An Update on the Educational Development Process

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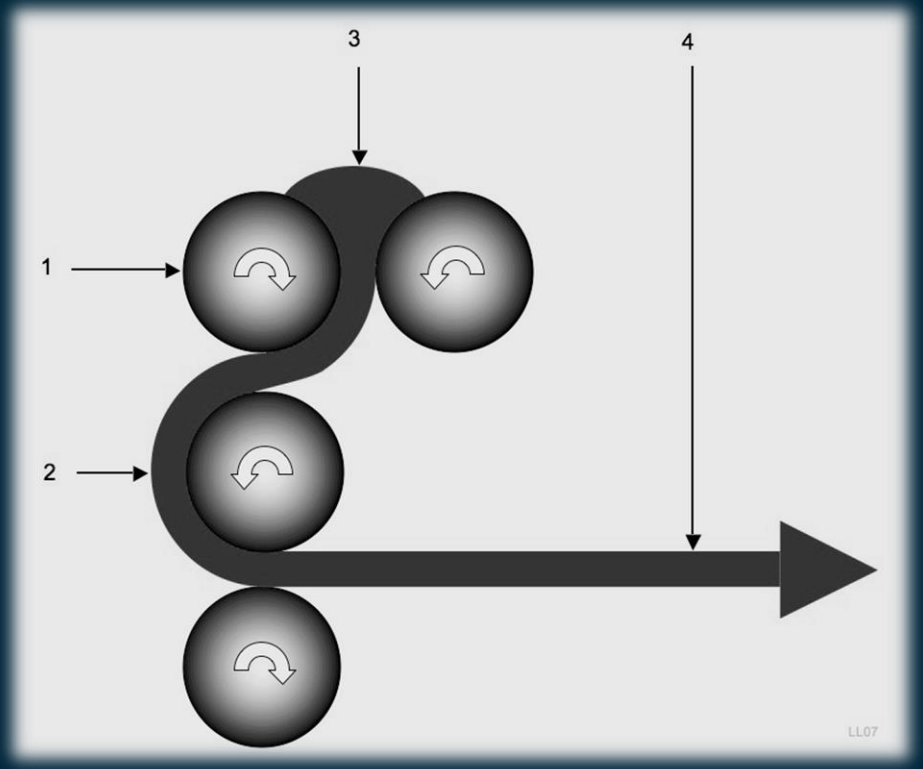
Section 1

SESSION INTRO



Session Outline

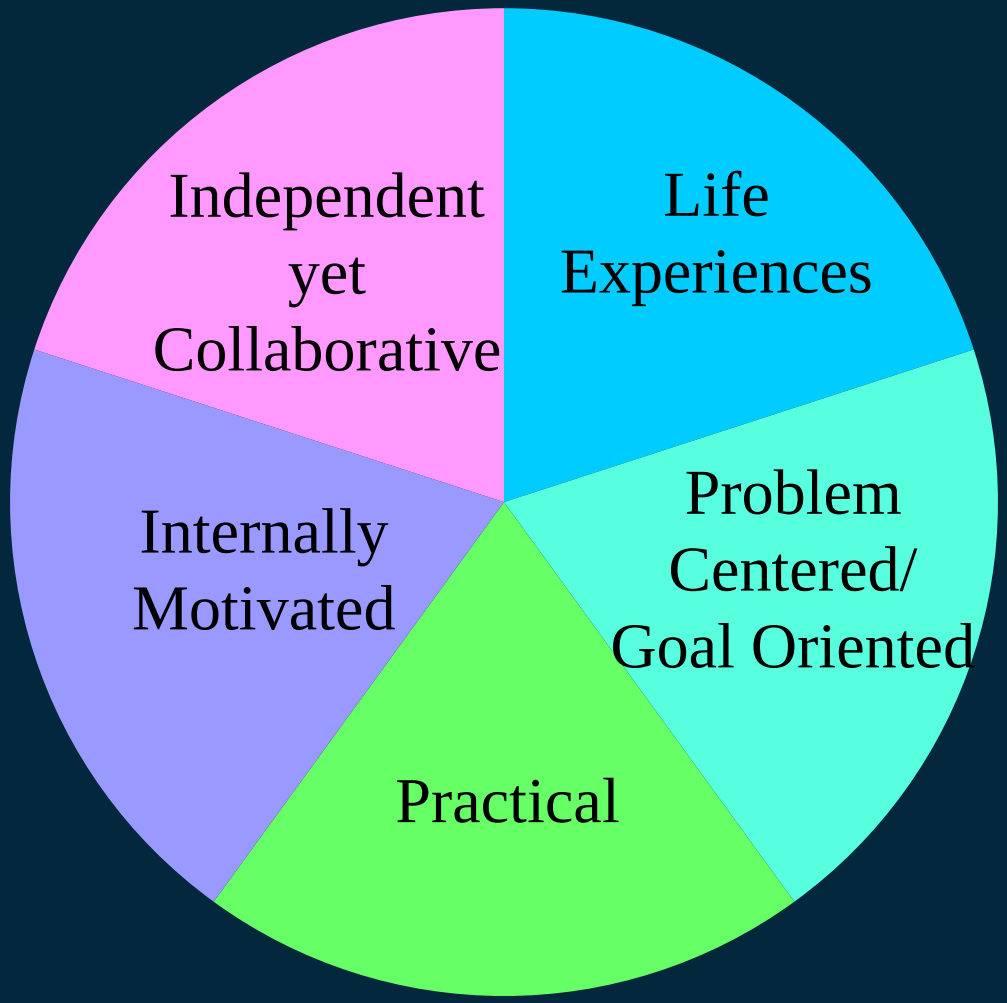
- Learning theory
- First year of the educational development process
- Summary of Progress for IAAO Course Updates & Education Materials
- Expectations for the development of new courses
- A Fresh Look for IAAO Course 101
- Online Offerings

Section 2

LEARNING THEORY

"…We live in the context of a global learning economy that requires us to constantly update, retool, rethink, and relearn."
Jeff Cobb

Adult Learning Characteristics

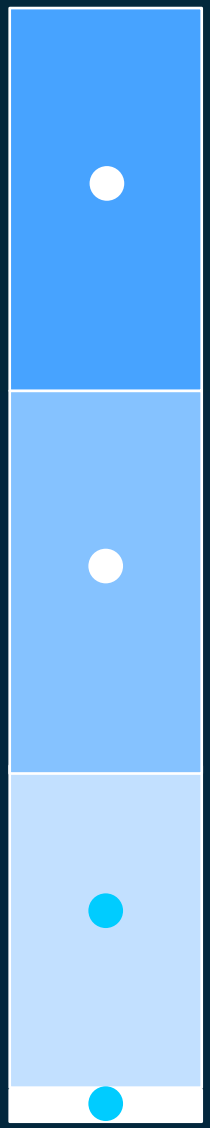


Learning Theories for Adults

- Action/Project Based
- Experiential
- Self Directed

DIFFERENCE BETWEEN THE COHORTS:

Learning Difference between Cohorts:



34% 1981-2000– Millennials

34% 1965-1980 – Gen X

29% 1946-1964 – Baby Boomers

2% 1925-1945 – Traditionalists

Differences between Cohorts:

Baby Boomers

- Individual learners
- Linear
- Lecture
- Books, cover to cover

Differences between Cohorts:

Baby Boomers

Recognition of Experience
Practicing new skills
Group Activities

Criticism
Role Playing
Authority

Differences between Cohorts:

Gen X

Pods or module
Books, access specific info
Structured lecture + small group
"Learning is Fun"

Differences between Cohorts:

Gen X

Asking questions
Challenging material
Interaction/socializing

"non-value added" activity

Differences between Cohorts:

Millenials

Constructivist environment
Research in networked structure
Heavy computer use
Flexible, quick focus changes

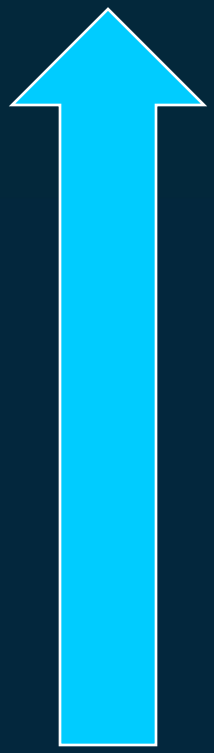
Differences between Cohorts:

Millenials

"Edu-tainment"
Multisensory
Collaboration

Confronting
people issues
Asking for help

TRAINING TRANSFER:

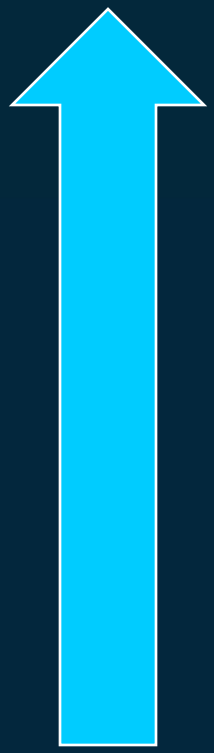


Work factors that can be controlled

Realistic training environment
Support – peer and supervisor
Opportunity to perform
Follow-up
Transfer Climate situational clues and consequences

Grossman and Salas, International Journal of Training and development 15:2, ISSN 1360-3736

TRAINING TRANSFER:



Trainee factors

Cognitive Ability
Self-efficacy
Motivation
Perceived utility of training

Grossman and Salas, International Journal of Training and development 15:2, ISSN 1360-3736

FLIPPED CLASSROOM

Learners approach content outside of the classroom through reading, video, online discussion/assignments PRIOR to going to class

Concept engagement takes place in classroom with support from instructor.

MICRO LEARNING:

Time to devote to Professional Development and Training?

"Just enough", "Just in time"

24 minutes




MICRO LEARNING:

Questions to consider:

~~CAN~~ everything be taught in "bites" SHOULD

GAMIFICATION:

Application of Gaming theory and design elements in non-game concepts.

GAMIFICATION:

GAMIFICATION:

Progression- Visualize Success incrementally

- **Levels- Ramp up to unlock content**
- **Points- Increase the "value" of your work**

GAMIFICATION:

Investment- Pride in your work

- **Achievements- Public Recognition**
- **Appointments- Check in for new content challenges**
- **Collaboration- work with others**

GAMIFICATION:

Cascading Information- Continuous Learning

- **Discovery- uncover new knowledge**
- **Infinite Play- continue until you become an expert**
- **Synthesis- Challenges require multiple skills to solve**

Section 3

FIRST YEAR OF THE EDUCATIONAL DEVELOPMENT PROCESS

METHODOLOGY:

Move from Word

METHODOLOGY:

Move from Word into InDesign

METHODOLOGY:

Move from Word into InDesign
Test Metrics

What is the definition of the term “ad valorem”?

The learner will be able to define the term “ad valorem.”

METHODOLOGY:

Move from Word into InDesign

Test Metrics

- Write objectives from existing test questions

Map objectives to content

Refine Content

Refine Powerpoint

METHODOLOGY:

Edit, edit, edit

METHODOLOGY:

Move from Word into InDesign

Test Metrics

- Write objectives from existing test questions

Map objectives to content

Refine Content

Refine Powerpoint

Edit, edit, edit

Section 4

SUMMARY OF PROGRESS FOR IAAO COURSE UPDATES & EDUCATION MATERIALS

New/Revised Courses Currently Available

- ***Update -***

- **Course 101** – Fundamentals of Real Property Appraisal
- 171- Standards of Professional Practice and Ethics

New/Revised Courses Currently Available

Rewrite -

- **Course 112** – Advanced Income Approach

New/Revised Courses Currently Available

New

- **Course 332** – Modeling Concepts
- **Workshop 850** – CAE Case Study Review (2.5 days)
- **Workshop 851** – RES Case Study Review (2.5 days)
- **Workshop 852** – AAS Case Study Review (2.5 days)

New/Revised Courses/Workshops Almost Available to Offer

- **Workshop 552/553 – Personal Property Auditing Workshops**
- **Workshop 854** – CMS Case Problem Review Workshop (2.0 days)

New/Revised Courses/Workshops to be Available at the End of the Year

- **Course 333** – Modeling Application (SPSS or NCSS labs)
- **Workshop 853** – PPS Case Study Review Workshop (2.5 days)

Surfing the Web

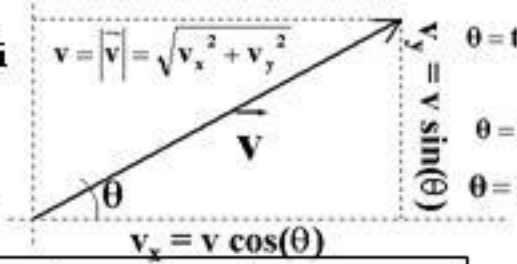
- IAAO Monthly Webinar Series – will be revealed September 20th
- *Online Education* – Starting with IAAO Course 101

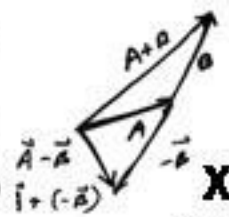
Study Guides

- **Flashcards** - Interactive PDF's can be downloaded, used offline and used as a study aid
- **Softchalk Study Guides** - Finished and in editing process

$\Delta x = x_f - x_i \quad \Delta v = v_f - v_i$

$\vec{v} = \frac{\Delta \vec{r}}{\Delta t} \quad \vec{a} = \frac{\Delta \vec{v}}{\Delta t}$





$\omega = \frac{\Delta\theta}{\Delta t} \quad \alpha = \frac{\Delta\omega}{\Delta t}$

$x = r\theta$

$v = \omega r$

$a = \alpha r$

$\omega = 2\pi f \quad f = \frac{1}{T}$

$\omega = \omega_o + \alpha t$

$I = \sum_i^{all} m_i r_i^2 \quad \theta = \theta_o + \omega_o t + \frac{1}{2}\alpha t^2$

$\omega^2 - \omega_o^2 = 2\alpha(\theta - \theta_o)$

$L = r_\perp p = mvr_\perp \quad \tau = r_\perp F = rF_\perp$

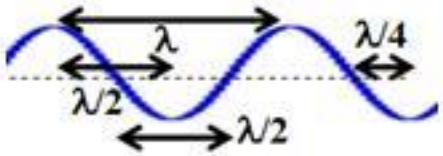
$L = I\omega \quad \tau = \frac{\Delta L}{\Delta t} \quad \tau = I\alpha$

$\frac{1}{2} I\omega^2$

$\sum_i^{all} \vec{F}_i = 0 \quad \sum_i^{all} \vec{\tau}_i = 0$

$v = \sqrt{\frac{T}{\rho}}$

$v = \lambda f$



$\vec{v} = v_0 + at$

$x = x_o + v_o t + at^2/2$

$v^2 - v_o^2 = 2a(x - x_o)$

$\bar{v} = \frac{v_f + v_i}{2} \quad \Delta x = \bar{v}\,\Delta t$

$x \to x, y \quad x_o \to x_o, y_o$

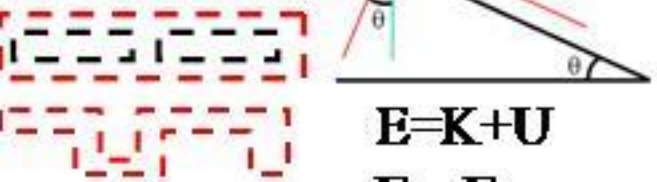
$v \to v_x, v_y \quad v_o \to v_{ox}, v_{oy}$

$a \to a_x, a_y$

μN

$a = \frac{v^2}{R}$

$\vec{F}_{tot} = m\vec{a}$



$E = K + U$

$E_i = E_f$

$\frac{1}{2}mv^2$

$\Delta Q = (\text{quant.})\, C_{cond}\, \Delta T$

$\Delta Q_{into} = \Delta W_{by} + \Delta E$

$\frac{RT}{2}\Big|_{\text{deg. freedom}}$

$C_P = C_V + R$

$\Delta S \geq 0$

$\Delta Q = 1\,\Delta(\text{quant.})$

$PV = nRT$

$W = F\,d_{\parallel} = F_{\parallel}\,d$

$W_{tot} = \Delta(KE)$

$\Delta U = -W_{if}$

$e = \frac{\Delta W}{\Delta Q} \quad e = 1 - \frac{T_L}{T_H} \quad P = \frac{F}{A}$

$\frac{1}{2}kx^2 \quad \omega = \sqrt{\frac{k}{m}}$

$x = A\cos(\omega t) = \{\text{or}\}\ A\sin(\omega t)$

$v = -A\omega \sin(\omega t) = \{\text{or}\}\ A\omega\cos(\omega t)$

$a = -A\omega^2\cos(\omega t) = \{\text{or}\}\ -A\omega^2\sin(\omega t)$

$M = \rho V \quad P_1 = P_2$

$\Delta P = \rho g\,\Delta h$

$B = \rho_{liq} V_{disp} g$

$\vec{p} = m\vec{v}$

$\vec{P}_{init} = \vec{P}_{final}$

$\left(\sum_j^{all} m_j \vec{v}_j\right)_{init} = \left(\sum_j^{all} m_j \vec{v}_j\right)_{final}$

$\frac{GM_e}{R_e} = gR_e \quad \frac{GMm}{r^2}$

$M_e = 5.97(10)^{24}$ Kg

$R_e = 6.37(10)^6$ m

$G = 6.67\,(10)^{-11}\ N\,m^2/Kg^2$

$-\frac{GMm}{r}$

$A_1 v_1 = A_2 v_2$

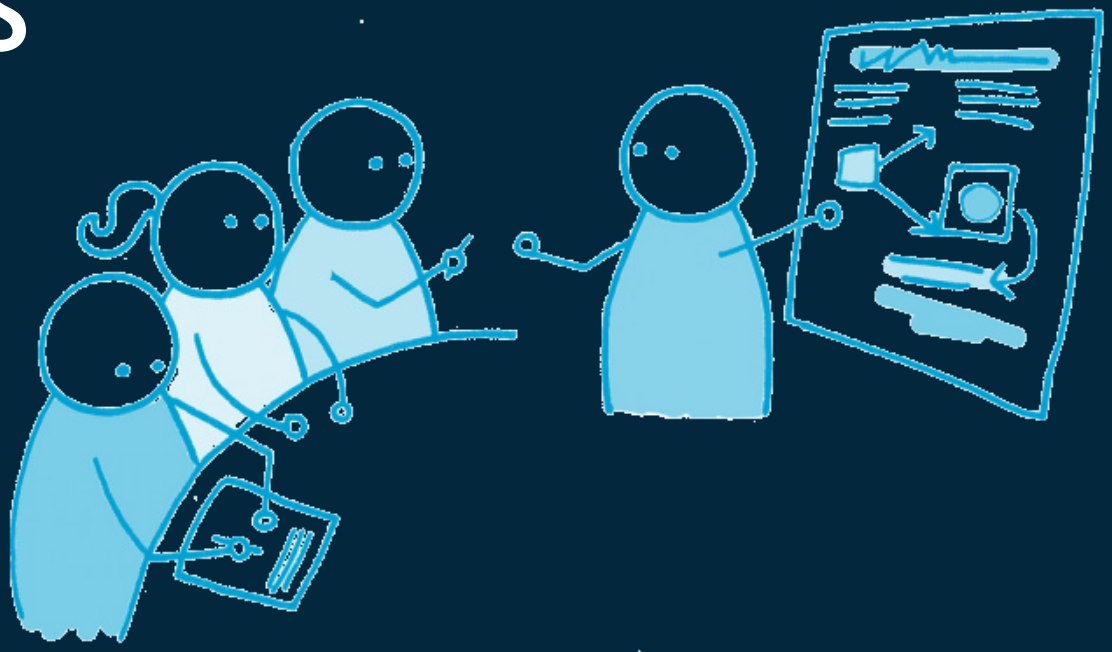
$P + \frac{1}{2}\rho v^2 = \text{const.}$

Pipeline – Projects in Queue

- **Update of Course 300** – Fundamentals of Mass Appraisal
- **Update of Course 102** – Income Approach
- **Workshop 158** - Highest & Best Use
- **Ratio studies**

Section 5

EXPECTATIONS FOR THE DEVELOPMENT OF NEW COURSES



STANDARDIZATION

Format

Language

Appearance

Section 6

A FRESH LOOK FOR IAAO COURSE 101

Course 101 Changes

- New design template offers a cleaner and contemporary look to the material
- Revised learning objectives that target concepts in the material
- Content mapped to the exam questions
- High level power point slides focusing on key items and improved illustrations
- Integrated instructor manual so instructors only need one manual

Course 101: Chapter 1

Fundamentals of Real Property Appraisal

IAAO Professional Development Program

INTERNATIONAL ASSOCIATION
of ASSESSING OFFICERS
Valuing the World™

Duties of the Assessor

Discover

List

Value

USPAP

(Uniform Standards of Professional Appraisal Practice)

- Assessors/appraisers are professionals
- Professionals are accountable to a standard
- USPAP provides a standard

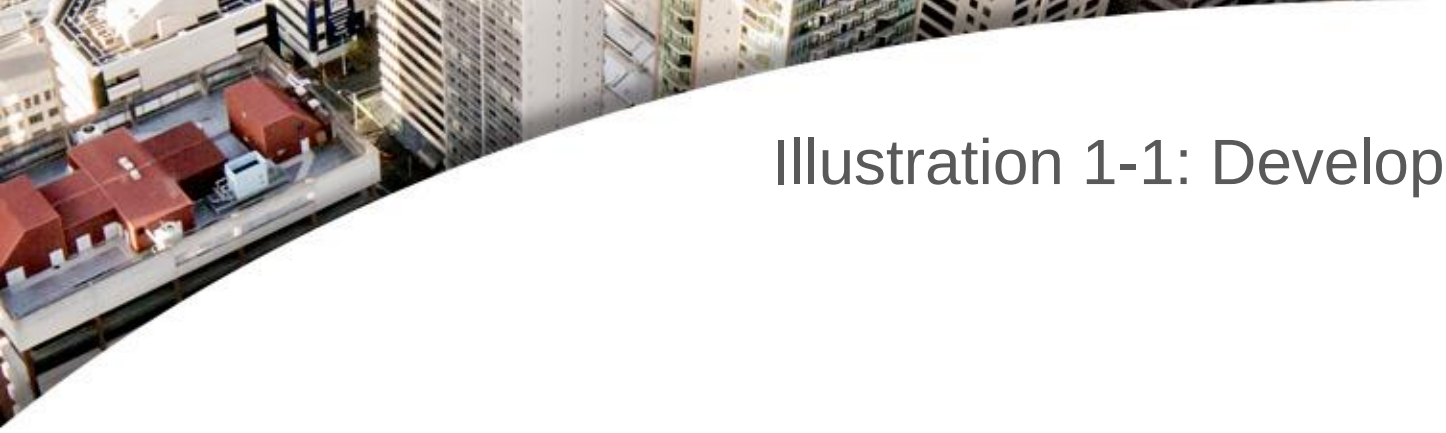


Illustration 1-1: Developing a Tax Rate

The numerator in developing a tax rate is the budget.

$$\frac{\text{Budget}}{\text{Assessed Value}} = \text{Tax Rate}$$

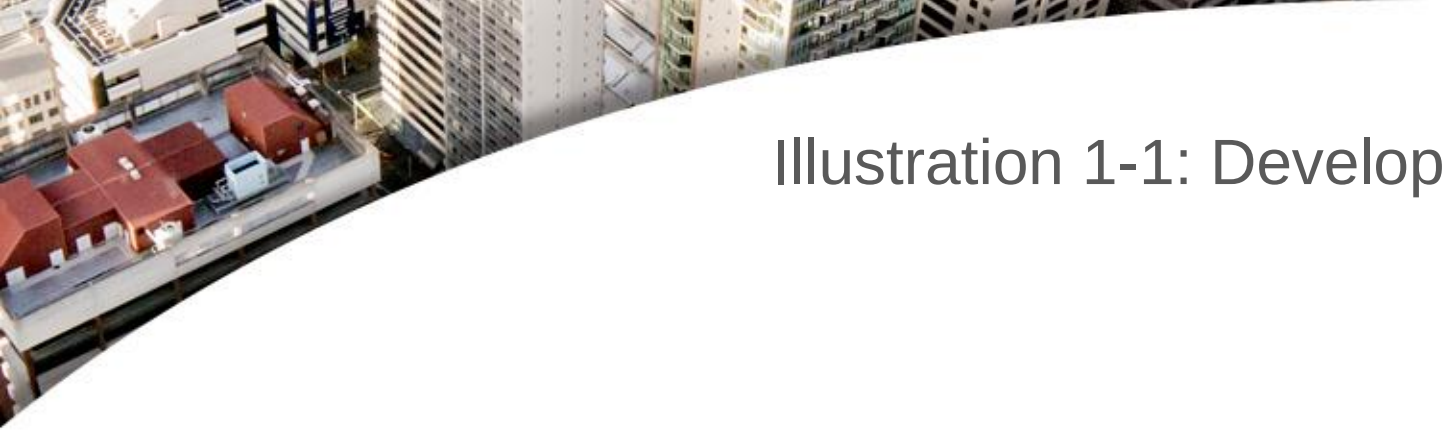


Illustration 1-1: Developing a Tax Rate

The denominator in developing a tax rate is the total assessed value.

$$\frac{\text{Budget}}{\text{Assessed Value}} = \text{Tax Rate}$$

Illustration 1-1: Developing a Tax Rate

Is this the same as market value?

What is an assessment ratio? (assessment level)?

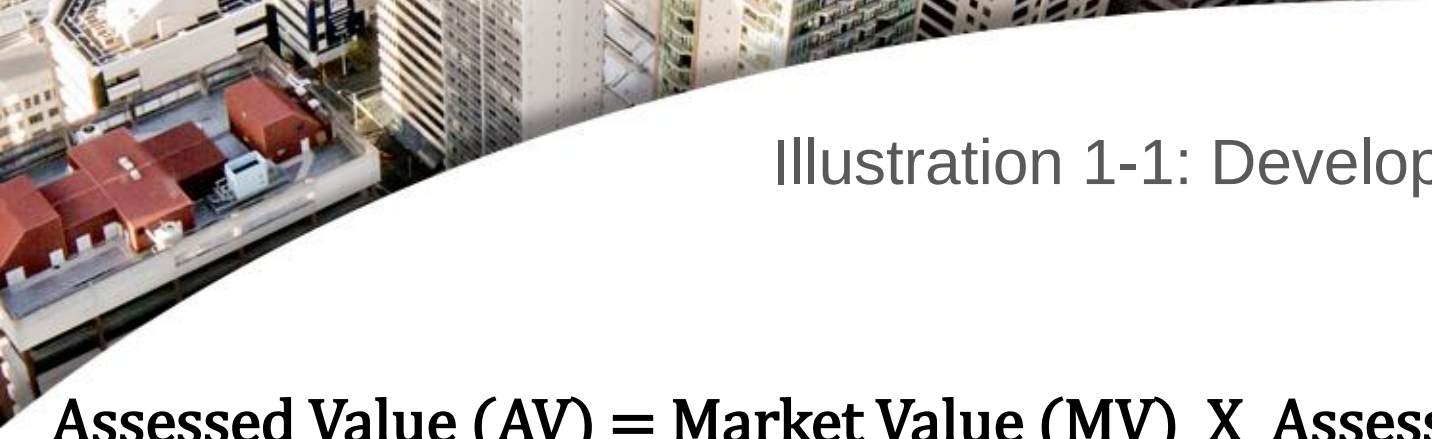


Illustration 1-1: Developing a Tax Rate

$$\text{Assessed Value (AV)} = \text{Market Value (MV)} \times \text{Assessment Ratio (AR)}$$

Other ways of expressing the relationship:

$$\text{Assessment Ratio(AR)} = \frac{\text{Assessed Value(AV)}}{\text{Market Value (MV)}}$$

$$\text{MV} = \frac{\text{AV}}{\text{AR}}$$

Illustration 1-1: Developing a Tax Rate

$$\text{Assessment Ratio} = \frac{\text{Assessed Value}}{\text{Market Value}}$$

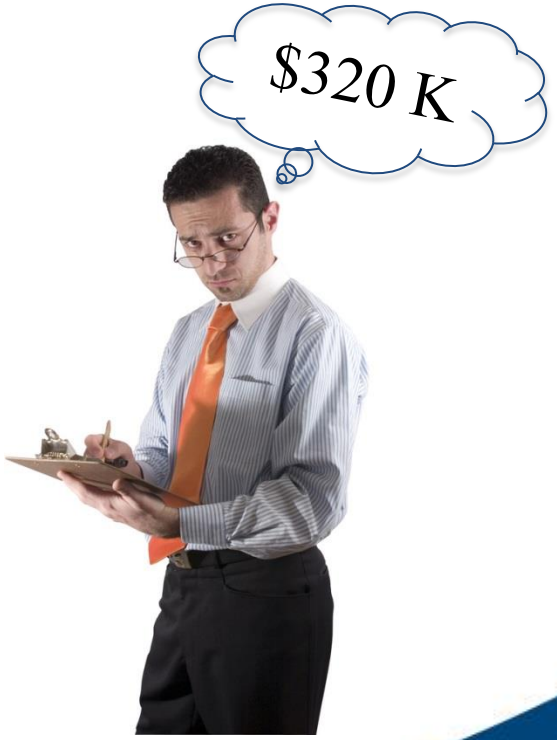
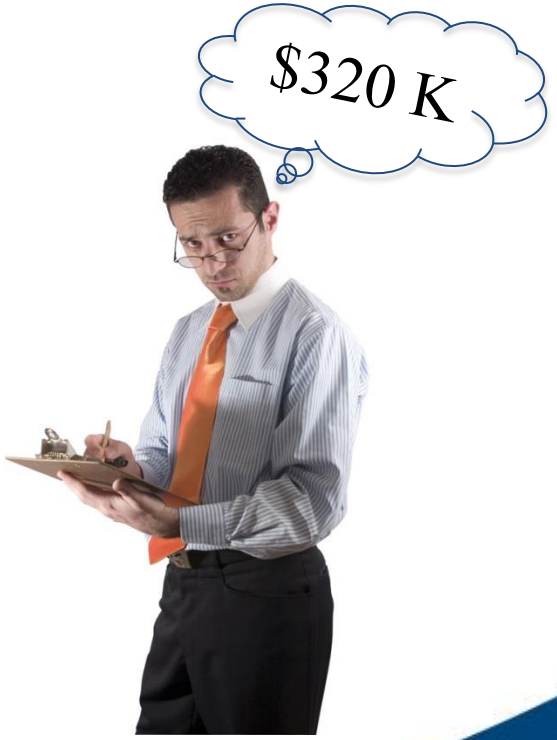


Illustration 1-1: Developing a Tax Rate

$$\textbf{Assessment Ratio} = \frac{\$320{,}000}{\$800{,}000}$$



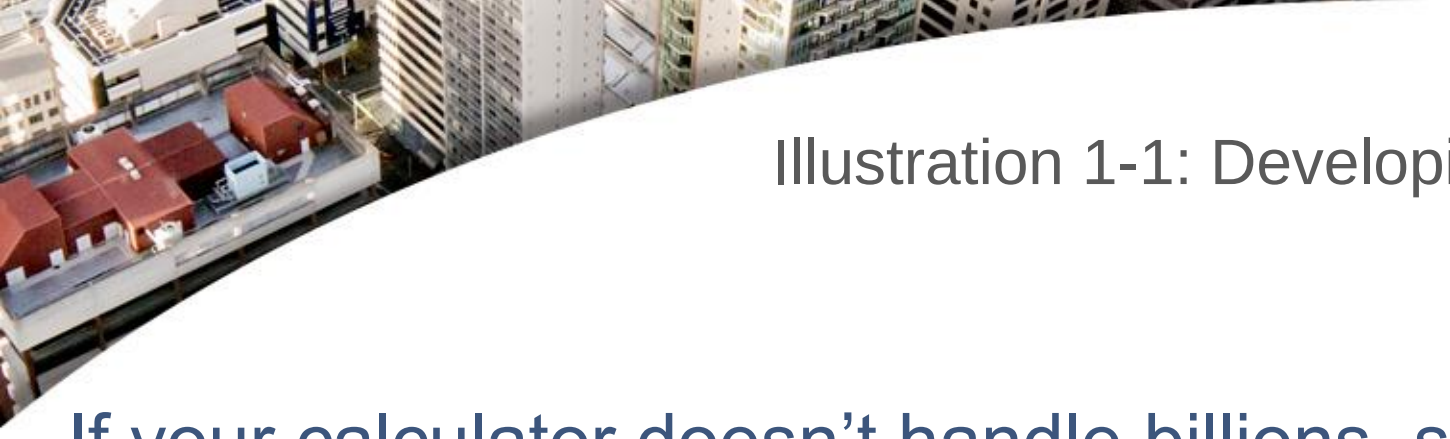


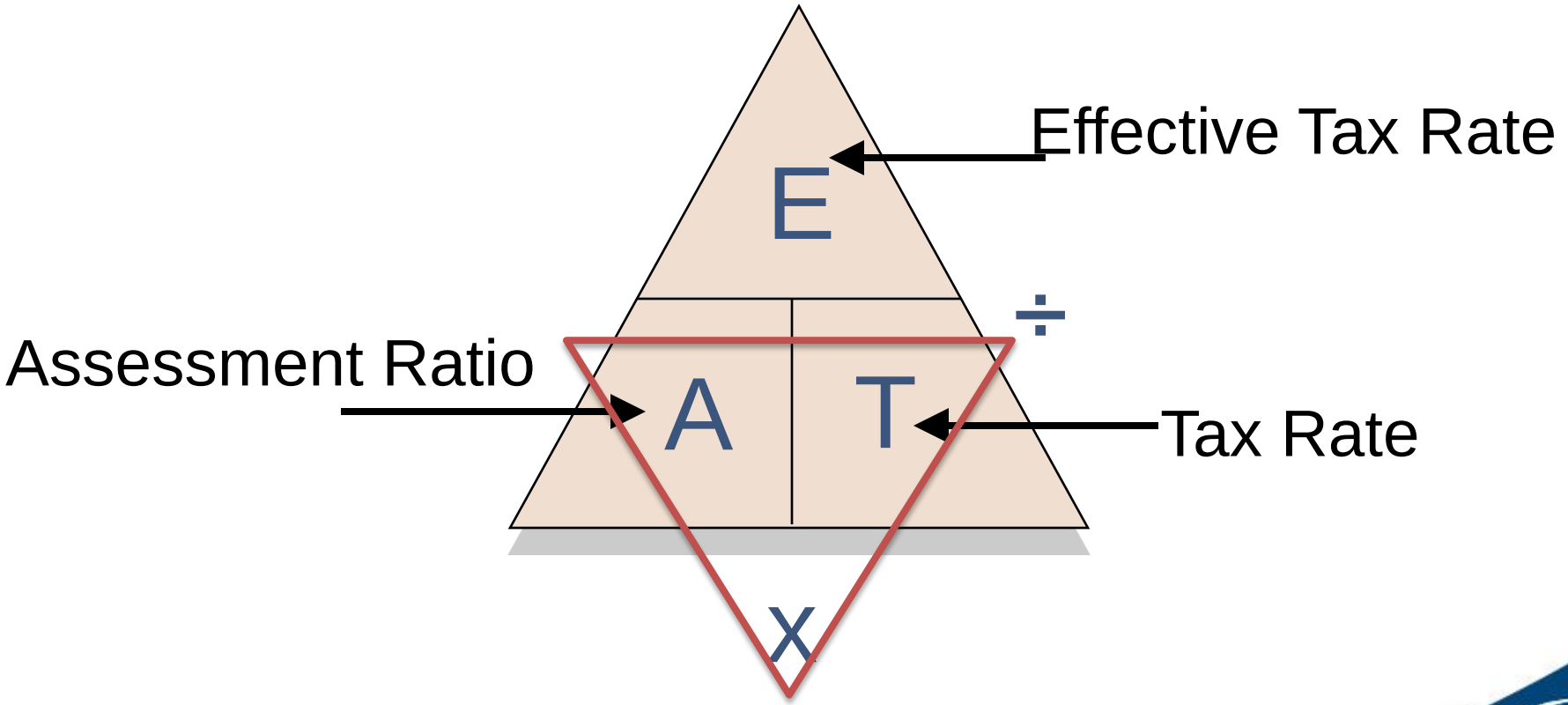
Illustration 1-1: Developing a Tax Rate

If your calculator doesn't handle billions, simply drop the same number of zeroes from the numerator and denominator before you divide.

$$\left(\frac{500{,}000{,}000}{10{,}000{,}000{,}000} = \frac{500{,}000}{10{,}000{,}000} = \frac{500}{10{,}000} = \frac{5}{100} = .05\right)$$

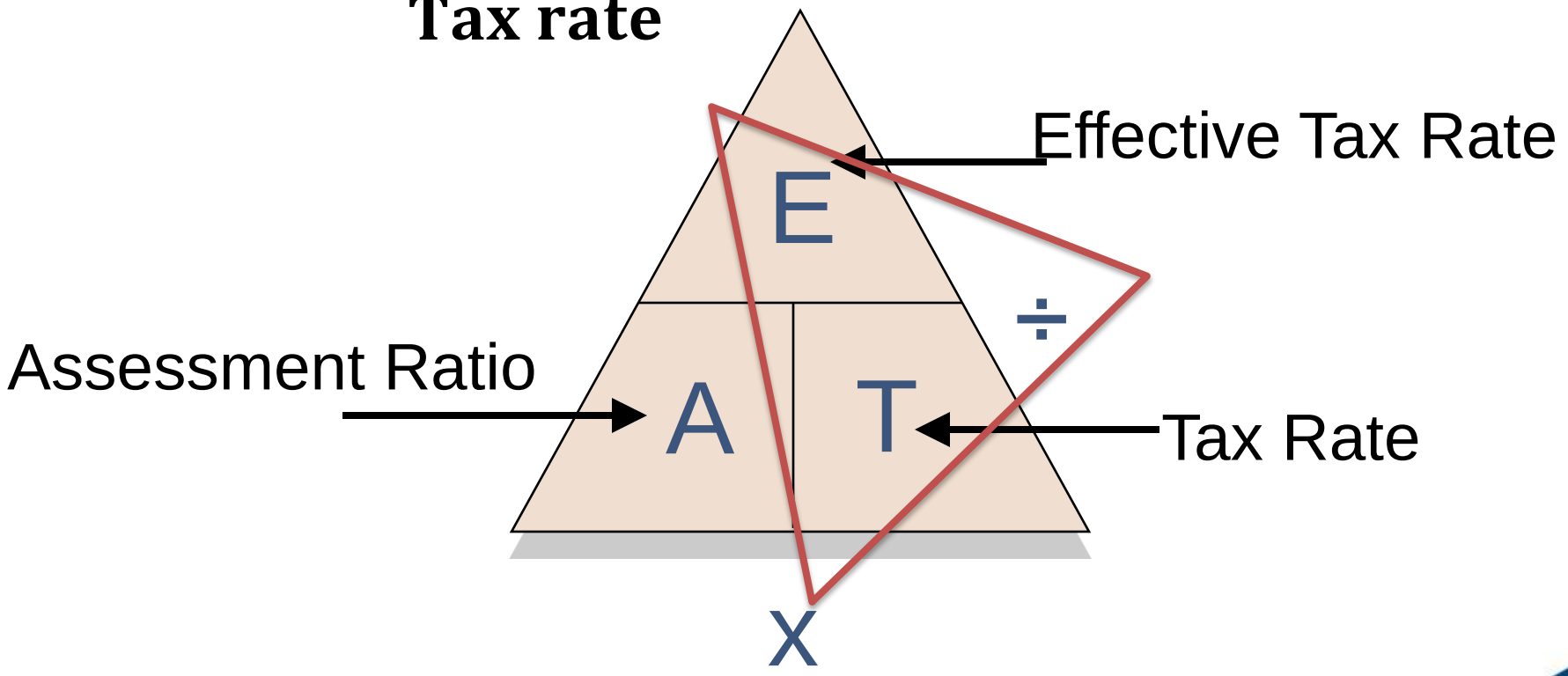
Demonstration1-1 Effective Tax Rate
Effective Tax Rate Formula – EAT Triangle

Effective Tax Rate = Tax rate X Assessment Ratio.



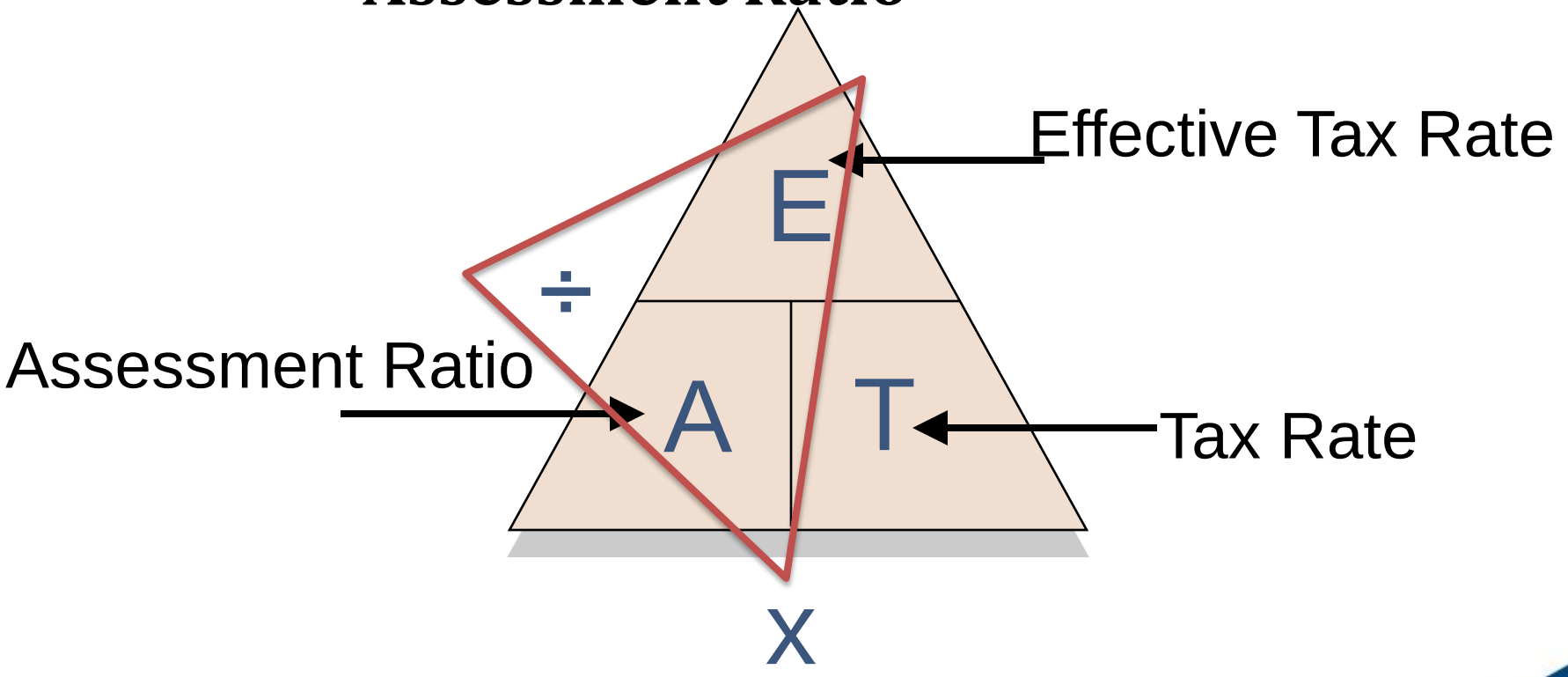
Demonstration1-1 Effective Tax Rate
Effective Tax Rate Formula – EAT Triangle

$$\frac{\textbf{Effective Tax Rate}}{\textbf{Tax rate}} = \textbf{Assessment Ratio}$$



Demonstration1-1 Effective Tax Rate
Effective Tax Rate Formula – EAT Triangle

$$\frac{\textbf{Effective Tax Rate}}{\textbf{Assessment Ratio}} = \textbf{Tax Rate}$$



Residential

Classes of Property

Residential

Commercial

Classes of Property

Residential

Commercial

Industrial

Classes of Property

Residential

Commercial

Industrial

Agricultural

Sell

Sell

Lease or Rent

Concepts of Property and Property Rights

Sell

Lease or Rent

Use

Concepts of Property and Property Rights

Sell

Lease or Rent

Use

Give Away

Concepts of Property and Property Rights

Sell

Lease or Rent

Use

Give Away

Enter or Leave

Concepts of Property and Property Rights

Sell

Lease or Rent

Use

Give Away

Enter or Leave

Refuse to do any of these

Taxation

Taxation

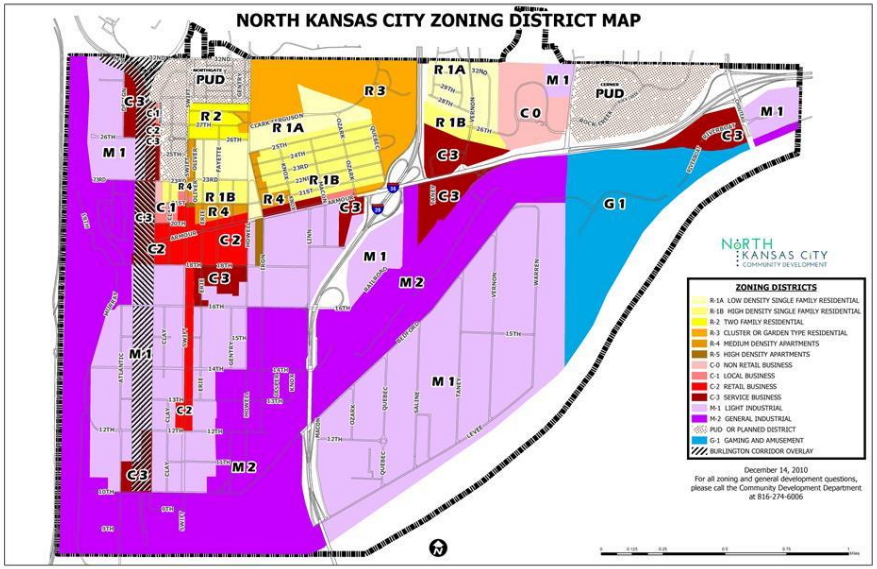
Eminent Domain

Government Restrictions on Property Ownership

Taxation

Eminent Domain

Police Power



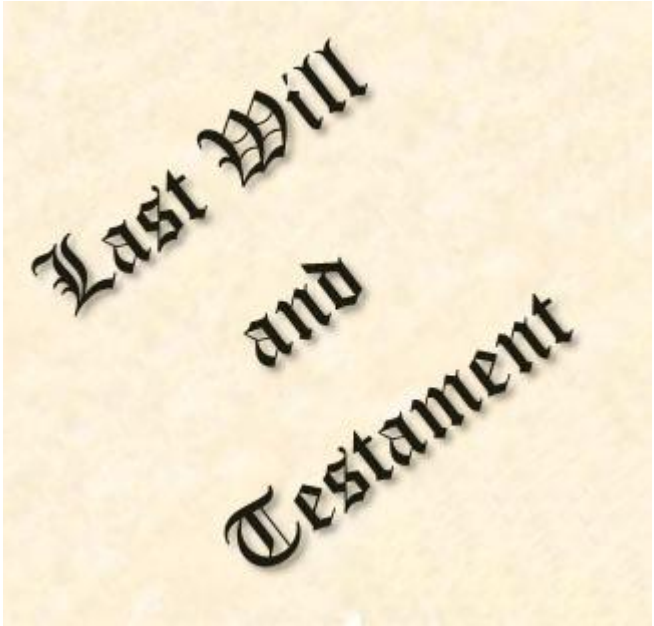
Government Restrictions on Property Ownership

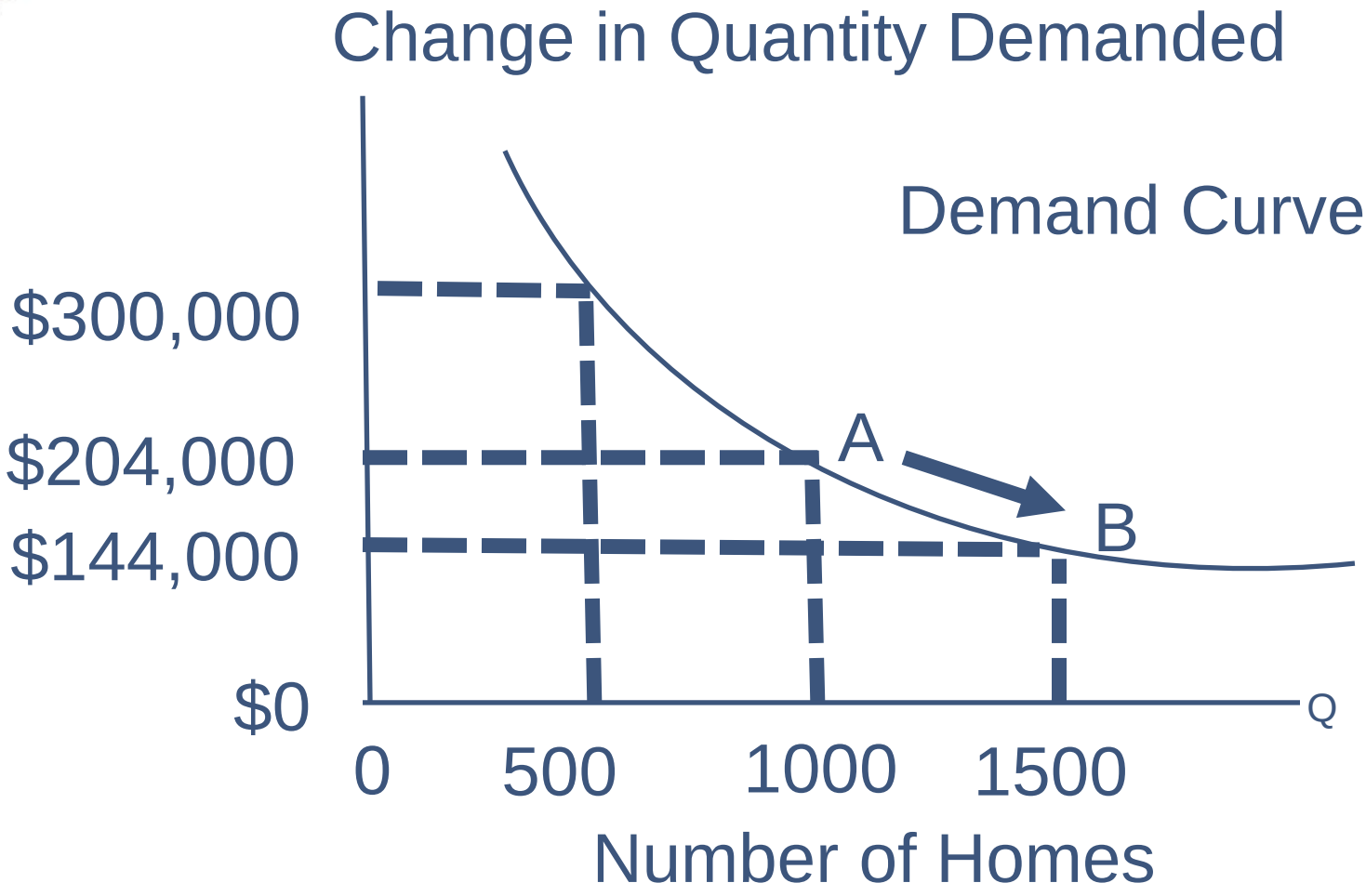
Taxation

Eminent Domain

Police Power

Escheat




Change in Quantity Demanded
Demand Curve
$300,000
$204,000
$144,000
$0
A
B
Q
0
500
1000
1500
Number of Homes

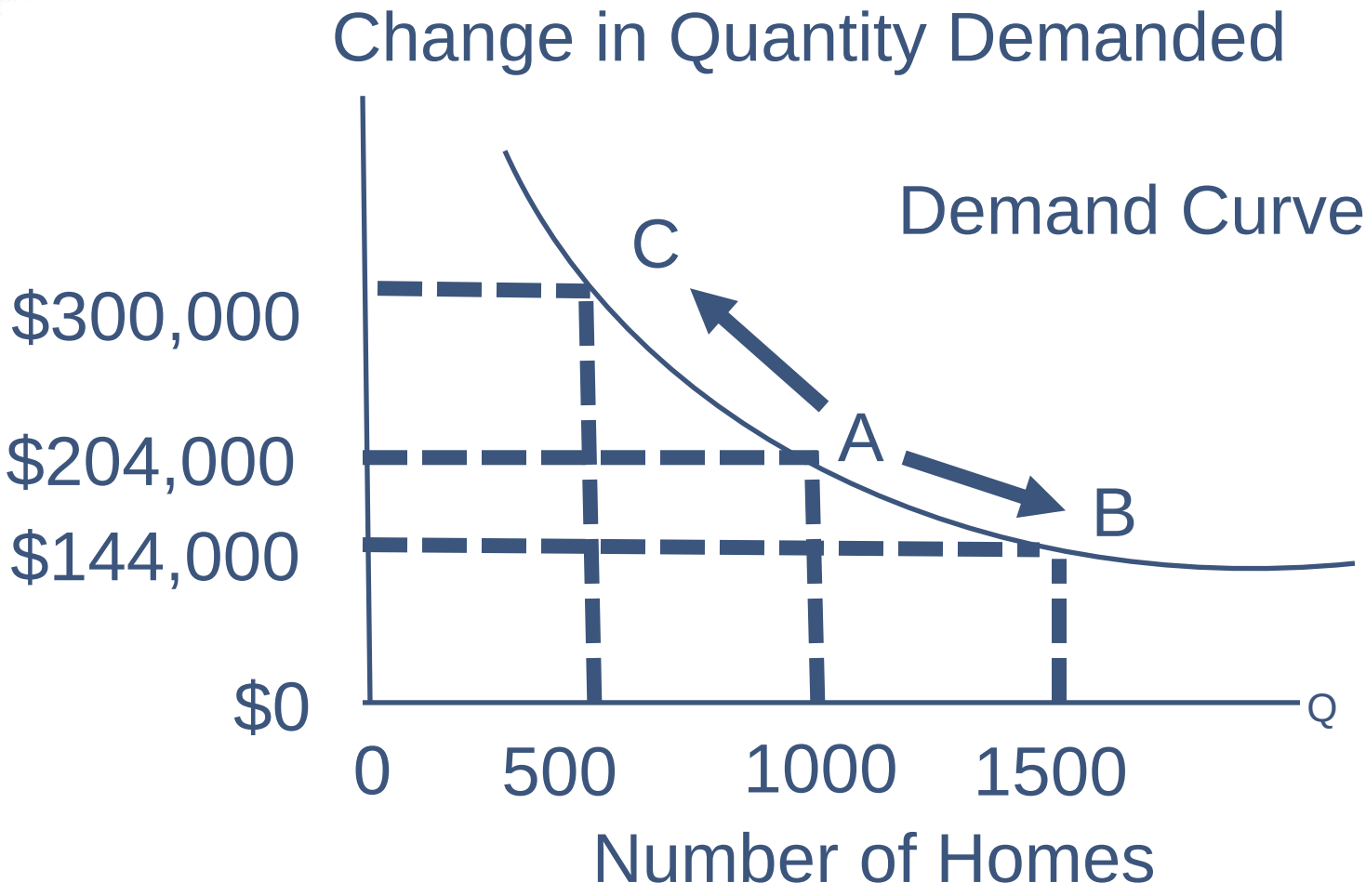
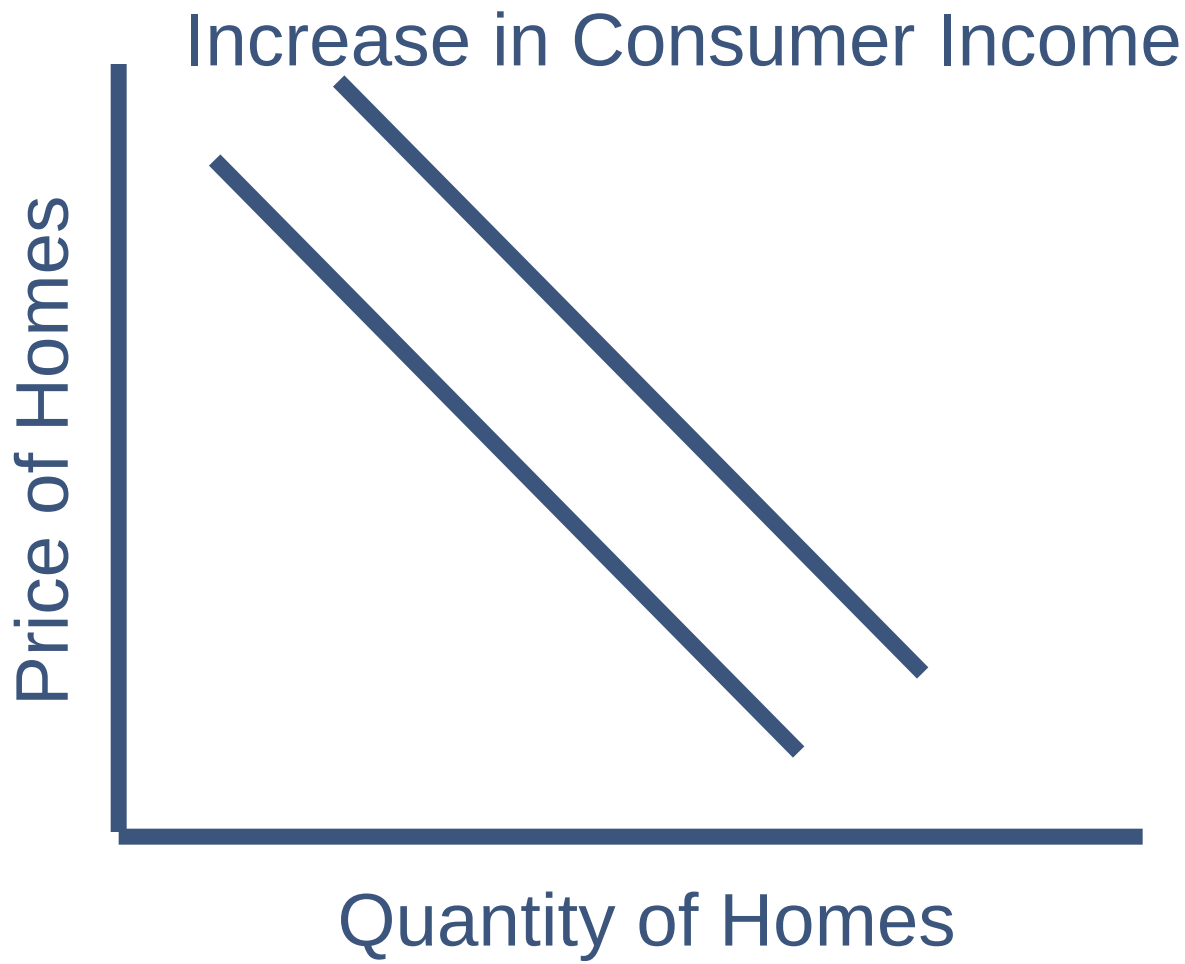
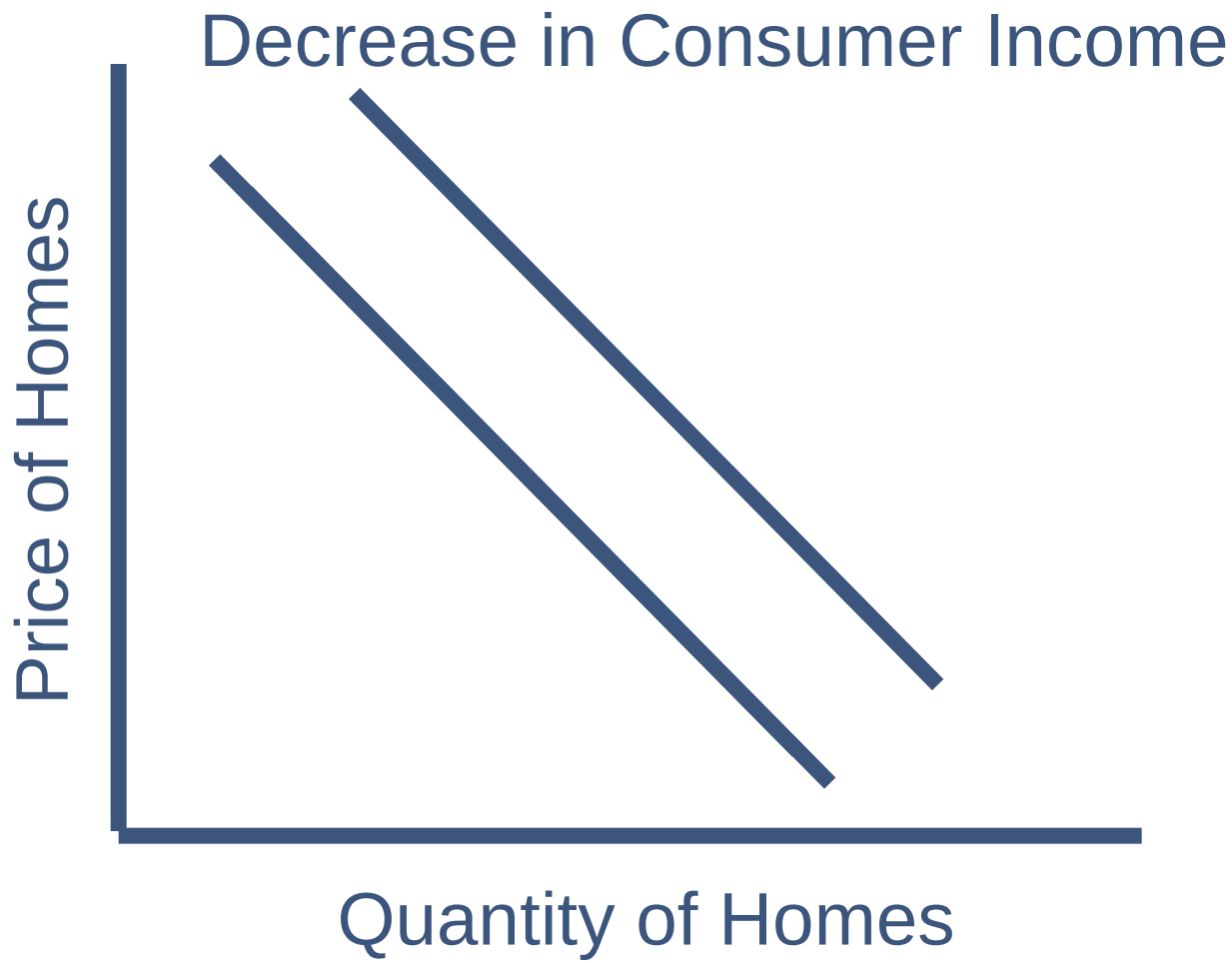
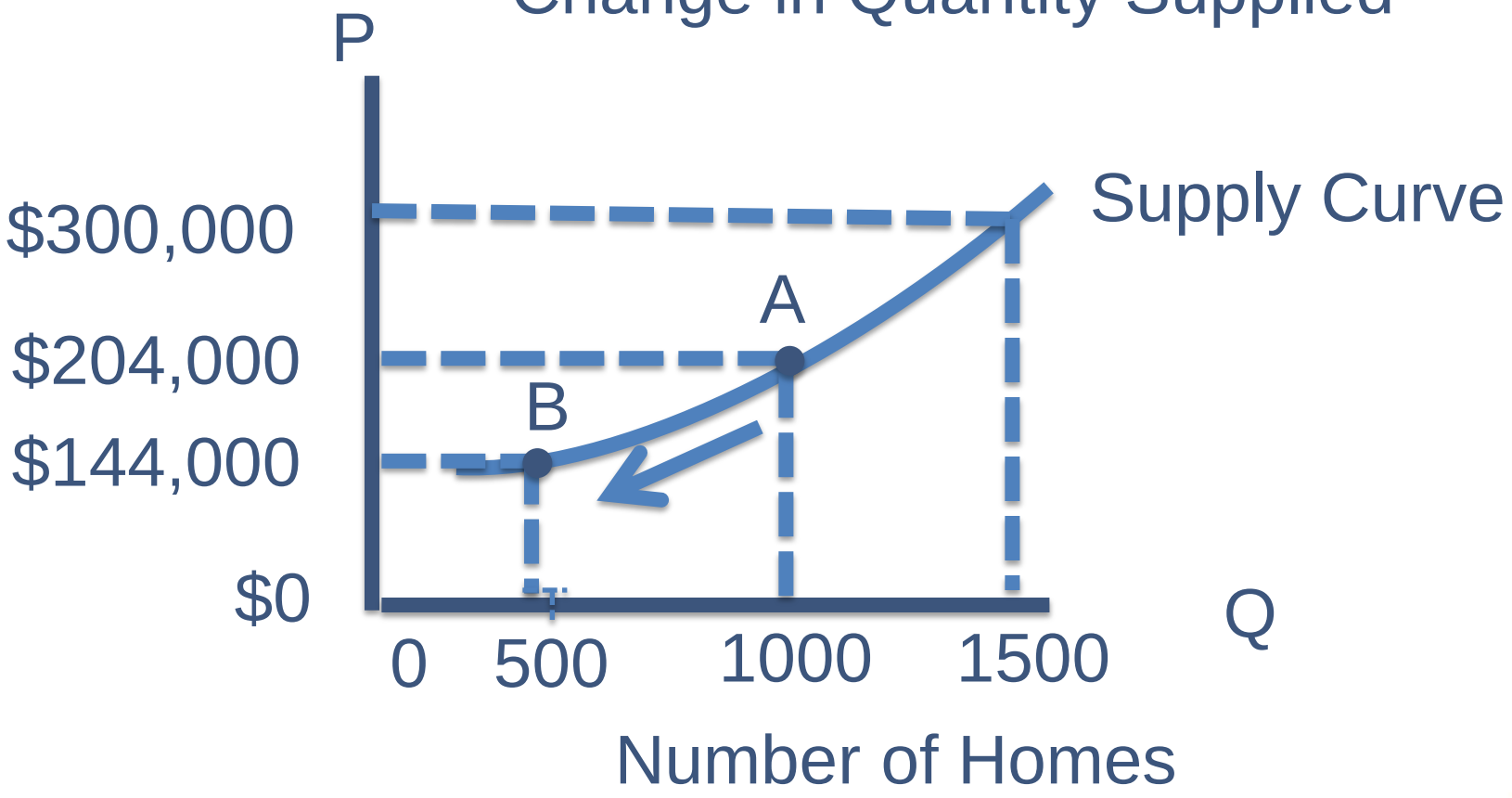

Change in Quantity Demanded
Demand Curve
C
A
B
$300,000
$204,000
$144,000
$0
Q
0
500
1000
1500
Number of Homes

Illustration 1-4




Decrease in Consumer Income
Price of Homes
Quantity of Homes

Change in Quantity Supplied



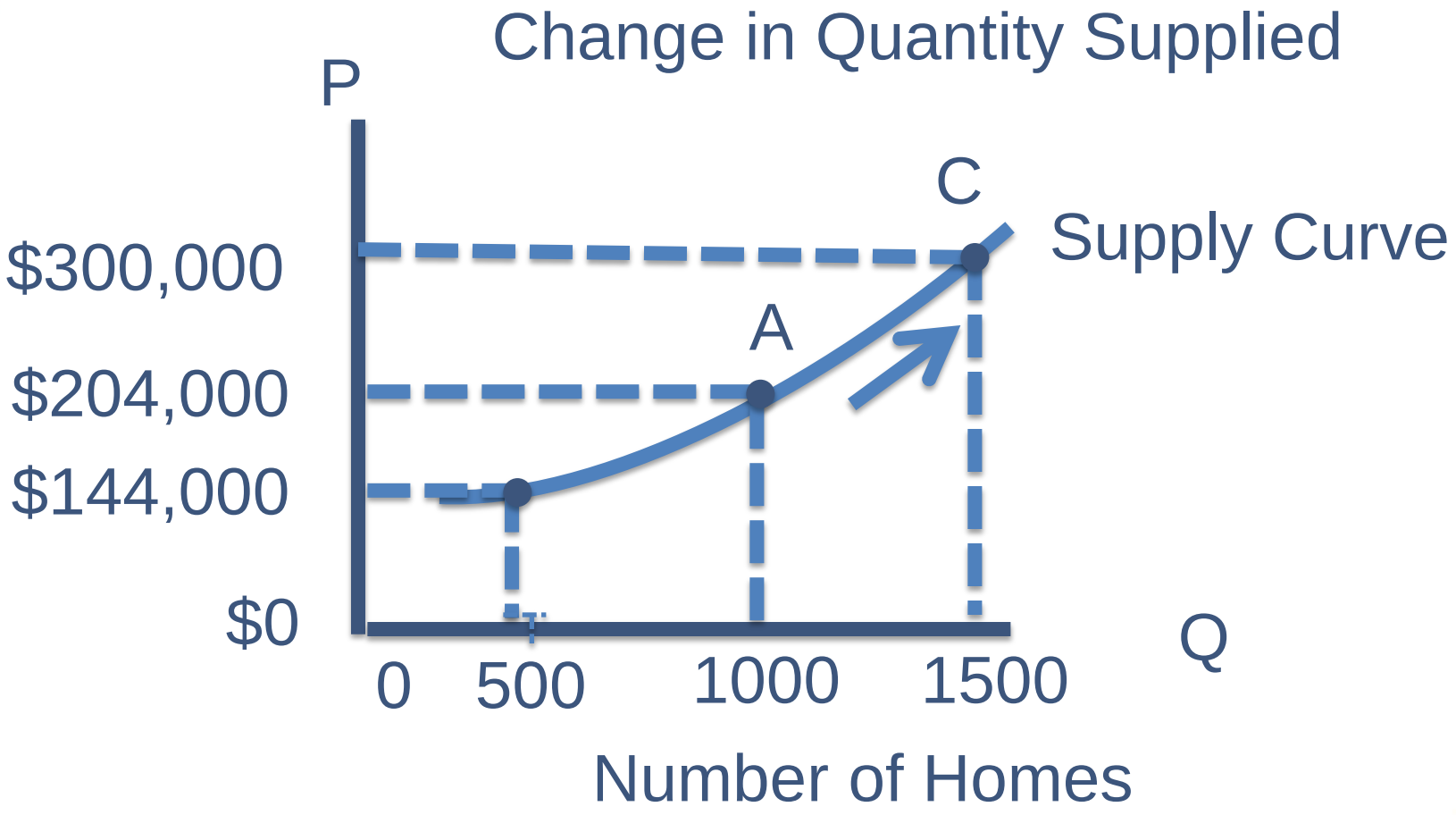
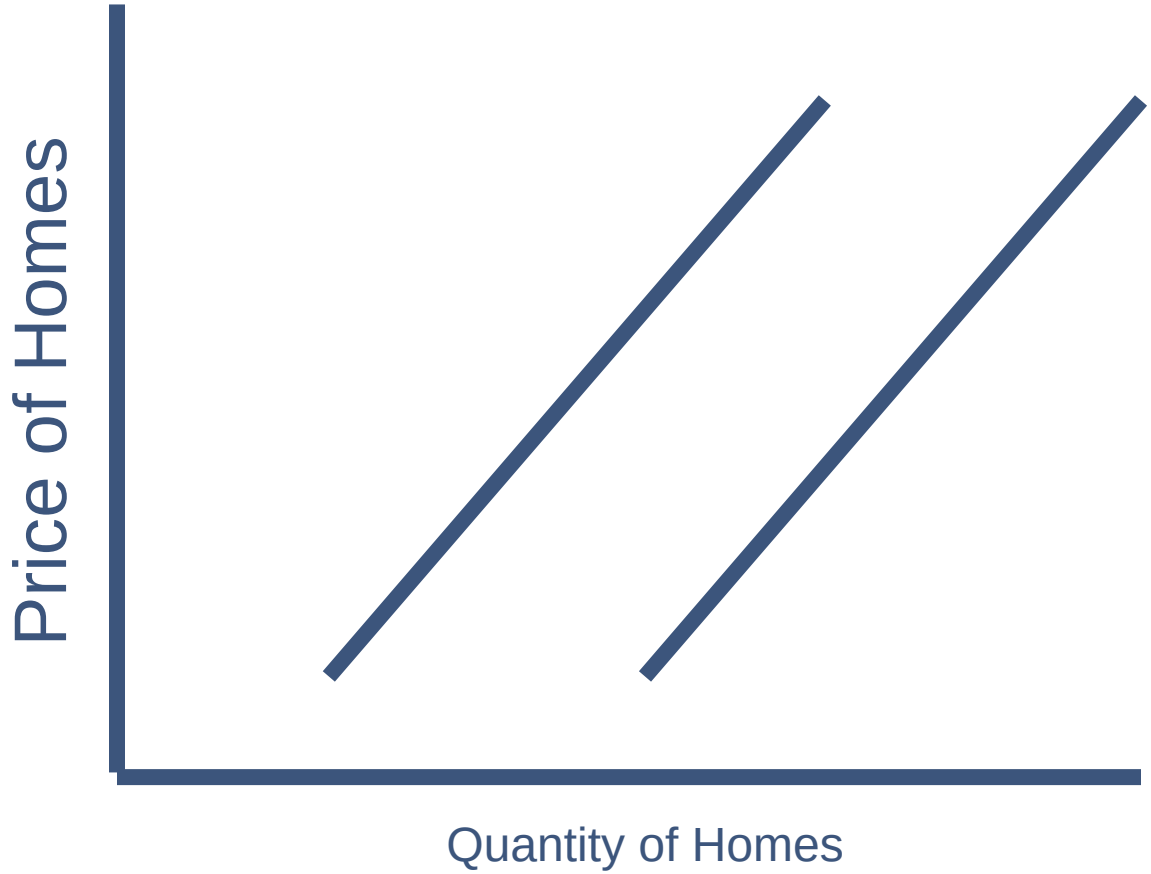
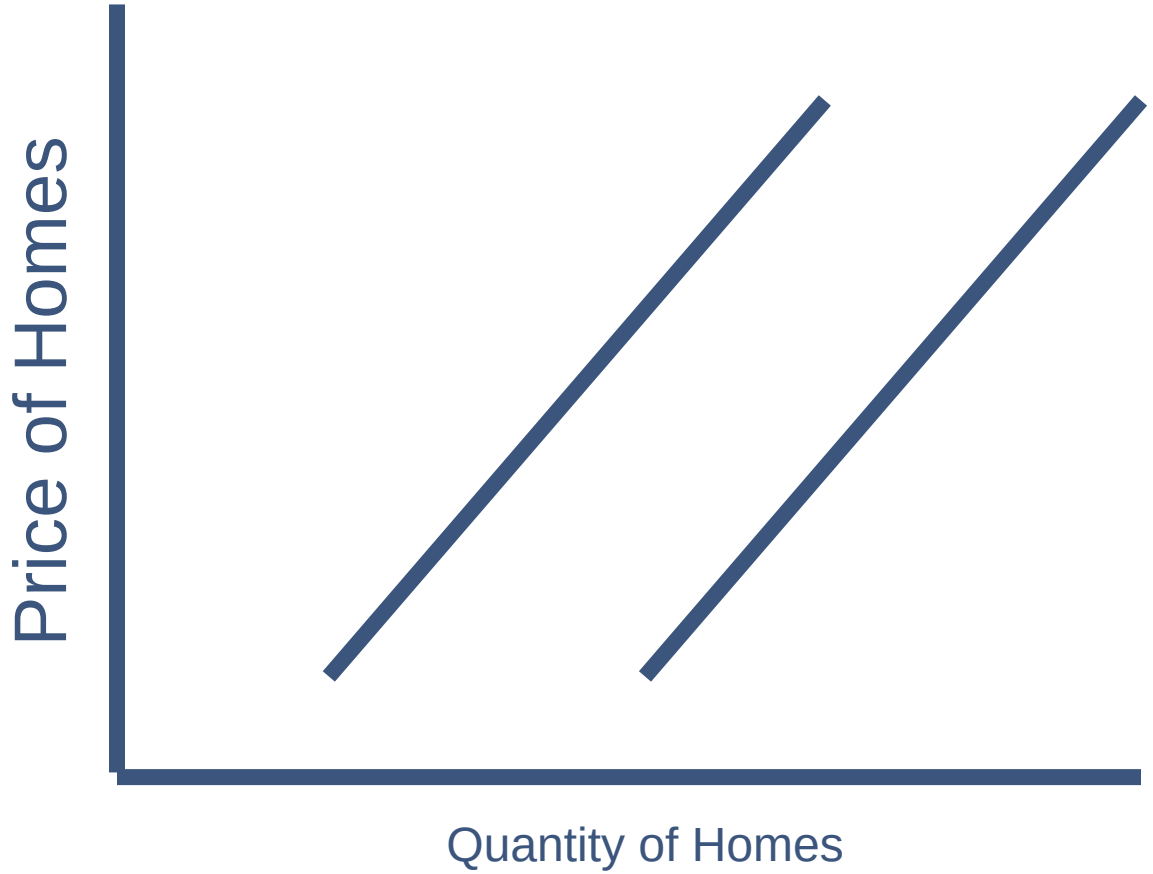

Change in Quantity Supplied
P
C
Supply Curve
$300,000
A
$204,000
$144,000
$0
0
500
1000
1500
Q
Number of Homes

Illustration 1-6

Decrease in Supply



Increase in Supply



Step One: Definition of the problem

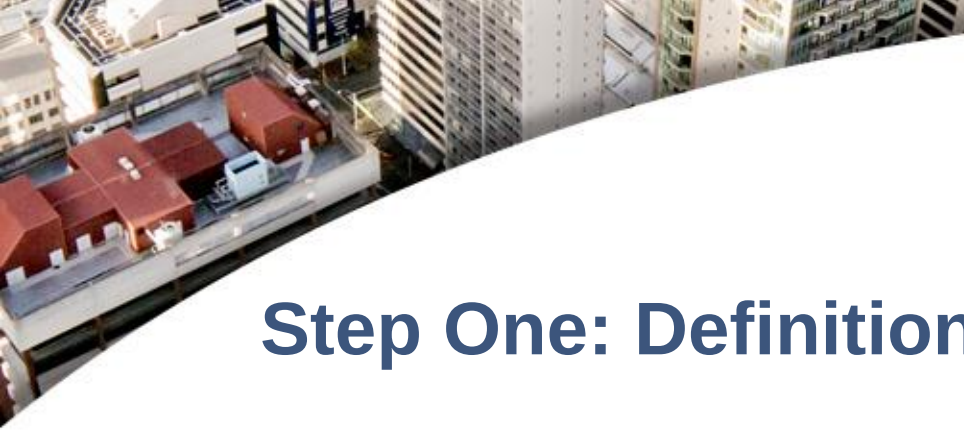
Where

What

Why

When

How



Step One: Definition of the problem

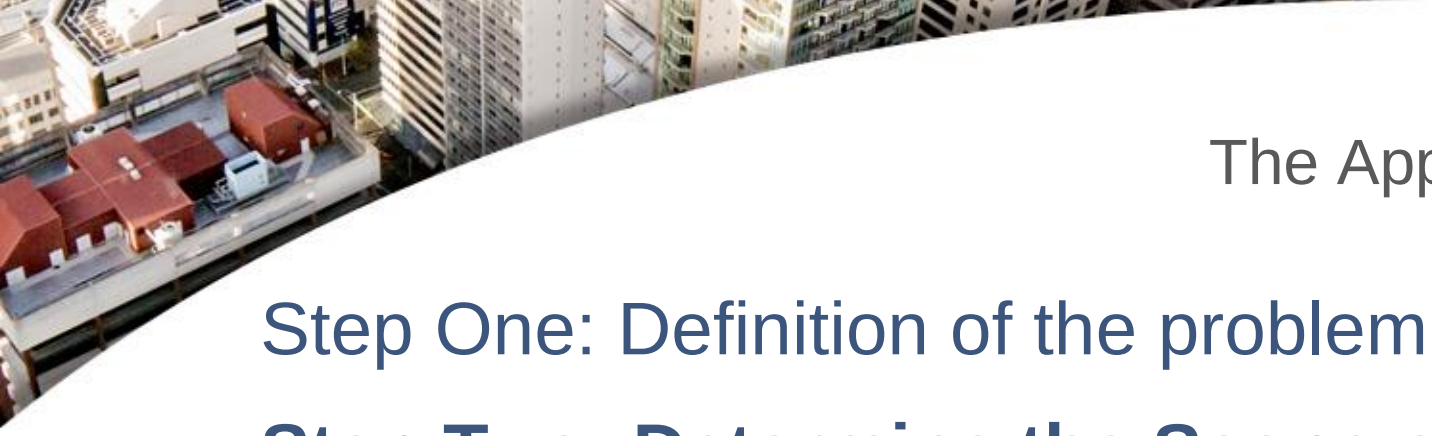
Identify property to be appraised

Determine property rights to be appraised

Define purpose and intended use of the appraisal

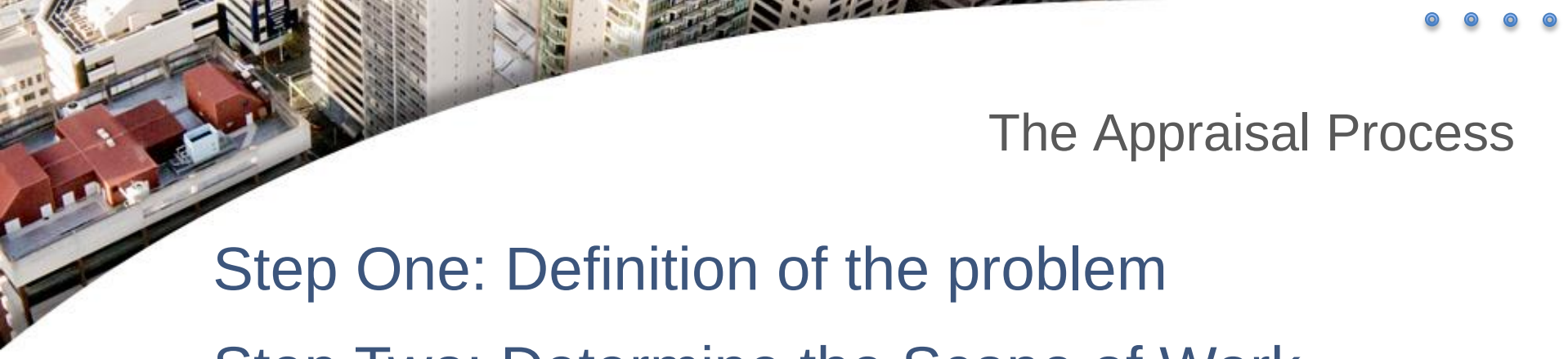
Specify the date of appraisal

Define the type of value



Step One: Definition of the problem

Step Two: Determine the Scope of Work

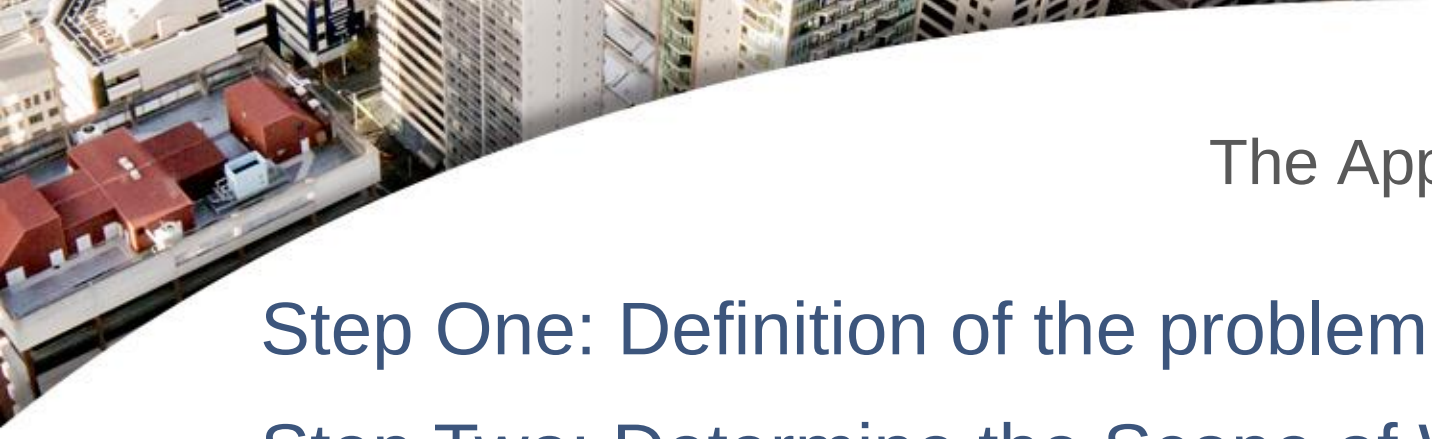


Step One: Definition of the problem

Step Two: Determine the Scope of Work

Step Three: Preliminary survey and planning

- **Estimate tentative or final Highest and Best Use**
- **Determine which data will need to be collected**
- **Consider the 3 approaches to value**
- **Allocate time and resources**



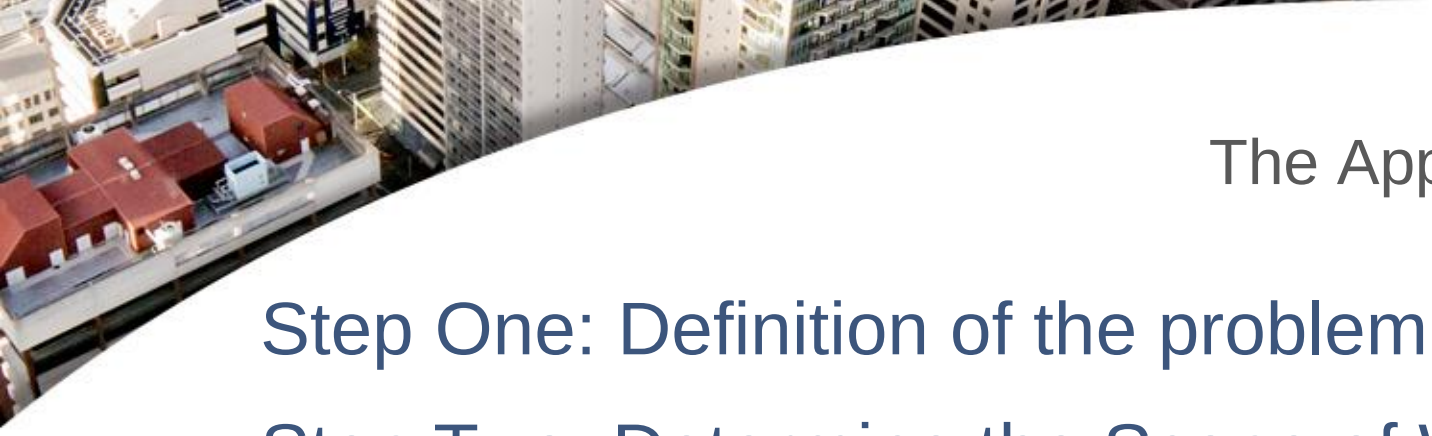
Step One: Definition of the problem

Step Two: Determine the Scope of Work

Step Three: Preliminary survey and planning

Step Four: Collect Data

- **General**
- **Specific**
- **Comparative**



Step One: Definition of the problem

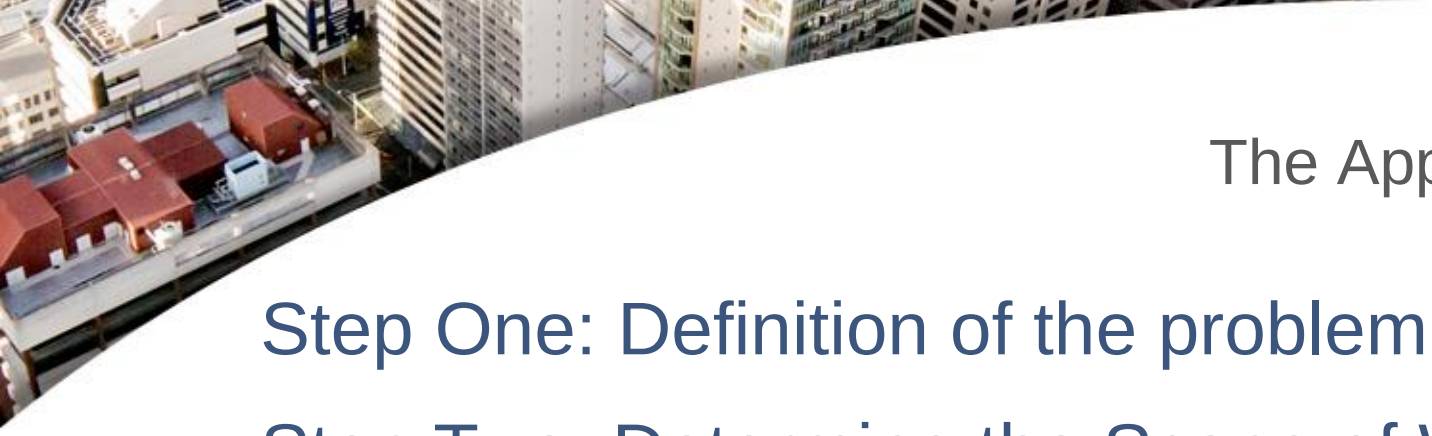
Step Two: Determine the Scope of Work

Step Three: Preliminary survey and planning

Step Four: Collect Data

Step Five: Highest and Best Use Analysis

Value as if vacant AND as if improved



Step One: Definition of the problem

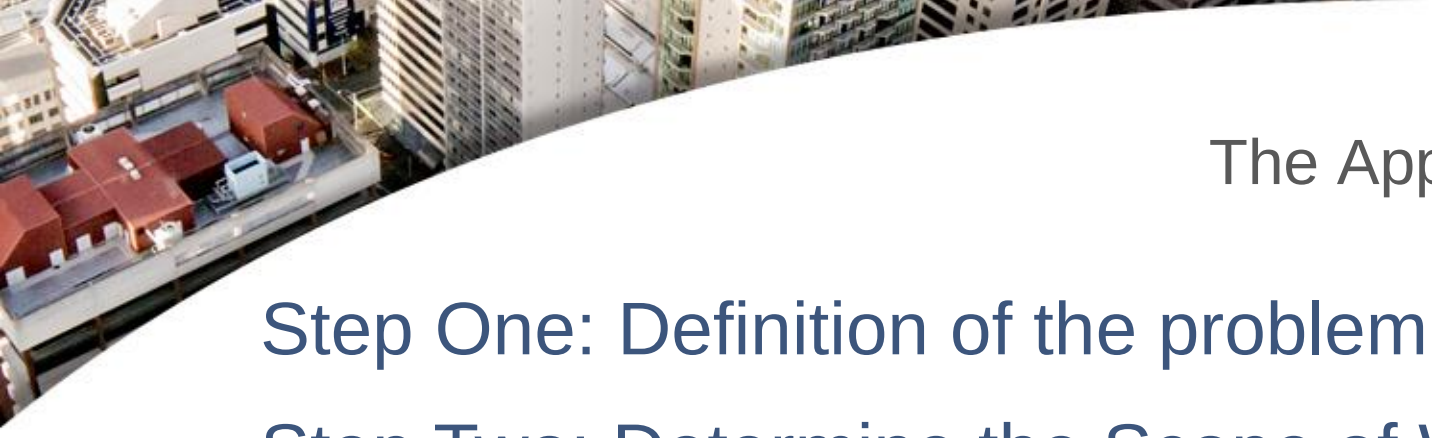
Step Two: Determine the Scope of Work

Step Three:- Preliminary survey and planning

Step Four: Collect Data

Step Five: Highest and Best Use Analysis

Step Six: Apply Approaches to Value



Step One: Definition of the problem

Step Two: Determine the Scope of Work

Step Three: Preliminary survey and planning

Step Four: Collect Data

Step Five: Highest and Best Use Analysis

Step Six: Apply Approaches to Value

Step Seven: Determine value

IAAO Annual Conference

Tampa, Florida

August 28-31, 2016