housing within a reasonable distance of their jobs. Improving and expanding R4 zoning to allow for higher-density housing would help alleviate these issues by increasing housing availability, reducing pressure on existing housing stock, and supporting economic growth in the region.

Increasing Housing is in the Financial Interest of Ferguson Township

Like all municipalities, **Ferguson Township faces rising costs** due to inflation and other economic pressures. To address these rising costs, Ferguson Township has three options:

1. **Increase taxes** on current residents.
2. **Reduce public services** such as road maintenance, parks, and emergency response.
3. **Expand the tax base** by increasing the number of residents and businesses.

Encouraging **higher-density housing through improved R4 zoning** offers a **fiscally responsible** solution. By increasing the number of **tax-paying residents**, the township can **generate more revenue without raising taxes or reducing services**. Attracting more residents also strengthens **local businesses, schools, and infrastructure investments**, benefiting the entire community.

Consequences of the Lack of Workforce Housing

The **shortage of workforce housing**—defined as housing for individuals and families who work in the Centre Region but cannot afford market-rate rents or home prices—has wide-reaching effects:

- **Higher taxes and cost of living** – A smaller tax base means existing residents bear a greater share of rising costs.
- **Reduced business hours and services** – Many businesses struggle to hire and retain workers due to high housing costs, forcing them to cut hours or limit services.
- **Increased inflation** – Housing costs directly impact the cost of goods and services, as businesses pass higher operating costs onto consumers.
- **Longer commutes and higher transportation costs** – Workers unable to find affordable housing near their jobs **must commute longer distances**, increasing traffic congestion, fuel expenses, and emissions.

A lack of workforce housing affects **not just renters but all residents** of Ferguson Township. If housing remains scarce and unaffordable, it will become harder for **teachers, healthcare workers, retail employees, and other essential workers** to live in the community, worsening labor shortages and decreasing the availability of services.

Affordability Challenges in the Centre Region

The **Centre Region has become increasingly unaffordable**, with **rents and home prices rising faster than incomes**. According to recent data:

- **The average rent in Centre County is \$2,052 per month** (RentCafe).
- **Median household income in Centre County:**
 - **\$70,087** (Data USA, 2022)
 - **\$69,999** (FRED, 2023)
 - **\$69,101** (Census Reporter)
- **Pennsylvania median household income:** \$73,824
- **National median household income:** \$77,719

These figures show that **Centre County residents earn less than the state and national median income levels**, yet **they face higher-than-average housing costs**. The affordability standard suggests that residents should spend **no more than 30% of their income on housing**, but with an average annual rent of **\$24,624**, Centre County residents are spending **35.1% of the median household income on rent**. This places a financial strain on renters, making it difficult for many individuals and families to save, invest, or spend money in the local economy.

Comparing Centre County to National Averages

- The **average rent of \$2,052 in Centre County is higher than both the state and national averages**, making it one of the **most expensive housing markets in Pennsylvania relative to income levels**.
- The **median household income in Centre County is lower than both the state and national averages**, which means residents have **less financial flexibility** when it comes to affording housing.

Without changes to zoning policies that allow for **higher-density, affordable housing**, Ferguson Township and the greater Centre Region will continue to see **rising costs, workforce shortages, and economic challenges** that impact both businesses and residents. Expanding **R4 zoning to accommodate more housing density is a necessary step to address affordability, economic sustainability, and community well-being**.

About the Proposed R4 Zoning in Ferguson Township

The proposed R4 zoning improvements in Ferguson Township introduce a forward-thinking approach to high-density residential development, balancing the need for increased housing with modern sustainability solutions, improved accessibility, and integrated community-focused amenities. The revised zoning framework maximizes land use efficiency while ensuring that stormwater impacts are mitigated, transportation options are enhanced, and residents have access to essential services within their communities.

Maximum Height and Lot Coverage

- **Maximum Building Height: 55 feet (5 stories)**, increasing the allowable height compared to the current **40-foot (4-story) limit** in R4 zoning.
- **Maximum Lot Building Coverage: 100%**, allowing for more efficient land use, compared to the current **30% coverage limit**.
- **Stormwater Management: The 100% impervious coverage allowance will be balanced with advanced stormwater management solutions**, including **green roofs, underground storage tanks, and permeable surfaces**, ensuring sustainable water management and minimizing flood risks.

Simplified and Consistent Zoning Requirements

The **new R4 zoning** will apply **uniform requirements across all residential units**, streamlining the approval process and making the zoning easier for developers to **navigate and implement**.

Setback Requirements

- Side Setbacks: 25 feet on all sides to maintain appropriate spacing between developments.
- Building-to-Building Setbacks: No setbacks between buildings on the same property, allowing for more efficient land use and integrated community design.

Parking and Transit Accessibility

- **Optimized Parking Requirements:**
 - **The new R4 zoning will introduce incentives for reduced parking**—setting the minimum requirement to **1 space + (N/2) per unit (where N is the number of bedrooms)**.
 - **Public parking transfer hubs** will be required **on-site or within 1,000 feet of the property**, encouraging transit-based commuting and reducing unnecessary parking sprawl.
- **Public Transit Integration:**
 - Developments must incorporate or be near a **public transit hub** to qualify for reduced parking requirements.
 - The **transit hub must accommodate multiple transit options**, including bus services, rideshare pickups, and car-share stations, without disrupting traffic.
- **Bicycle Facilities:** A requirement of **1 bike rack per 25 residents** will support **alternative transportation and sustainability goals**.

Noise Mitigation & Soundproofing Requirements

To enhance residential quality of life, new developments under R4 zoning will be required to incorporate noise mitigation measures such as soundproofing materials in construction. These measures help reduce noise pollution, improve neighbor relations, and create a more peaceful living environment in high-density areas.

Modernized Accessory Uses

The proposed R4 zoning will expand permitted accessory uses to enhance livability and reduce reliance on personal vehicles. These amenities will allow residents to access essential goods, services, and

recreational activities without unnecessary travel, making high-density developments more self-sufficient and convenient.

New Accessory Uses Include:

- **Grocery store pick-up centers** – Supporting modern shopping habits with easy curbside and delivery logistics.
- **Transport logistics hubs** – Providing efficient package and delivery management for online shopping, reducing congestion.
- **Multi-floor parking structures** – Reducing surface parking sprawl while maintaining necessary vehicle storage.
- **Co-working spaces** – Offering flexible workspaces within residential developments, reducing commutes.
- **Spa and wellness centers** – Encouraging health and relaxation close to home.
- **Health and medical centers** – Including telemedicine booths and wellness clinics for accessible healthcare services.
- **Maker spaces and shared workshops** – Providing creative and technical resources for residents.
- **Pool halls, lounges, and entertainment spaces** – Supporting on-site recreation to enhance community life.

Benefits of Expanded Accessory Uses

- **Encourages a self-sufficient community** – Residents can **work, shop, and socialize** without traveling long distances.
- **Reduces reliance on personal vehicles** – Less need for **long commutes, parking, and road congestion**.
- **Supports sustainability goals** – Green infrastructure, local services, and **reduced transportation needs lower the environmental impact** of new developments.
- **Attracts new residents and businesses** – Well-designed **high-density communities** with built-in **amenities increase property value** and attract a more **diverse workforce**.

Future-Proofing Ferguson Township

By expanding R4 zoning, Ferguson Township is taking a proactive step toward sustainable, high-density urban growth. The revised zoning will increase housing availability, modernize infrastructure,

and create vibrant, walkable communities where people can live, work, and relax—all within reach of their homes.

These changes position Ferguson Township as a leader in forward-thinking urban development, ensuring the township remains economically strong, socially inclusive, and environmentally responsible for years to come.

Comparing the Proposed R4 Zoning to Current R3

Number of People and Residential Units for Current R4 and Proposed R4 Comparison

A calculator for the number of housing units and rent prices based on zoning regulations is available on elliottkillian.com.

This calculator can be used to consider improvements to Ferguson Township's R4 zoning.

Ferguson Current R4 Numbers

1. Lot Size:

– 1 acre = 43,560 ft²

2. Maximum Building Coverage:

– 30% of lot

– Building footprint = $0.30 \times 43,560 = 13,068 \text{ ft}^2$

3. Building Height:

– Maximum height 40 ft (≈ 4 floors)

– Total building floor area = $13,068 \text{ ft}^2 \times 4 = 52,272 \text{ ft}^2$

4. Apartment Assumptions:

– 1,000 ft² per 2-bedroom apartment

5. Estimated Number of Apartments:

– $52,272 \text{ ft}^2 \div 1,000 \text{ ft}^2/\text{apartment} \approx 52$ apartments

6. Estimated Population:

– $52 \text{ apartments} \times 2 \text{ people/apartment} = 104$ residents per acre

7. Parking Requirement:

– Formula: $1.5 + (N - 1)$ spaces per unit (for a 2-bedroom, $N = 2 \rightarrow 1.5 + 1 = 2.5$ spaces/unit)

– Total parking = $52 \times 2.5 = 130$ parking spaces per acre

Ferguson Proposed R4 Numbers

1. **Lot Size:**
 - 1 acre = 43,560 ft²
2. **Maximum Building Coverage:**
 - 100% of lot
 - Building footprint = 43,560 ft²
3. **Building Height:**
 - Maximum height 55 ft (≈ 5 floors)
 - Total building floor area = 43,560 ft² × 5 = **217,800 ft²**
4. **Apartment Assumptions:**
 - 1,000 ft² per 2-bedroom apartment
5. **Estimated Number of Apartments:**
 - 217,800 ft² ÷ 1,000 ft²/apartment ≈ **217 apartments**
6. **Estimated Population:**
 - 217 apartments × 2 people/apartment = **434 residents per acre**
7. **Parking Requirement:**
 - Formula: Minimum of 1 + (N/2) spaces per unit (for a 2-bedroom, N = 2 → 1 + 1 = 2 spaces/unit)
 - Total parking = 217 × 2 = **434 parking spaces per acre**

Comparing the Requirements for the Proposed R4 Zoning to Current R4 in Ferguson Township

The proposed **R4 zoning improvements in Ferguson Township** significantly **increase housing density, optimize land use, and modernize infrastructure requirements** compared to the current R4 zoning. These changes aim to **accommodate more residents, improve affordability, and support sustainability initiatives** while ensuring that high-density developments remain functional and livable. Below is a direct comparison between **the current R4 zoning and the proposed R4 zoning** in Ferguson Township.

1. Maximum Lot Coverage & Land Use Efficiency

The proposed R4 zoning maximizes land use efficiency by allowing for full lot coverage and an increase in building height, significantly increasing available housing space without expanding the township's footprint.

2. Housing Density & Population Growth

Regulation	Current R4	Proposed R4
Maximum Height	40 feet (≈ 4 floors)	55 feet (≈ 5 floors)
Estimated Apartments per Acre	52 apartments	217 apartments
Estimated Residents per Acre	104 residents	434 residents

Impact: The proposed zoning would quadruple the number of apartments per acre. This directly addresses housing shortages in Ferguson Township and the broader Centre County region.

3. Parking Requirements & Transportation Accessibility

Regulation	Current R4	Proposed R4
Parking Formula (2-bedroom unit)	1.5 + (N-1) per unit	Minimum of 1 + (N/2) per unit
Total Parking Spaces per Acre	130 spaces	434 spaces (with transit incentives reducing requirement)
Public Transportation Integration	Not required	Public parking transfer hub required on-site or within 1,000 feet

Impact: The proposed R4 zoning modernizes parking requirements by incorporating public transportation incentives. With transit-oriented development strategies, the parking requirement can be reduced when amenities and transit options are present, reducing reliance on personal vehicles.

4. Stormwater Management & Environmental Sustainability

The proposed zoning incorporates modern stormwater management solutions, allowing for 100% impervious coverage while mitigating runoff impacts using green infrastructure and underground storage.

5. Accessory Uses & Community Amenities

The proposed R4 zoning encourages a mix of residential and commercial uses, providing on-site services that reduce the need for residents to travel. By allowing modern amenities like co-working spaces, delivery hubs, and wellness centers, the new R4 zoning helps create self-sufficient, walkable communities.

Summary for Comparing the Proposed R4 Zoning to Current R4

The proposed R4 zoning improvements in Ferguson Township offer a different approach to high-density residential development. By increasing housing capacity, maximizing land use, integrating transit options, and enhancing sustainability measures, these changes will help Ferguson Township meet the growing demand for housing while maintaining a livable and connected community. These reforms position Ferguson Township as a leader in modern, sustainable urban planning, ensuring long-term economic and environmental benefits.

Benefits of the Proposed R4 Zoning in Ferguson Township

The proposed R4 zoning improvements in Ferguson Township introduce a strategic approach to address housing shortages, enhance land use efficiency, and support sustainable urban growth. These changes will help the township accommodate increased residential demand while maintaining livability, accessibility, and environmental responsibility.

1. Increased Housing Supply

- By increasing the maximum building height to 55 feet (5 stories) and allowing 100% lot coverage, the new R4 zoning will significantly expand housing capacity compared to current regulations, which limit buildings to 40 feet (4 stories) and 30% lot coverage.
- This expanded capacity directly addresses the growing housing demand in Centre County, particularly for workforce housing that serves essential workers, young professionals, and families.

2. Improved Affordability

- Higher-density developments reduce per-unit construction and infrastructure costs, making it more feasible to offer affordable housing options.
- The incentivized reduction in parking requirements—with amenities and public transit hubs integrated into developments—further lowers construction expenses, leading to more affordable rental and purchase prices.

3. Encouragement of Public Transit Usage

- The new parking structure incentives and public transport integration reduce dependence on personal vehicles and encourage residents to utilize transit, bike, and pedestrian-friendly options.
- A required or incentivised public parking transfer hub (either on-site or within 1,000 feet of new R4 developments) ensures seamless access to transit, reducing traffic congestion and making Ferguson Township more sustainable and commuter-friendly.

4. Efficient Land Use

- The removal of unnecessary building-to-building setbacks on the same property enables cohesive, space-efficient high-density communities while maintaining proper spacing from neighboring properties.
- The 100% impervious coverage allowance, combined with modern stormwater solutions like green roofs and underground storage tanks, allows for higher-density development without increasing flood risks.
- Expanded accessory uses, including grocery pick-up centers, transport logistics hubs, and co-working spaces, reduce the need for external travel, allowing more land to be dedicated to housing instead of parking lots.

5. Simplified and Flexible Zoning Regulations

- The proposed R4 zoning applies uniform requirements across all residential units, simplifying the approval and permitting process.
- Developers benefit from clearer, more predictable zoning rules, reducing administrative burdens for both businesses and township staff.
- Flexible parking requirements, based on proximity to transit and amenities, help optimize land use for different types of developments.

6. Support for Modern Lifestyles

- New accessory uses such as health and wellness centers, maker spaces, spa facilities, and entertainment spaces help create self-sustaining, amenity-rich communities.
- Co-working spaces and remote work amenities support modern workforce trends, reducing the need for commuting and improving work-life balance for residents.
- Innovative features like drone delivery landing zones and shared mobility services (rideshare, bike-share, and car-share) future-proof developments for changing technology trends.

7. Economic Growth and Workforce Retention

- Increasing housing supply near employment centers helps businesses attract and retain workers, addressing the ongoing labor shortage in education, healthcare, retail, and public services.
- Local businesses benefit from a higher resident population with better access to transit and amenities, increasing economic activity in Ferguson Township.

8. Alignment with Regional and Municipal Goals

- The proposed R4 zoning aligns with broader regional planning objectives, including Centre County’s goals for sustainable, transit-oriented development.
- By implementing modern zoning policies, Ferguson Township positions itself as a leader in high-density, sustainable urban planning, ensuring smart growth that meets future needs.

What Needs to Be Decided by Ferguson Township

As Ferguson Township considers improvements to R4 high-density zoning, several key policy decisions must be made to ensure that zoning changes effectively address housing needs, sustainability goals, and modern urban development trends. The following questions highlight the important areas for discussion:

1. Should Ferguson Township increase the maximum building height to 5 floors (55 feet) in R4?
 - The current maximum height in R4 is 40 feet (4 floors). Should it be increased to 55 feet (5 floors) to allow for greater housing density and more efficient land use?
2. Should Ferguson Township require a mix of housing types (1, 2, and 3-bedroom units) in R4 developments?
 - Would a required mix of unit sizes better accommodate diverse resident needs, including families, students, and workforce housing?

3. Should Ferguson Township allow for a wide range of accessory uses in R4 zoning?
 - If so, should accessory uses that reduce the need for residents to own personal vehicles be incentivized with reduced parking requirements?
 - If so, which accessory uses should be permitted? Options could include:
 - Grocery pick-up centers and transport logistics hubs
 - Co-working spaces and maker spaces
 - Wellness centers, health clinics, and telemedicine booths
 - Multi-floor parking structures with shared-use options
 - Entertainment and community spaces (lounges, pool halls, event spaces)
4. Should Ferguson Township allow modern stormwater technologies to enable higher impervious coverage and building coverage in R4?
 - The current maximum impervious coverage is 65% for lots under 1 acre and 50% for lots 1 acre or larger.
 - The proposed zoning would allow 100% impervious coverage, with stormwater impacts mitigated through green roofs, underground storage, and permeable surfaces. Should these modern solutions be required?
 - Should 100% building coverage be allowed in R4 to maximize land use efficiency?
5. Should Ferguson Township incentivize or require soundproofing materials and noise pollution mitigation in R4 developments?
 - Would requiring soundproofing measures help maintain higher-quality residential environments in high-density areas?
6. Should Ferguson Township encourage public transportation by reducing parking requirements in R4?
 - Should developments near public transportation hubs receive lower parking requirements as an incentive?
 - Should public transportation transfer hubs be required on-site or within 1,000 feet of R4 developments?
 - Should rideshare pickup hubs be encouraged within R4 zoning?
7. Should Ferguson Township consider rezoning all or some current R3 areas to R4?
 - Would expanding R4 zoning in select areas increase housing capacity, improve affordability, and align with long-term growth strategies?

Conclusion

The proposed R4 zoning improvements in Ferguson Township offer a strategic solution to the township's growing housing needs while promoting sustainable development, efficient land use, and modern urban planning practices. By increasing housing capacity, integrating public transit incentives, expanding accessory uses, and incorporating advanced stormwater management solutions, these changes will ensure that Ferguson Township can support a growing population while maintaining a high quality of life for residents.

With thoughtful zoning reforms, Ferguson Township can position itself as a leader in smart, high-density development, fostering a community that is affordable, accessible, and environmentally responsible. These changes will support local businesses, retain workforce talent, and create a vibrant, well-connected township for future generations.