



Simplified Zoning: Assessment of Land Use Impacts

September 2025

Land uses within our communities are always changing, as are the positive and negative impacts that each use creates. Instead of *reactively* regulating individual land use types, Zoning Ordinances should *proactively* permit uses based on their common impacts and inherent impact intensities. Regulating in this way enables neighborhoods, municipalities, and regions to adapt naturally and more consistently as each community's needs change over time.

To begin, let's identify which land uses should be allowed within each zoning district based on expected land use impacts. We can then determine which impacts may necessitate greater regulation through the Conditional Use or Special Exception processes, and which impacts should not be permitted within a specific zoning district due to land use incompatibility.

For example, **seasonal** odors are a common impact from some Agricultural zone uses, making regulation of those odors unnecessary. However, more **frequent** odors produced by a paper mill proposed for that same agricultural district would likely require regulation because such odors do not fit the expected impacts of an agricultural district. Similarly, a proposed land use that generates lots of pedestrian traffic within public rights-of-way would be welcomed and permitted by right in Downtown Borough and City Cores, but it might not be permitted within the Heavy Industrial-Manufacturing or a Rural Special Districts due to safety concerns.

The purpose of this document is to establish specific thresholds for impact intensities, or limits on the scale of impacts for each of 18 proposed zoning districts, while avoiding duplicating federal and state regulations. This information is then summarized in the Zoning District Impacts chart.

Zoning District Impacts

Zoning District	N1	N2	A1	A2	RC	RSD	VMUR	VMUC	ER	MR	MUR	MUC	MUH	MUE	IM	IW	DCB	DCC
Noise & Vibration (Detected Offsite)																		
Intermittent	○	○	◐	◐	◐	●	◐	◐	○	○	◐	◐	●	●	●	●	◐	◐
Constant	○	○	○	◐	◐	●	○	◐	○	○	○	◐	●	●	●	◐	◐	◐
Air Quality & Odor																		
Intermittent or Seasonal	○	◐	●	●	●	●	◐	◐	◐	○	○	◐	●	●	●	◐	○	○
Constant	○	◐	○	◐	◐	●	○	◐	○	○	○	◐	●	◐	●	●	○	○
Water																		
% Impervious Coverage	○	○	○	○	○	●	◐	◐	○	◐	●	●	●	◐	●	●	●	●
Quality/Quantity																		
Soil Contamination																		
Aquifer Protection	○	○	○	◐	◐	●	◐	◐	○	○	○	○	●	●	●	◐	○	○
Traffic Generation / Transportation Safety Conflicts																		
# of Loading Docks	⊘	⊘	○	○	○	●	⊘	○	⊘	⊘	○	◐	●	●	●	●	○	○
# of Vehicle Parking Spaces	○	○	○	○	○	●	○	◐	◐	○	○	●	●	●	●	●	○	○
Truck Traffic Generation*	⊘	○	○	○	◐	●	○	◐	⊘	⊘	○	◐	●	●	●	●	◐	◐
Pedestrian Activity Generation	○	○	○	○	○	⊘	◐	●	○	◐	●	●	○	○	⊘	⊘	●	●
Community Character																		
Residential	○	○	○	○	◐	⊘	●	◐	●	●	●	◐	○	○	⊘	⊘	◐	◐
Retail Commercial	⊘	⊘	⊘	○	◐	○	◐	●	○	○	◐	●	●	●	○	○	●	●
Industrial, Manufacturing, or Wholesale Commercial	⊘	⊘	○	○	◐	●	⊘	○	⊘	⊘	⊘	○	●	●	●	●	○	○
Natural	●	●	◐	◐	◐	○	◐	◐	N/A	○	○	○	○	○	N/A	N/A	N/A	N/A
Agricultural	◐	◐	●	●	◐	○	◐	◐	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
Scale of Built Environment	○	○	○	○	○	N/A	◐	◐	○	◐	●	●	●	●	N/A	●	●	●

* Regulated by state or on state roads

Key

- Low impact
- ◐ Moderate impact
- High impact
- ⊘ Not permitted
- N/A Not applicable
- - - Separates districts with on-lot utilities from those with public sewer and water services

Noise¹ And Vibration²

Noise and vibration regulations are important for the prevention of land use conflicts from activities that generate high noise and vibration levels such as industrial operations, ongoing construction, and vehicles. They help to promote human health and well-being by reducing stress risks from unwanted noise and vibration exposure. In addition to these human impacts, constant or frequent vibrations can also negatively impact existing building foundations.

General Impact Considerations

- Will the proposed land use generate loud noises and/or vibrations that can be heard or felt beyond its property boundaries?
- If so, will these noises and/or vibrations be generated intermittently or constantly?

Guiding Questions for Conditional Use / Special Exception Requirements

- How intense will the anticipated noises and/or vibrations generated typically be?
- Will these noises and/or vibrations be generated beyond standard 8am-5pm business hours?
- Are nearby land uses predominantly residential, commercial, agricultural, transportation, natural, industrial, or something other?
- Can the project developer effectively mitigate any noises and/or vibrations generated by the proposed land use?

Air Degradation and Odor³

Air quality and odor regulations are important to protect human health, the environment, and wildlife from the adverse effects of airborne pollutants and smells. They also help to preserve quality of life and create healthier, safer communities.

General Impact Considerations

- How will the proposed land use align with [places2040](#) air quality goals of reducing ozone levels, short-term (24-hr. avg.) and long-term (yearly avg.) levels of particle pollution, and the frequency of days with unhealthy air quality?
- Will the proposed land use adversely impact air quality or create odors seasonally, intermittently or constantly?

Guiding Questions for Conditional Use / Special Exception Requirements

- What type of particulates, dust, emissions, or odors will the proposed land use create?
- Will air quality impacts be confined to a local area, or will there be a more regional impact?
- What are the anticipated quantities and/or intensities of particulates, dust, emissions, and/or odors?
- Will the particulates, dust, emissions, and/or odors be generated beyond standard 8am-5pm business hours?
- Are any of the following sources of industrial, manufacturing, commercial, and agricultural particulates, dust, emissions, and odors appropriate in this zoning district?
 - Industrial or manufacturing emissions and odors
 - Particulates generated by agricultural field operations
 - Diesel or gas emissions from idling and moving vehicles
 - Refuse burning
 - Agricultural livestock and manure storage
 - Land application of manure, biosolids, or food waste
 - Restaurant exhausts

Water Impacts⁴

Water quality regulations protect floodplains, wetlands, wildlife habitats, and other native plant communities. In addition, they ensure sustainable supplies of clean water that support a growing population, a strong economy, recreational uses, and ecological needs while protecting the natural and built environment from conditions contributing to flooding.

Runoff from impervious surfaces can carry pollutants into nearby waterbodies. Impervious surfaces also concentrate and direct rainfall flow, potentially leading to downstream flooding. In addition, water quality and quantity can be impacted by water and sewer infrastructure.

General Impact Considerations

- How will proposed land use impacts align with these [places2040](#) water quality goals:
 - Reduce the number of impaired streams;
 - Reduce levels of nitrogen, phosphorus, and suspended sediment;
 - Increase the miles of riparian buffers; and
 - Increase the percentage of land covered by tree canopy?
- If on-lot sewer service is proposed, will nitrate loads remain below 10ppm?
- If on-lot water service is proposed, will nitrate levels remain below 10ppm and within the range considered safe for human consumption?
- If connection to public sewer and/or public water service is proposed, does adequate capacity exist?

Guiding Questions for Conditional Use / Special Exception Requirements

- Does existing water, sewer, and stormwater infrastructure have capacity for the proposed land use?
- Does the proposed land use require additional sewer, water, or stormwater infrastructure?
- Will new construction be required to extend an existing public water or sewer network?
- Is there any surface water (e.g. streams, lakes, etc.) within proximity to the proposed land use that could be adversely affected by stormwater, sediment, or debris run-off?
- Does the proposed land use incorporate riparian buffers, floodplain restoration, rain gardens, or other forms of green infrastructure to protect nearby water bodies?
- Does the proposed land use's operation incorporate any oils, chemicals, or other hazardous materials that could potentially impact groundwater?
- Does the applicant propose any other improvements or impacts pertaining to water quality and quantity?

Soil Degradation⁵

Like zoning provisions pertaining to water impacts, regulations focused on Soils are important for the protection of human health, the environment, and wildlife from the adverse effects of pollutants. They also promote long-term sustainability of land for various uses including agriculture while protecting desirable aesthetics and community appearance.

General Impact Considerations

- Does the proposed land use create any potential for soil contamination or degradation?
- What quantity, concentration, intensity, and/or frequency of soil degradation is potentially created from the proposed land use?
- Are the potential contaminants water soluble and/or reactive to any elements?
- How long do the potential contaminants remain in the soil?
- Could they be absorbed into crops or plants subsequently consumed by humans, domesticated livestock, or wildlife?
- Consider the following sources of industrial or agricultural pollution. Are they appropriate in this zone?
 - Industrial and manufacturing spills, byproducts, or unsecured storage of hazardous materials
 - Chemicals associated with agricultural uses, such as herbicides, pesticides, and fertilizer
 - Overapplication of manure or synthetic fertilizer, or land application of biosolids
 - Unenclosed outdoor storage of used building materials, junk, or refuse (e.g. appliances, cars, or furniture)

Traffic Generation / Transportation Safety Conflicts⁶

Traffic regulation is important for ensuring safety, promoting efficiency, and maintaining order in transportation networks. By establishing rules and enforcing them, traffic management systems help to prevent accidents, reduce congestion, and facilitate the smooth flow of motorists, cyclists, pedestrians, and freight.

General Impact Considerations

- How many loading docks, if any, are typical for this land use?
- How many passenger vehicle parking spaces are typically associated with this land use?
- How frequent are truck deliveries/pick-ups, if any, for this proposed land use?

Guiding Questions for Conditional Use / Special Exception Requirements

- Is there a retail and/or wholesale business aspect to the proposed land use?
- Does the proposed use generate traffic from large vehicles (48' length or longer) such as tractor-trailers, buses, and dump trucks, or does it primarily generate passenger vehicle traffic?
- Does the number of proposed loading spaces, if any, make sense considering the proposed location for the use itself?
- Will the proposed agricultural use create truck traffic and/or require slow moving or large agricultural equipment (e.g. spreading crop fertilizer, harvesting) to share roadways with passenger vehicles and trucks?
- For any non-residential uses, how many freight deliveries (in and out) are likely to occur each day?
- Does the proposed use primarily generate motorized or non-motorized traffic?
- Does the number of proposed passenger vehicle parking spaces exceed 50, or does it make sense considering the proposed location for the use itself?
- Will the project create transportation / pedestrian connections to its surrounding areas to lessen vehicular congestion?
- Will the use generate the need for road sharing of passenger vehicles and trucks with horse and buggies, bikes and pedestrians?

Impacts on Community Character⁷

Community character regulations enrich our county's physical form while preserving its distinctive identity. Although community character is less measurable than other land use impacts, it is equally important to the creation of livable communities. Such land use recommendations move beyond the questions of "where?" and "how much?" to address impacts pertaining to a sense of place.

Within the Simplified Zoning tool:

Natural Character sectors consist of natural lands, including woodlands and wetlands, that provide ecological benefits such as improved air quality, water quality, and habitat protection, along with scenic and recreational value.

Agricultural Character sectors are comprised of places where crop cultivation and livestock raising are the primary economic activities within Lancaster County's most recognized open spaces and agrarian landscapes.

Residential Character sectors are shaped by the distinct identity of its built environment, social interactions, and community fostered by people living near each other in domestic buildings that cumulatively contribute to a unique sense of place and neighborhood identity. Residential character encompasses both the physical and social aspects of a place, contributing to overall quality of life for its residents.

Retail/Commercial Character sectors are hubs of economic activity, job creation, and entrepreneurship. customer attraction and social interaction. In addition, retail and commercial land uses contribute to the local economy by generating municipal revenue for infrastructure maintenance.

Industrial, Manufacturing, and Wholesale/Commercial Character sectors are also hubs of economic activity and vitality. They generate revenue, create diverse employment opportunities, and provide essential products and services.

Community Scale is a term that refers to the mass and intensity of a built area, proportional to its surrounding environment.

General Impact Considerations

- Will the scale of the proposed development or redevelopment be consistent with its zoning district's bulk regulations and general characteristics?
- Will its scale be compatible with the surrounding natural and cultural community patterns?
- Does the proposed land use's character promote and implement the community's goals for this zoning district?

Guiding Questions for Conditional Use / Special Exception Requirements

- Will the proposed land use implement goals and objectives identified in the municipality's comprehensive plan?
- Will the proposed land use utilize and protect cultural and historic resources?
- Will the proposed land use displace current residents and/or businesses?
- Will the proposed land use obstruct scenic vistas and viewsheds?
- Will the proposed land use cause any loss or degradation of wildlife and native species habitat?
- Within the N1, N2, A1, and A2 Zones, will the proposed land use further fragment or divide landscapes or natural ecosystems with roadways or other impervious surfaces?
- Will the proposed land use adversely impact forest, marsh, meadows, or geological formations?
- Will the proposed land use impact other ecosystem functions such as groundwater purification and recharge, flood control, air purification and oxygen production, or biodiversity management?

Local, State, and Federal Regulation References

- ¹ "Rules and Regulations" of PA DEP
- ² Explosive materials regulated by Chapter 211, Title 25, PA DEP, Rules and Regulations for Storage, Handling and Use of Explosives
- ² "Rules and Regulations" of PA DEP, max 0.002g
- ³ The Pennsylvania Air Pollution Control Act, in conjunction with Chapters 131 and 123 of Article III
Title 25 Rules and Regulations of 1971, as amended, of PA DEP
- ⁴ "Rules and Regulations" of the Pennsylvania Departments of Health and Environmental Protection
- ⁴ The Federal Emergency Management Act
- ⁴ The Pennsylvania Low -Level Radioactive Waste Disposal Act
- ⁴ The Pennsylvania Hazardous Materials Emergency Planning and Response Act
- ⁴ The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act (Act101)
- ⁴ The Pennsylvania Solid Waste Management Act (Act 97)
- ⁴ Pennsylvania Act No. 1984-219, the "Noncoal Surface Mining Conservation and Reclamation Act"
- ⁵ The Federal Superfund Amendment and Reauthorization Act
- ⁵ The Pennsylvania Code, Title 25, Chapter 102. Erosion and Sediment Control
- ⁵ The Pennsylvania Hazardous Materials Emergency Planning and Response Act
- ⁵ The Pennsylvania Low -Level Radioactive Waste Disposal Act
- ⁵ The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act (Act101)
- ⁵ The Pennsylvania Solid Waste Management Act (Act 97)
- ⁶ Highway Occupancy Permit Operations Manual, Driveway HOP Plan Requirements
- ⁶ "Rules and Regulations" of PA DEP, Federal-Aid Highway Act of 1970, PennDOT+local nuisance ordinances (for vehicles)
- ⁶ The Pennsylvania Code, Transportation (Title 67)
- ⁷ The Comprehensive Plan for Lancaster PA, Places 2040, Creating Great Places
- ⁷ The Lancaster County Character Sector Guide