

Where Should Development Go?

Land Use Planning Clues Student Background City of Medford

How Much Land Should Be Developed?

Now you know how land use planners use maps and clues to decide which land will be best to develop for new people who will be born or will be moving into cities in Oregon. But how do they know how much land will be needed? They use their math skills. First, they learn how many people live in a city, then they estimate how many new people might move to that city or be born there in the next 20 or 25 years.

Today and tomorrow, you will plan for future development for the city of Medford, which had a population in 2018 of 81,780 people. It is estimated that by the year 2040, another 22,818 people might be living in the city. Land use planners use special formulas to estimate how much new development will be needed for housing, industry, shops and public uses. Land needs for this development are measured using acres. An acre is an area of land that's a little bigger than a football field. Can you estimate future land use needs for the 22,818 new people who could be living in Medford using the formulas below?

Land for Housing – 2.5 new people will live in each house. How many houses will be needed? . How many houses will be needed? The formula is: $22,818 \div 2.5$.

Eight one-family houses could fit on an acre of land, or 16 two-family houses. How many acres will be needed? The formula is: $9,127 \div 8$ or $9,127 \div 16$.

Land for Shops – One acre will be needed for each 45 new people. How many acres will be needed for these uses? The formula is $22,818 \div 45$.

Land for Industry – One acre will be needed for each 60 new people. How many acres will be needed for industry?The formula is: $22,818 \div 60$.

Land for Public Uses – One acre will be needed for each 50 new people. How many acres will be needed for public uses? The formula is $22,818 \div 50$.

When land use planners use maps to show where the different types of development are allowed, they use yellow to show land for housing, red to show land for shops, purple to show land for industry and blue to show land for public uses.

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KEY

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Land for Housing – 2.5 new people will live in each house. How many houses will be needed? . How many houses will be needed? The formula is: $22,818 \div 2.5$. **Answer: 9,127 houses**

Eight one-family houses could fit on an acre of land, or 16 two-family houses. How many acres will be needed? The formula is: $9,127 \div 8$ or $9,127 \div 16$. **Answer: 1,141 or 570 acres**

Land for Shops – One acre will be needed for each 45 new people. How many acres will be needed for these uses? The formula is $22,818 \div 45$. **Answer: 507 acres**

Land for Industry – One acre will be needed for each 60 new people. How many acres will be needed for industry? The formula is: $22,818 \div 60$. **Answer: 380 acres**

Land for Public Uses – One acre will be needed for each 50 new people. How many acres will be needed for public uses? The formula is $22,818 \div 50$. **Answer: 456 acres**

When land use planners use maps to show where the different types of development are allowed, they use yellow to show land for housing, red to show land for shops, purple to show land for industry and blue to show land for public uses.

Where Should Development Go? City of Medford

Name: _____ Period/Class: _____

1. You will be using small, colored blocks to represent development of different land use types on the map.

Each block equals 80 acres.

Find the number of blocks needed for each land use type. Round numbers to the nearest whole block. (5 minutes)

City of Medford Future Land Use Needs:

Blocks Needed



Housing 1,141 acres (single-stacked) or 570 acres (double stacked)

_____ acres ÷ 80 acres/block = _____ blocks

Yellow Blocks

_____ acres ÷ 80 acres/block = _____ blocks



Shops 507 acres

_____ acres ÷ 80 acres/block = _____ blocks

Red Blocks



Industry 380 acres

_____ acres ÷ 80 acres/block = _____ blocks

Purple Blocks



Public Uses 456 acres

_____ acres ÷ 80 acres/block = _____ blocks

Blue Blocks

2. Will you plan for one-family or two-family housing? Why? (5 minutes)

3. Study the map and discuss where development should go, using Land Use Clues. Check which clues your team decides are more or less important. (10 minutes)

	Important	More Important	Most Important
Clue #1: Close to the city & roads			
Clue #2: Not on farm or forest land			
Clue #3: Not on wildlife habitat			
Clue #4: Not in hazardous areas			
Clue #5: Not on state, city or federal protected lands			

4. Put the sticky squares on the bottom of the blocks you will use and place them in the locations the group has decided on. If you change your mind, you can move the blocks. (5 minutes)

5. Discuss and respond to the following questions: (5 minutes)

Is your development close together or far apart? _____

Are different land uses together or separated? _____

Does your development cross a river? _____

What are the advantages of the development locations you chose?

What are the disadvantages of the development locations you chose?

How did you decide which clues are more important than others?

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KEY

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City of Medford Future Land Use Needs:

Blocks Needed



Housing 1,141 acres (single-stacked) or 570 acres (double stacked)

1141 acres ÷ 80 acres/block = 14 blocks

Yellow Blocks

570 acres ÷ 80 acres/block = 7 blocks



Shops 507 acres

507 acres ÷ 80 acres/block = 6 blocks

Red Blocks



Industry 380 acres

380 acres ÷ 80 acres/block = 5 blocks

Purple Blocks



Public Uses 456 acres

456 acres ÷ 80 acres/block = 6 blocks

Blue Blocks

2. Will you plan for one-family or two-family housing? Why? (5 minutes)

3. Study the map and discuss where development should go, using Land Use Clues. Check which clues your team decides are more or less important. (10 minutes)

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