

URBAN REDEVELOPMENT: A GUIDE FOR SMALL DEVELOPERS

CNU COLORADO & DOWNTOWN COLORADO • OCTOBER 18, 2017

Who is Kronberg Wall?



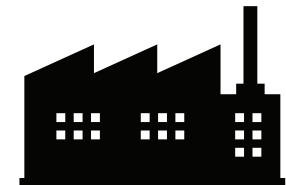
ARCHITECTS, PLANNERS, DESIGNERS, DEVELOPERS, URBAN EVANGELISTS



NEIGHBORHOOD ACTIVATORS



URBAN INFILL



ADAPTIVE REUSE

We believe walkable areas with existing infrastructure are the easiest targets for quick and cost-effective antidotes to sprawl.

Most often these are places like a main street or a downtown.



WHY WE CARE ABOUT DOWNTOWN REDEVELOPMENT

BECAUSE DOWNTOWNS ARE VALUABLE

1. They already exist

Investing in existing assets is a great way to leverage existing infrastructure, support sustainable growth, and preserve community character

2. They are economic engines

Compact, “downtown” areas typically contribute the highest property tax revenue per acre, even before revitalization

3. They allow for incremental development

Dense areas allow for infill development to happen in smaller increments, which means more opportunities for small developers (if you can reduce the related brain damage)

DOWNTOWNS ARE VALUABLE

- **Generates high tax values**
- **Efficient use of land**
- **Existing infrastructure**
- **More convenient for everyone**

DOWNTOWNS ARE VALUABLE

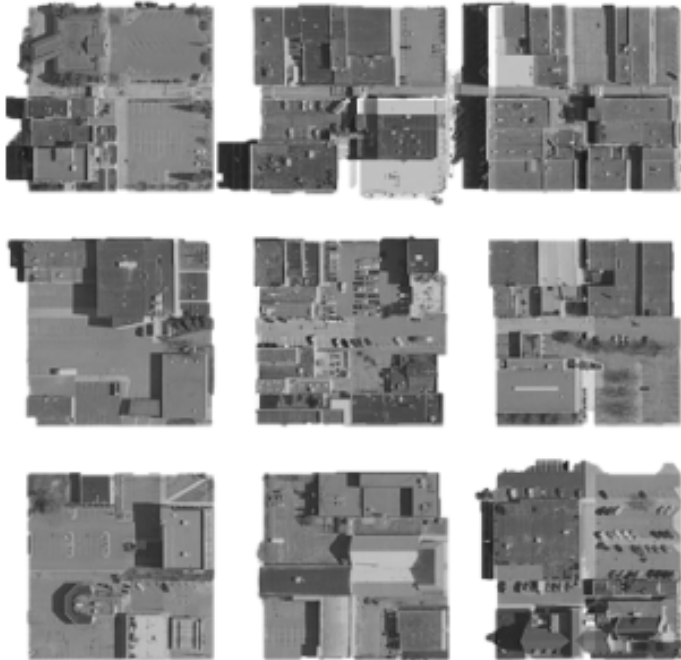
Suburbia seems cheaper and easier to build but...

- **Lower tax values**
- **Inefficient use of land**
- **Requires new, more extensive infrastructure**
- **Only convenient if you have a car**

DOWNTOWNS ARE VALUABLE

Nine downtown blocks

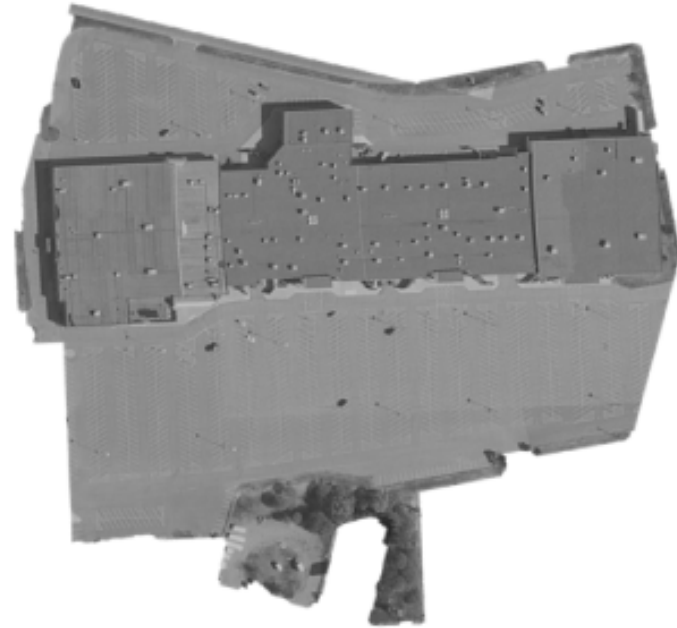
- 16 taxable acres
- Net value per acre: \$1,310,830



\$20,973,280 for 16 acres

Shopping mall

- 23 taxable acres
- Net value per acre: \$281,128



\$6,465,944 for 23 acres

DOWNTOWNS ARE VALUABLE

People

- Create jobs
- Spend money
- Make a Place



Cars

- Do Not



People are economic engines. Not cars!

SO YOU WANT TO REDEVELOP IN A DOWNTOWN?



Great! You understand the value!
Now it's time to understand the hurdles...

REDEVELOPMENT HURDLES:

1.SITE REQUIREMENTS

SITE ISSUES:

- 1. Suburban-based zoning requirements**
- 2. Parking requirements**
- 3. Site requirements / Stormwater costs**

ZONING: Intro

- Originally about separation of uses-keeping evil, nasty commercial uses away from single family.
- Land value comes from walkability. But walkability comes from proximity and connectedness, not separation.
- Many great, walkable, connected places and buildings are illegal under current zoning laws.



Euclidean zoning separates uses and creates car-oriented environments.



Historic downtowns are mixed-use and pedestrian-oriented because they were built before zoning!

ZONING: Grandfathering

- For buildings and uses that existed before zoning or a change in zoning made them illegal.
- “Non-conforming”: what you have is OK as long as you don’t change it.
- If you change anything, you have to comply with current codes.
- If you like the grandfathered condition, consider making it legal.



Example:
Grandfathered Commercial Use in Single Family

THUNDERDOME: Regulatory requirements

ZONING

LIFE SAFETY

**BUILDING
CODES**

PARKING

STORMWATER

Why don't we provide regulations that encourage the development we want to see? Or reduce the ones in our way?

ZONING: Change of Use & Additions

- Changes of use and additions result in losing your grandfathered status
- Typically affects zoning and building codes



Example: Change of Use



Example: Addition

PARKING REQUIREMENTS: Existing Buildings

- Existing buildings often don't have the land required to meet parking requirements.
- The solutions to this problem are often not great:
 - Buy more land for parking
 - Tear part of the building down
 - Get a variance
- If the requirements are cumbersome, consider collective solutions or even.... changing the requirements!



Example:

Part of building removed and converted to parking: an expensive solution that creates less value

Helpful Links:

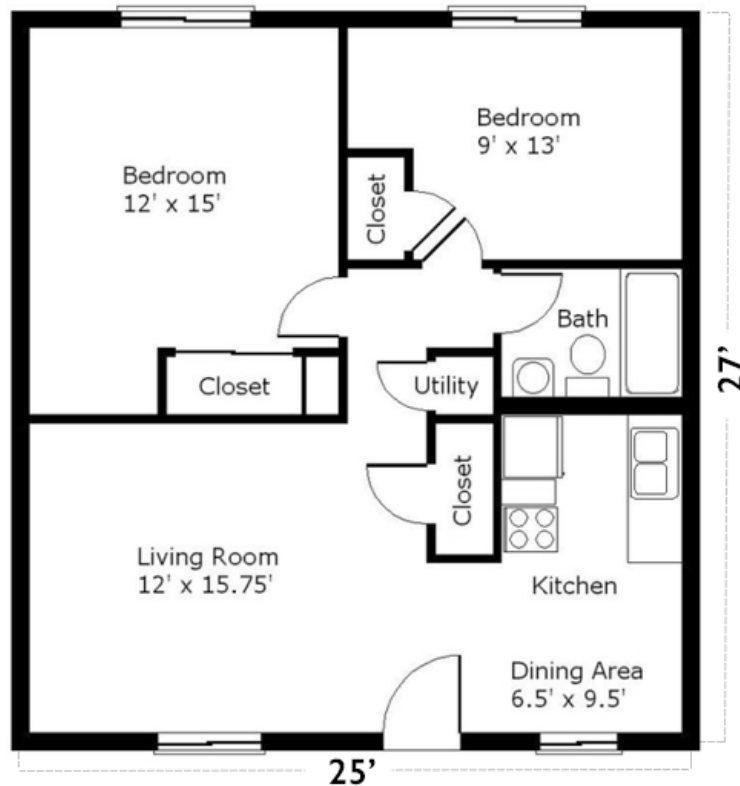
<http://www.amazon.com/High-Cost-Parking-Updated-Edition/dp/193236496X>

<http://kronbergwall.com/placemaking-v-parking-part-1/>

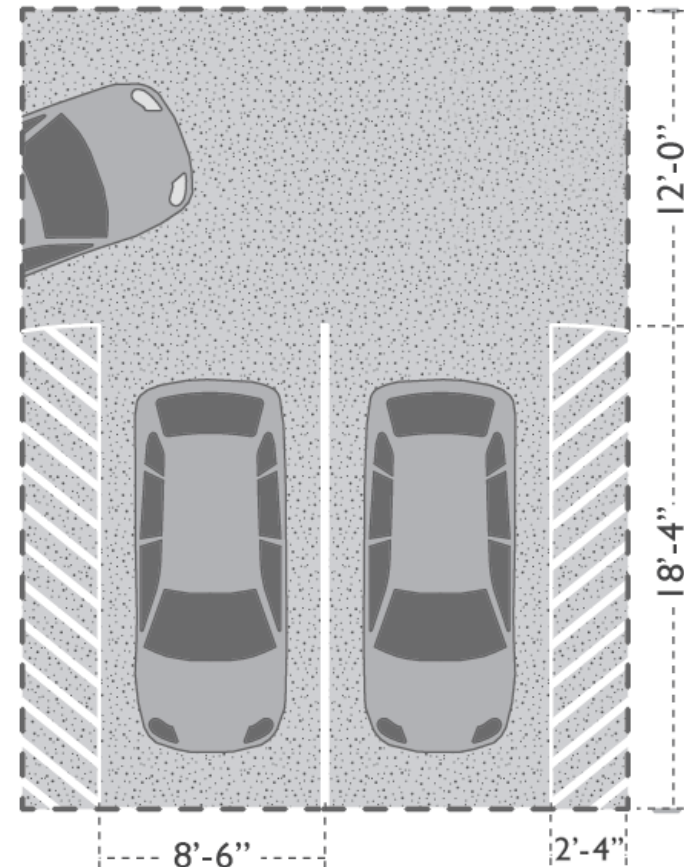
<http://kronbergwall.com/placemaking-v-parking-part-2/>

<http://kronbergwall.com/read-richard-willson-case-against-minimum-parking-requirements/>

PARKING REQUIREMENTS: Understanding Scale



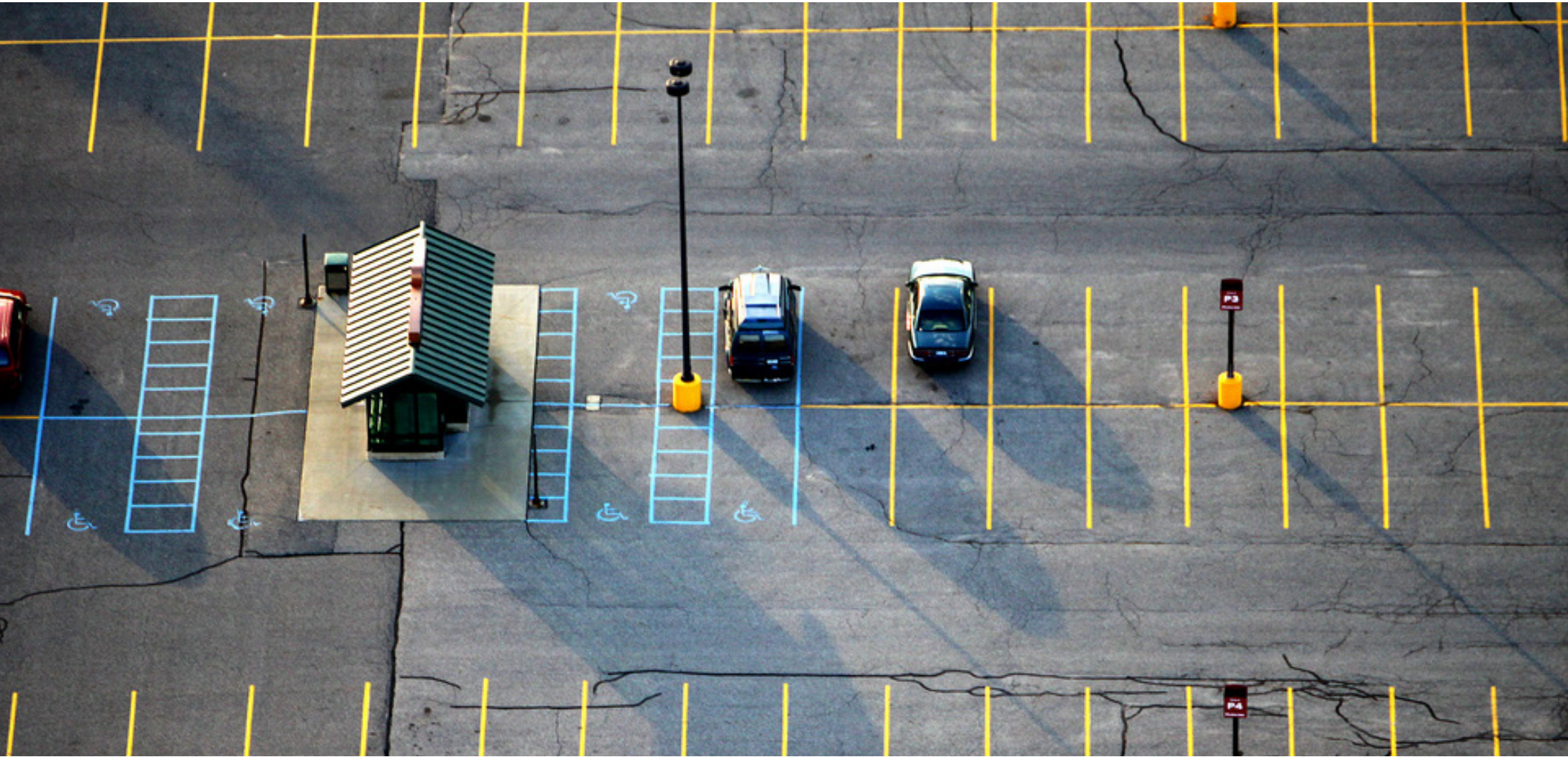
size for 2 bedroom apartment: 675 FT²



size for 2 parking spaces: 650 FT²

The space required for two parking spaces can fit a 2 bedroom apartment. Which is more productive for your town?

PARKING REQUIREMENTS: Alternative Solutions



Option 1: Eliminate all off-street parking requirements (for your non-suburban areas). This is bold, but it is right.

PARKING REQUIREMENTS: Alternative Solutions



Option 2: Hack your parking requirements via zoning text amendments.

PARKING REQUIREMENTS: Alternative Solutions

Example Amendments:

- Keep grandfathered parking rights, allow transfer to new uses (NOLA)
- Permit Time-of-Day sharing (ATL)
- Permit on-street parking to be counted towards totals (Chattanooga)
- Eliminate parking requirements in proximity to transit (Tacoma & Miami)
- Credit bicycle parking (3 bike spaces = 1 auto space) (Dallas)
- Eliminate requirements for buildings built before a certain date (ATL - 1965)
- Eliminate requirements for buildings under a certain size (5,000-10,000 SF) (Miami)
- Allow municipal lots to count for spaces
- Permit In-Lieu-Of Fee Options
- Provide reduction / credit for providing rideshare loading spot

SITE IMPACT REQUIREMENTS

- Most municipalities have stormwater requirements triggered by adding or modifying impervious surfaces.
- Parking requires impervious surfaces, so existing paving is an important asset.
- Consider legalizing low-impact solutions like gravel or grass lots (may not work in snow-prone climates)



Example: Gravel parking lot



Example: Mix of gravel and asphalt

SITE IMPACT REQUIREMENTS: Stormwater

- More parking =
- More paving =
- More stormwater mitigation =
- Less money for buildings =
- Less tax generated for the municipality

Collective solutions can be more efficient!



Green infrastructure solutions often aren't enough to meet stormwater requirements...



...and typically still require expensive vaults to meet storage quantity obligations

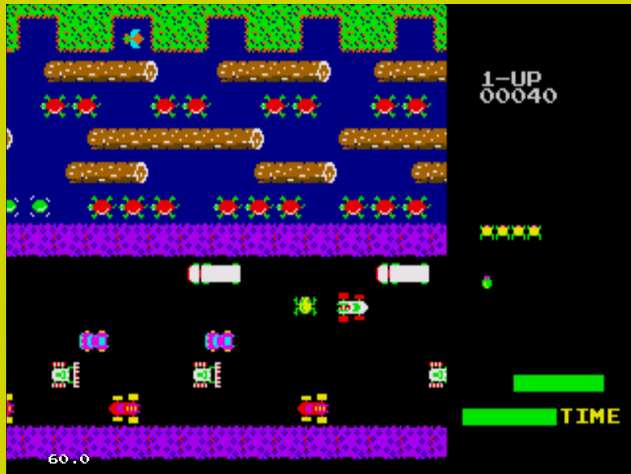
REDEVELOPMENT HURDLES:

2.BUILDING REQUIREMENTS

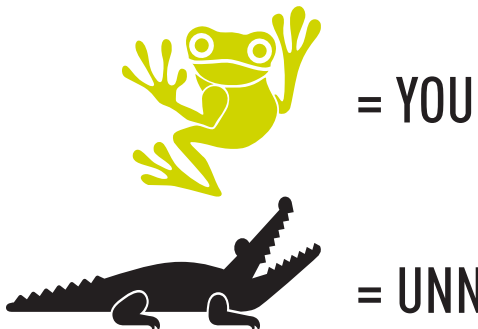
BUILDING ISSUES:

- 1. Existing buildings often don't meet new code requirements**
- 2. Retrofitting buildings (especially small buildings) to meet new requirements is often more expensive than constructing a new building**
- 3. ADA**

Small scale redevelopment is like a game of frogger.



IT SHOULDN'T HAVE
TO BE SO HARD...



= UNNECESSARILY PAINFUL CODE REQUIREMENTS

What requirements are standing in my way?

The current International Building code (since the 2009 version), has required fire sprinklers for **all multifamily buildings**. This means anything from a triplex on up, or anything in a mixed use building counts as multifamily. For multifamily, there is the option to provide a NFPA 13R sprinkler system instead of a full 13 system. This is a big deal.

NFPA 13 Sprinkler System:

A full 13 system requires a dedicated water line from the street with new tap and fee, new sprinkler riser, and all the valves and gauges before you even start running galvanized sprinkler pipe and heads.



In Atlanta, the tap, fee, line to the building, and riser often price out at \$60,000-\$70,000 before you even start running sprinkler heads.

\$\$\$\$\$\$\$\$\$\$

NFPA 13R Sprinkler System:

A 13R system is usually allowed to tap into the existing domestic water system without requiring all the separate infrastructure described above. It can also be run with PVC instead of hard pipe, further reducing cost.



No additional cost for tap - you only pay to run the sprinkler heads.

\$\$

So if I have to install a NFPA 13 sprinkler...

GAME OVER!

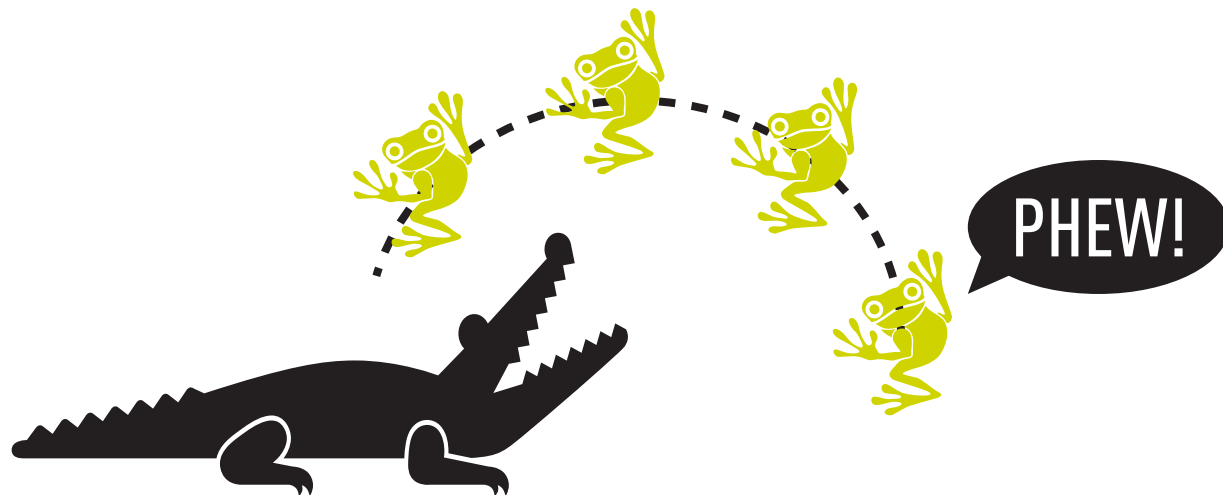
The requirement to install a NFPA 13 sprinkler system for a small building is the equivalent of being eaten by an alligator in Frogger... the costs outweigh the benefits.



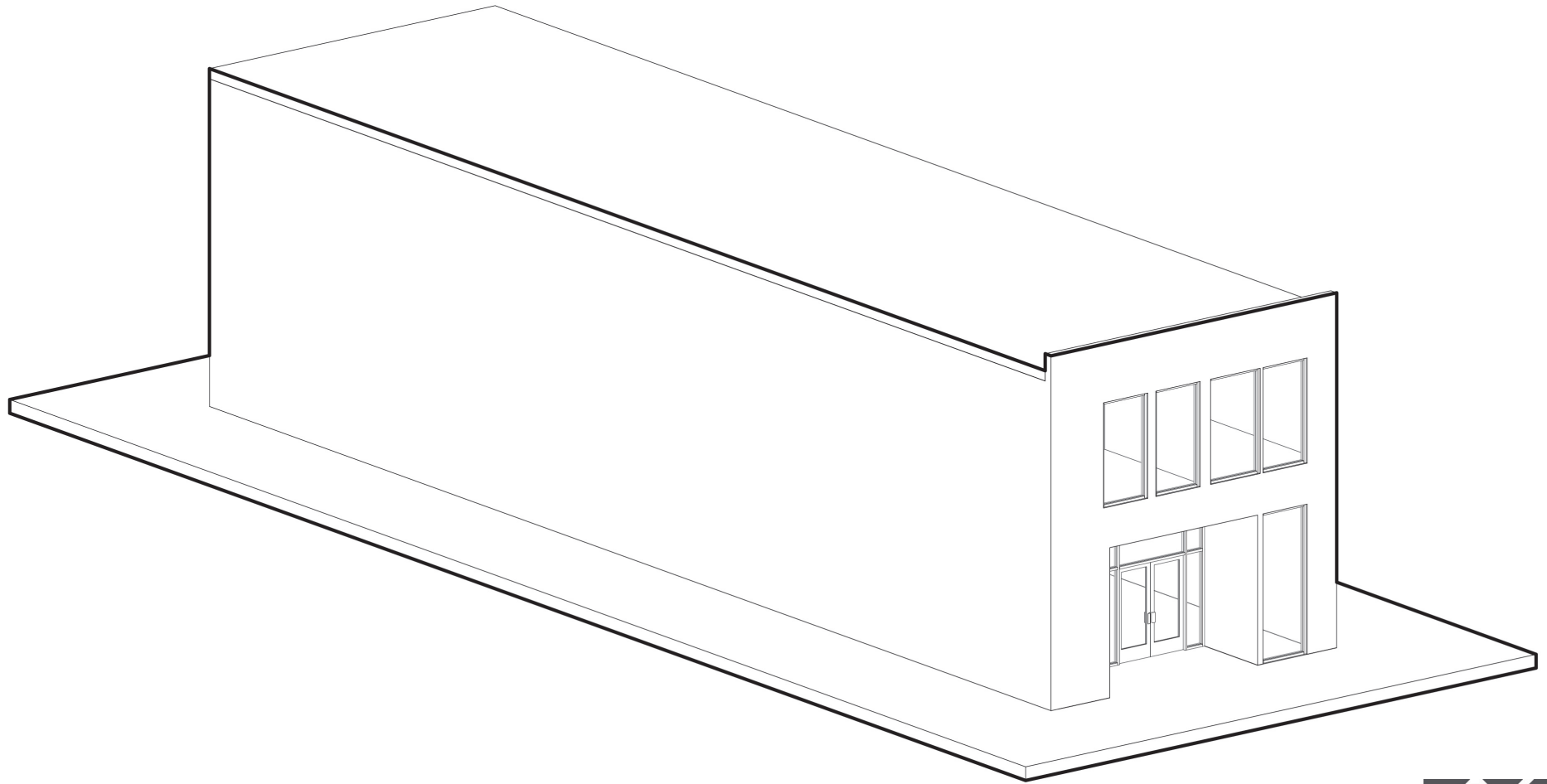
Is it possible to redevelop a building without needing to
install a commercial sprinkler?

YES!

We've discovered a few ways to leap over that alligator.



Let's use a "typical" main street building as our baseline.



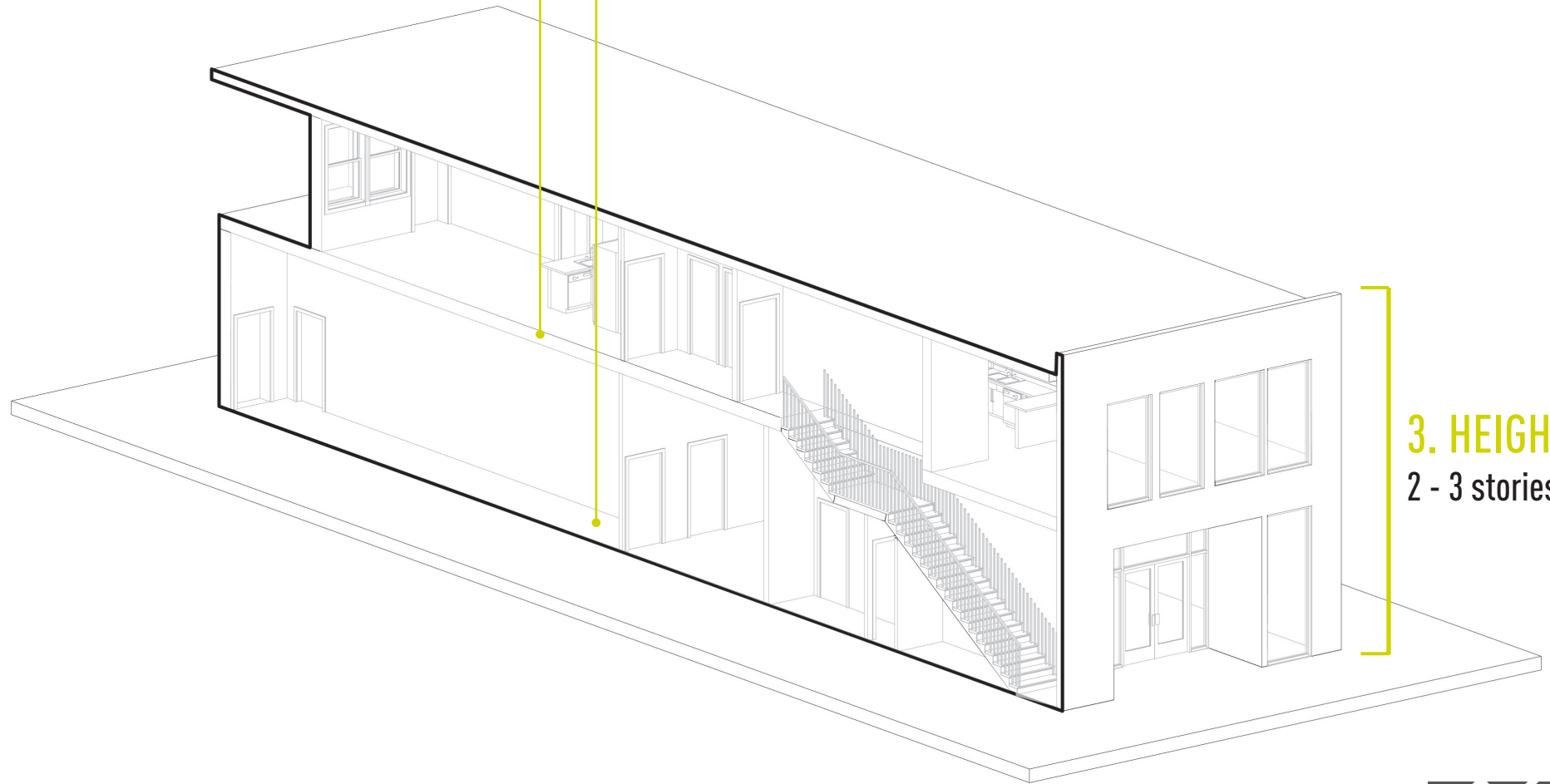
We can start out with some **physical** assumptions.

1. CONSTRUCTION TYPE:

- a) masonry walls, wood floors (type III)
- b) all wood (type V)

2. AREA:

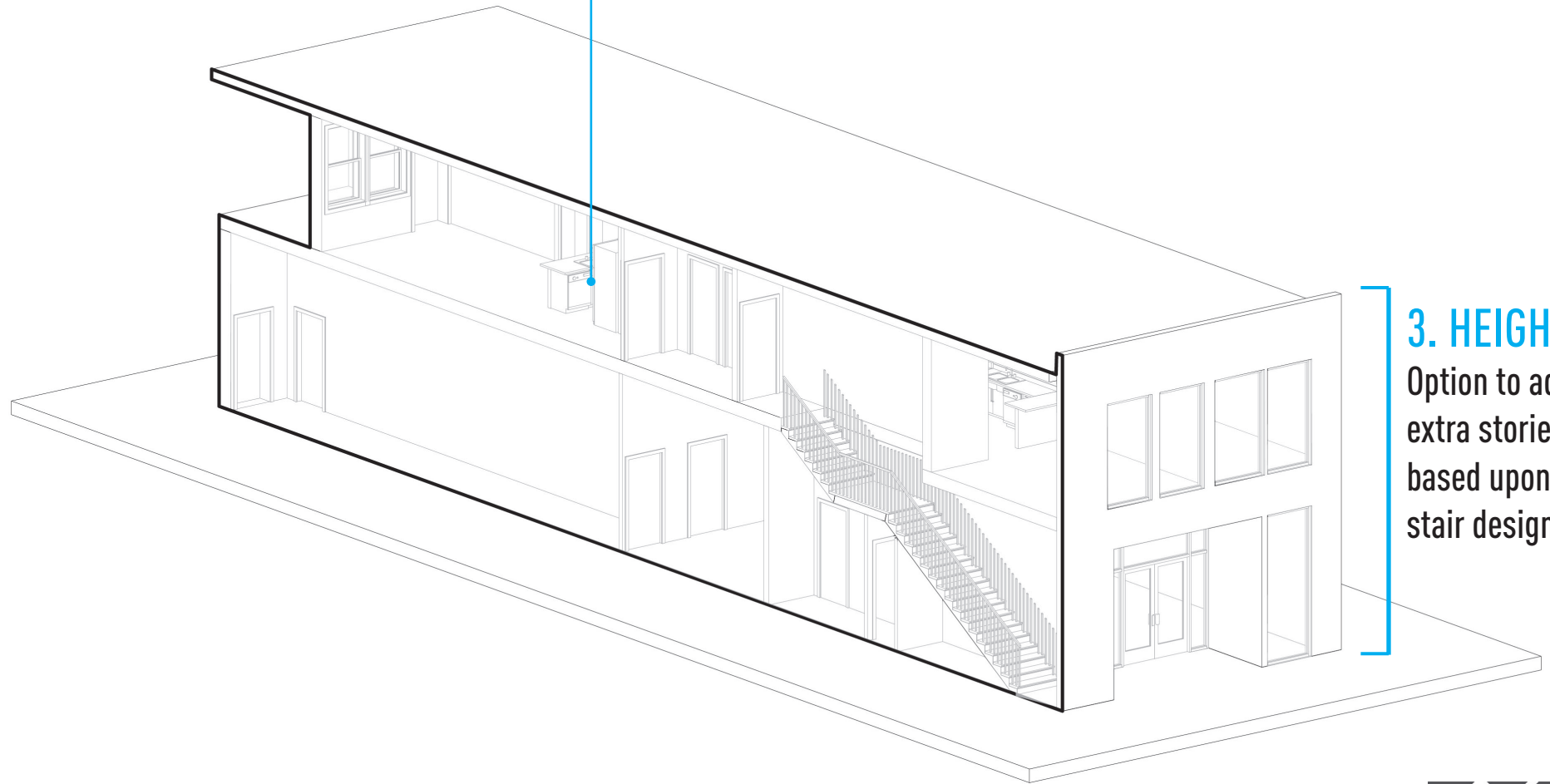
- a) type III: 19,000 SF max. floor plate
- b) type V: 9,000 SF max. floor plate



3. HEIGHT:
2 - 3 stories

And some **physical** goals.

1. MINIMAL ALTERATIONS TO CONSTRUCTION TYPE & AREA



3. HEIGHT:

Option to add
extra stories
based upon
stair design

We can begin with some **egress** assumptions.

SECTION 3404 ALTERATIONS

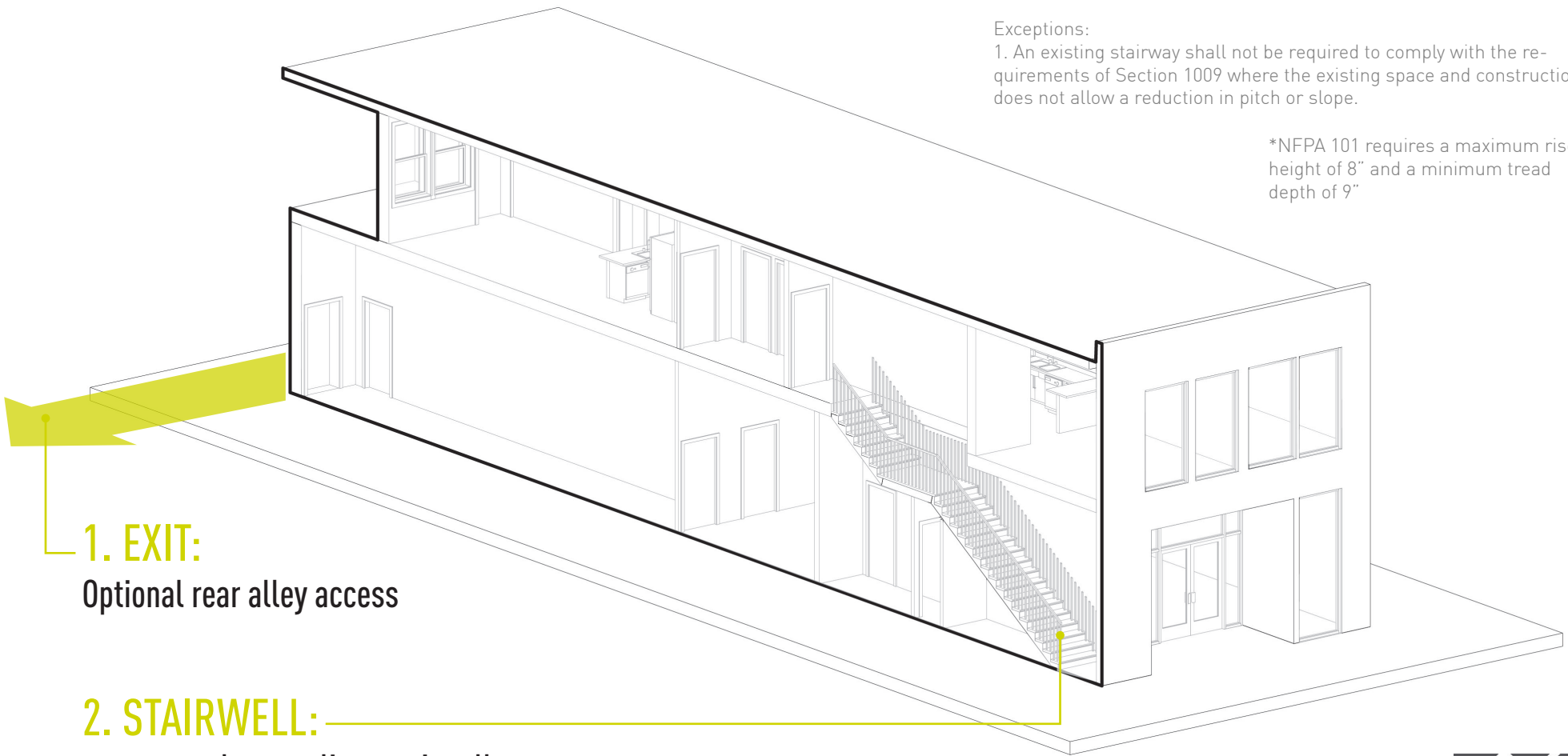
3404.1 General.

Except as provided by Section 3401.4 or this section, alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less complying with the provisions of this code 570 than the existing building or structure was prior to the alteration

Exceptions:

1. An existing stairway shall not be required to comply with the requirements of Section 1009 where the existing space and construction does not allow a reduction in pitch or slope.

*NFPA 101 requires a maximum riser height of 8" and a minimum tread depth of 9"



1. EXIT:

Optional rear alley access

2. STAIRWELL:

one non code-compliant stairwell

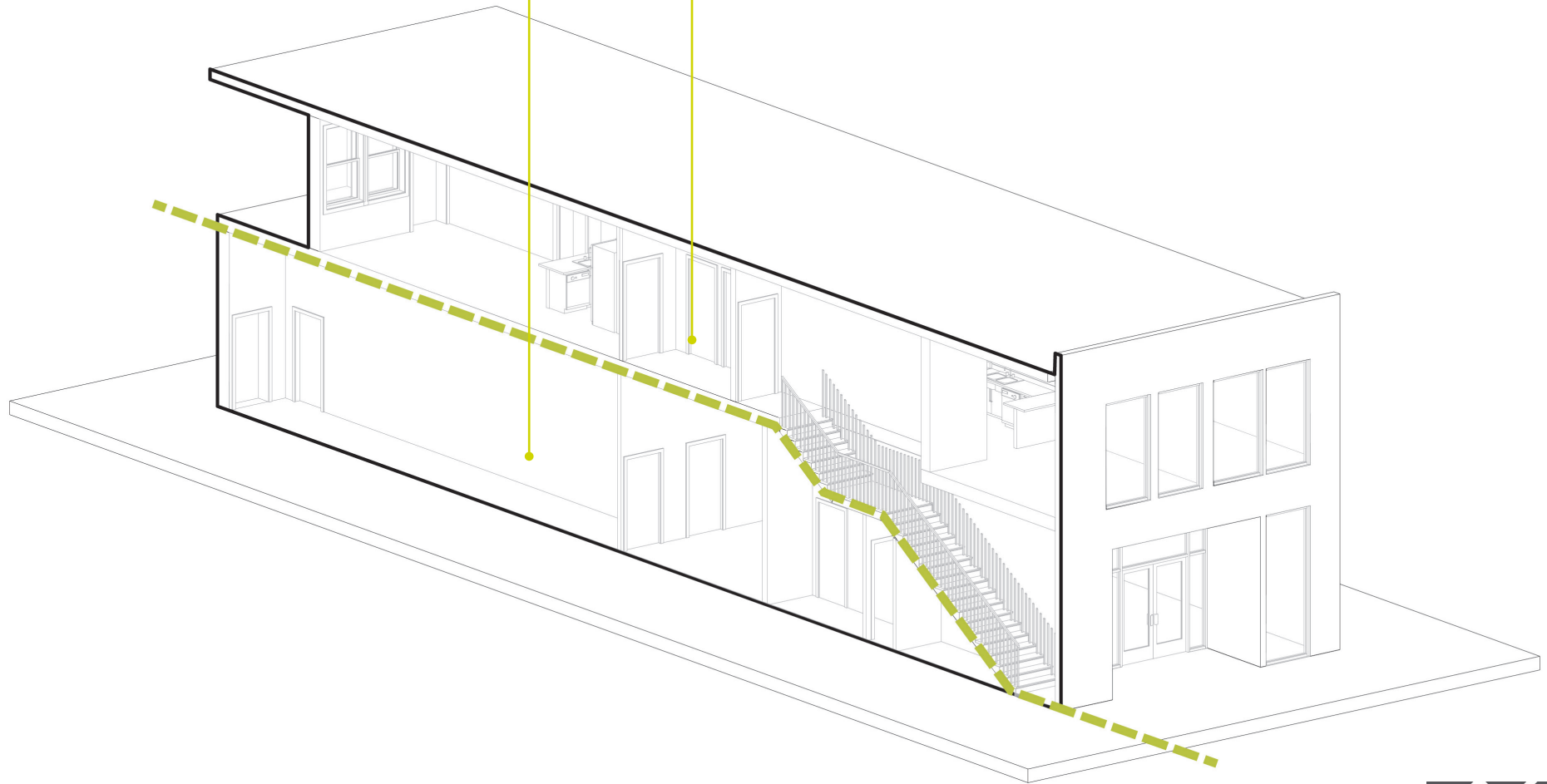
We can make some **occupancy** assumptions.

1. FIRST FLOOR:

- a) mercantile (M)
- b) business (B)

2. SECOND FLOOR:

- business (B)



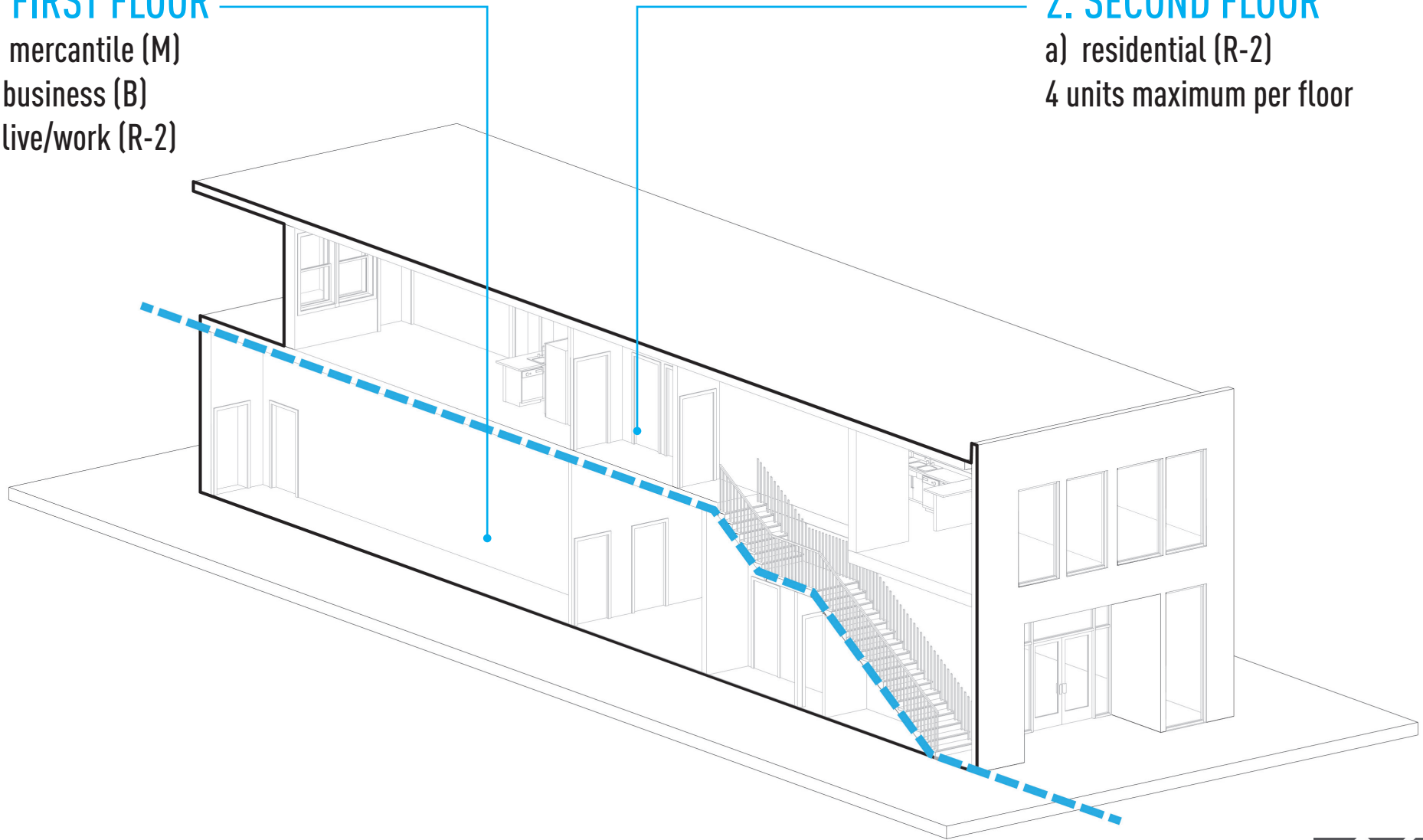
And establish some **occupancy** goals.

1. FIRST FLOOR

- a) mercantile (M)
- b) business (B)
- c) live/work (R-2)

2. SECOND FLOOR

- a) residential (R-2)
- 4 units maximum per floor



It is absolutely essential to know your building's existing occupancies. Check with your local code official to confirm.

KNOW YOUR EXISTING OCCUPANCIES

Ok, I've confirmed my existing occupancies. So is a change of occupancy allowed? What about mixed-occupancy?

Let's find out!

First, check which codes your municipality uses.

International Building Code (IBC)

Most municipalities in the U.S. have adopted the IBC as their primary model building code. As mentioned, most existing buildings do not comply with current IBC requirements for new construction.



Most jurisdictions currently use.

Int. Existing Building Code (IEBC)

The IEBC is another model code intended to provide alternative approaches for existing buildings to meet code compliance. Not many jurisdictions have adopted the IEBC.



Encourage your jurisdiction to adopt!

Now, check the International Building Code (IBC).

IBC says:

YES, change of occupancy is allowed, but...only if the new occupancy is **less hazardous** than the existing occupancy **OR** you **separate occupancies** (if mixed use).

SECTION 3408

CHANGE OF OCCUPANCY

3408.1 Conformance

No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancies, unless such building is made to comply with the requirements of this code for such division or group of occupancies. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

So how do I know what is less hazardous?

IBC doesn't say, but...

International Existing Building Code (IEBC) says:

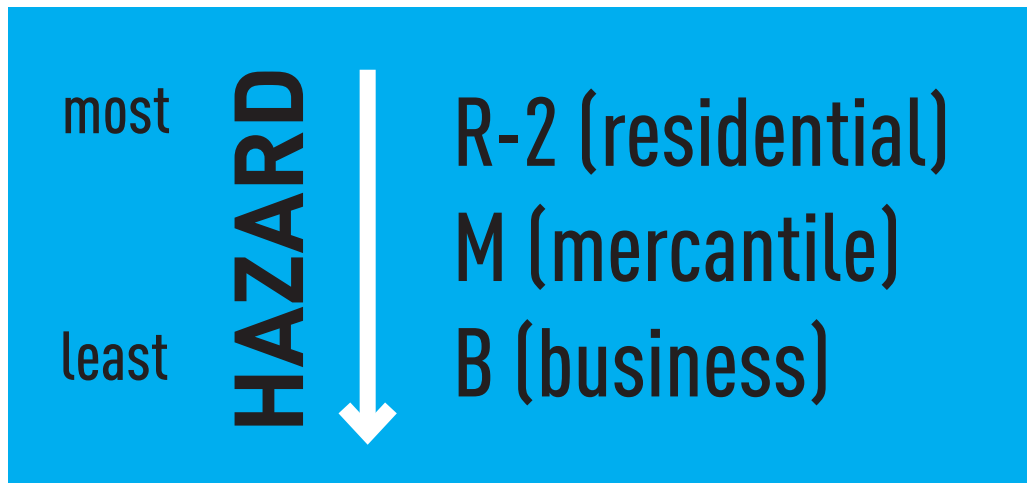


TABLE 1012.5
HEIGHTS AND AREAS HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATION
1 (HIGHEST HAZARD)	H
2	A-1, A-2, A-3, A-4, I, R-1, R-2, R-4
3	E, F-1, S-1, M
4 (LOWEST HAZARD)	B, F-2, S-2, A-5, R-3, U

And what does occupancy separation involve?

IBC says:

When residential is above, partial occupancy change in a non-sprinklered building requires **2-hour** separation between the occupancies.

SECTION 3412.2 APPLICABILITY

3412.2.2 Partial Change in Occupancy

Where a portion of the building is changed to a new occupancy classification, and that portion is separated from the remainder of the building with fire barriers or horizontal assemblies having a fire-resistance rating as required by Table 508.4 for the separate occupancies, or with approved compliance alternatives, the portion changed shall be made to comply with the provisions of this section.

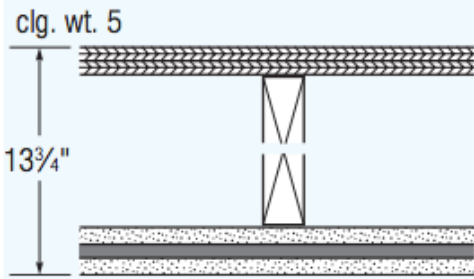
Where a portion of the building is changed to a new occupancy classification, and that portion is not separated from the remainder of the building with fire barriers or horizontal assemblies having a fire-resistance rating as required by Table 508.4 for the separate occupancies, or with approved compliance alternatives, the provisions of this section which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements which secure the greater public safety shall apply to the entire building or structure.

TABLE 508.4
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

OCCUPANCY	Ad, E		I-1, I-3, I-4		I-2		R		F-2, S-2b, U		B, F-1, M, S-1		H-1		H-2		H-3, H-4, H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
Ad, E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3a
I-1, I-3, I-4	-	-	N	N	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
I-2	-	-	-	-	N	N	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP
R	-	-	-	-	-	-	N	N	1c	2c	1	2	NP	NP	3	NP	2	NP
F-2, S-2b, U	-	-	-	-	-	-	-	-	N	N	1	2	NP	NP	3	4	2	3a
B, F-1, M, S-1	-	-	-	-	-	-	-	-	-	-	N	N	NP	NP	2	3	1	2a
H-1	-	-	-	-	-	-	-	-	-	-	-	-	N	NP	NP	NP	NP	NP
H-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	NP	1	NP

What is required for a 2-hour separation?

UL says:

2 Hour Fire-Rated Construction		Dimensional Lumber		Acoustical Performance		
Construction Detail	Description	Test Number	STC	IIC	Test Number	
 clg. wt. 5 13¾"	• Two layers 5/8" SHEETROCK FIRECODE C Core gypsum panels – 1" nominal wood sub and finished floor – 2 x 10 wood joist 16" o.c. – RC-1 channel or equivalent – joints finished	UL Des L511			Assembly not recommended when sound control is a major consideration	

Is there a way to avoid occupancy separation?

IBC says:

**Live/work units are classified as R-2 occupancy;
separation requirements do not apply.**

SECTION 419

LIVE/WORK UNITS

419.2 Occupancies

Live/work units shall be classified as a Group R-2 occupancy. Separation requirements found in Sections 420 and 508 shall not apply within the live/work unit when the live/work unit is in compliance with Section 419. High-hazard and storage occupancies shall not be permitted in a live/work unit. The aggregate area of storage in the nonresidential portion of the live/work unit shall be limited to 10 percent of the space dedicated to nonresidential activities.

Are there any limitations to a live/work occupancy?

419.1.1 Limitations. The following shall apply to all live/work areas:

1. Area

The live/work **unit** is permitted to be not greater than 3,000 square feet in area

2. Nonresidential Area

The nonresidential area is permitted to be not more than 50% of the area of each live/work unit

3. Nonresidential Location

The nonresidential area function shall be limited to the first or main floor only of the live/work unit

4. Occupancy Count

Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

Does a historic designation from IEBC help?

IEBC says:

If a sprinkler system is added to the building (including 13R), a historic designation can make code conformance much easier.

SECTION 1203

FIRE SAFETY

1203.1 Scope

This section recognizes the unique aspects associated with older historical structures. It reinforces the importance of the means of egress pathway while granting the code official some latitude in accepting some degree of variance in the egress components.

1203.2 General

Every historic building that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an approved automatic fire-extinguishing system as determined appropriate by the code official. However, an automatic fire-extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility.

Some helpful IEBC historic designation examples include:

1203.7: One-hour fire resistant assemblies

Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood or metal lath and plaster.

1203.8: Glazing in fire-resistance-rated systems

Historic glazing materials are permitted in interior walls required to have a 1-hour fire-resistance rating where the opening is provided with approved smoke seals and the area affected is provided with an automatic sprinkler system.

1203.9 & 1203.10: Stairway railings & Guards

Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally dangerous.

1205.4: Occupancy Separation

Required occupancy separations of 1 hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

What have we learned so far?

- 1 New residential ALWAYS requires a NFPA 13R sprinkler.
- 2 If you don't change your occupancy OR you move to a lower hazard occupancy, you don't have to supply a NFPA 13 sprinkler.
- 3 Once you have mixed occupancies with residential, you MUST separate occupancies with a 2-hour separation UNLESS you are live/work (which is considered R-2).
- 4 A historic designation does little to help you avoid sprinklering, but if you sprinkler it provides a lot of flexibility.

Not following?

LET'S BREAK IT DOWN!

Refer to the following color codes from here on out.



= Business



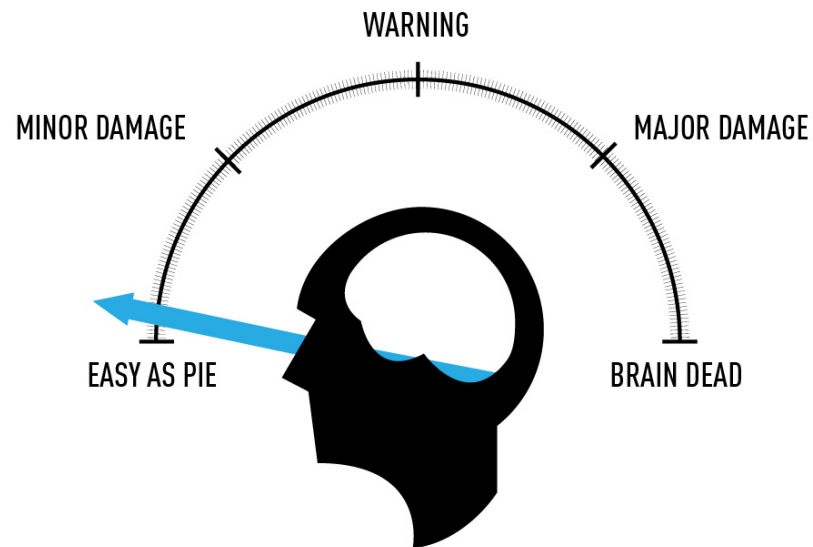
= Mercantile



= Residential (R-2)

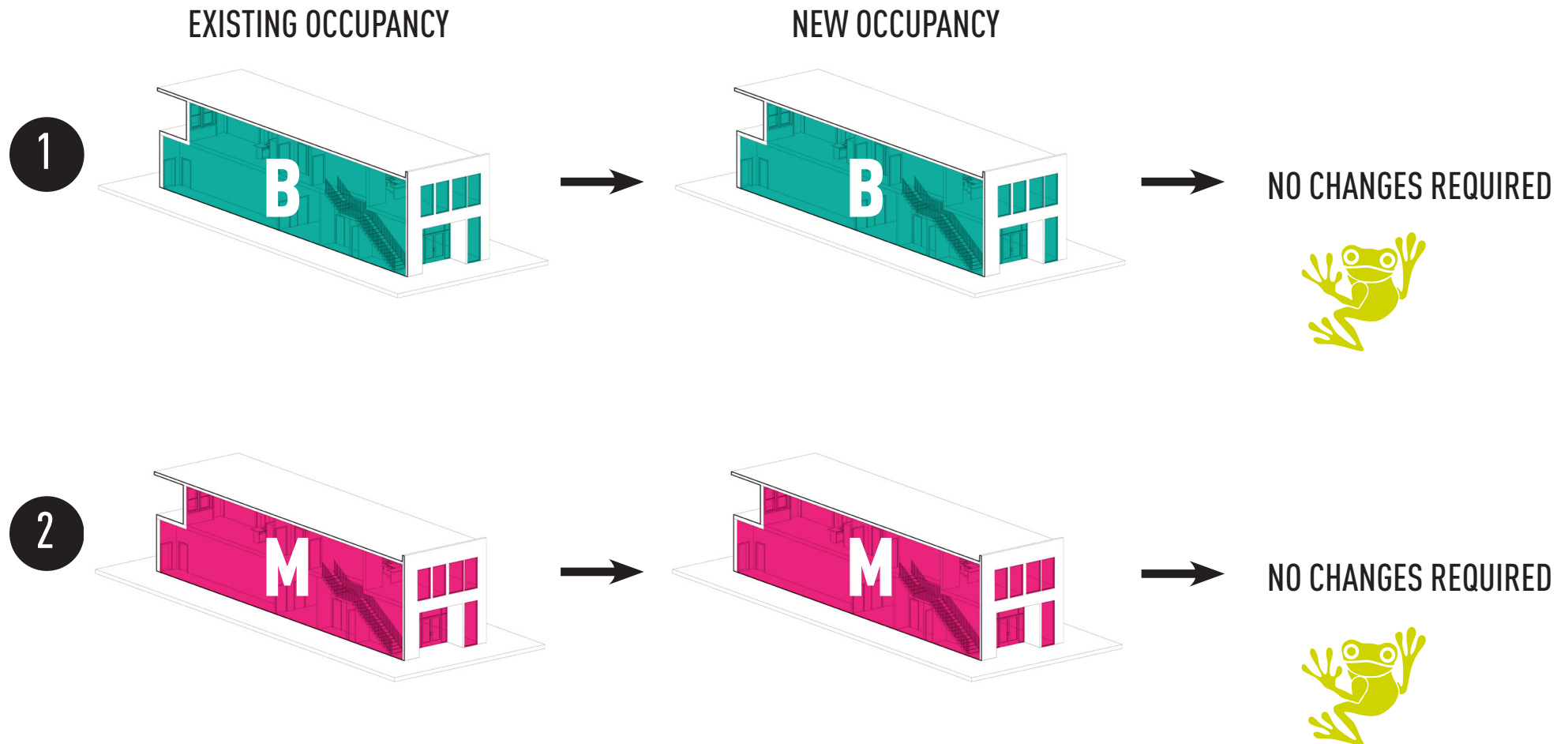
OPTION 1

NO RESIDENTIAL? NO SPRINKLERS!



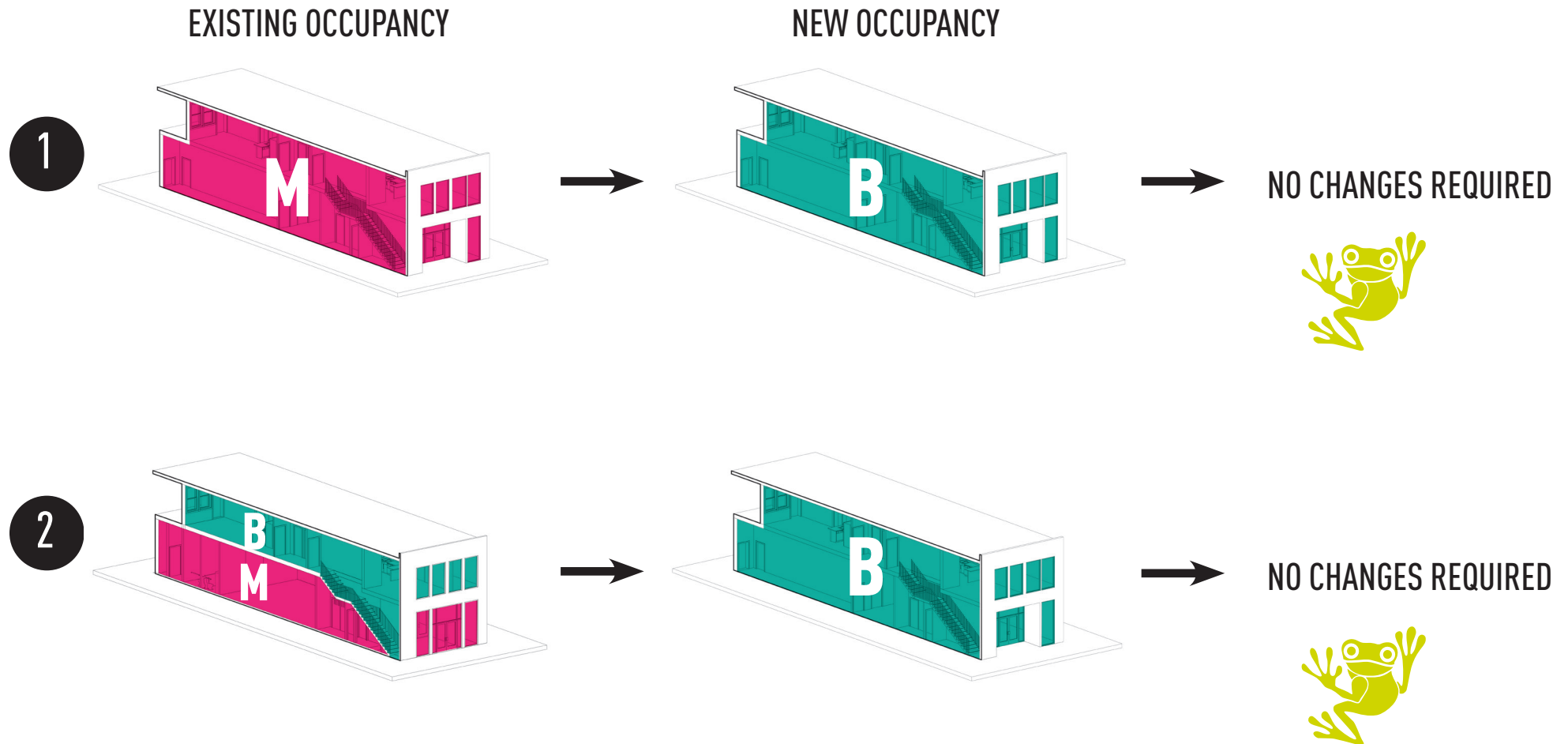
OPTION 1

NO CHANGE OF OCCUPANCY:



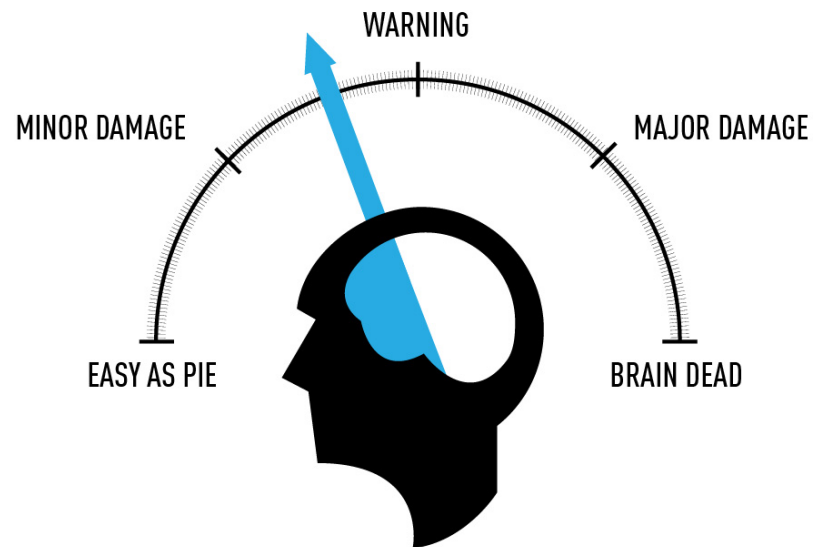
OPTION 1

CHANGE TO A LESS HAZARDOUS OCCUPANCY:



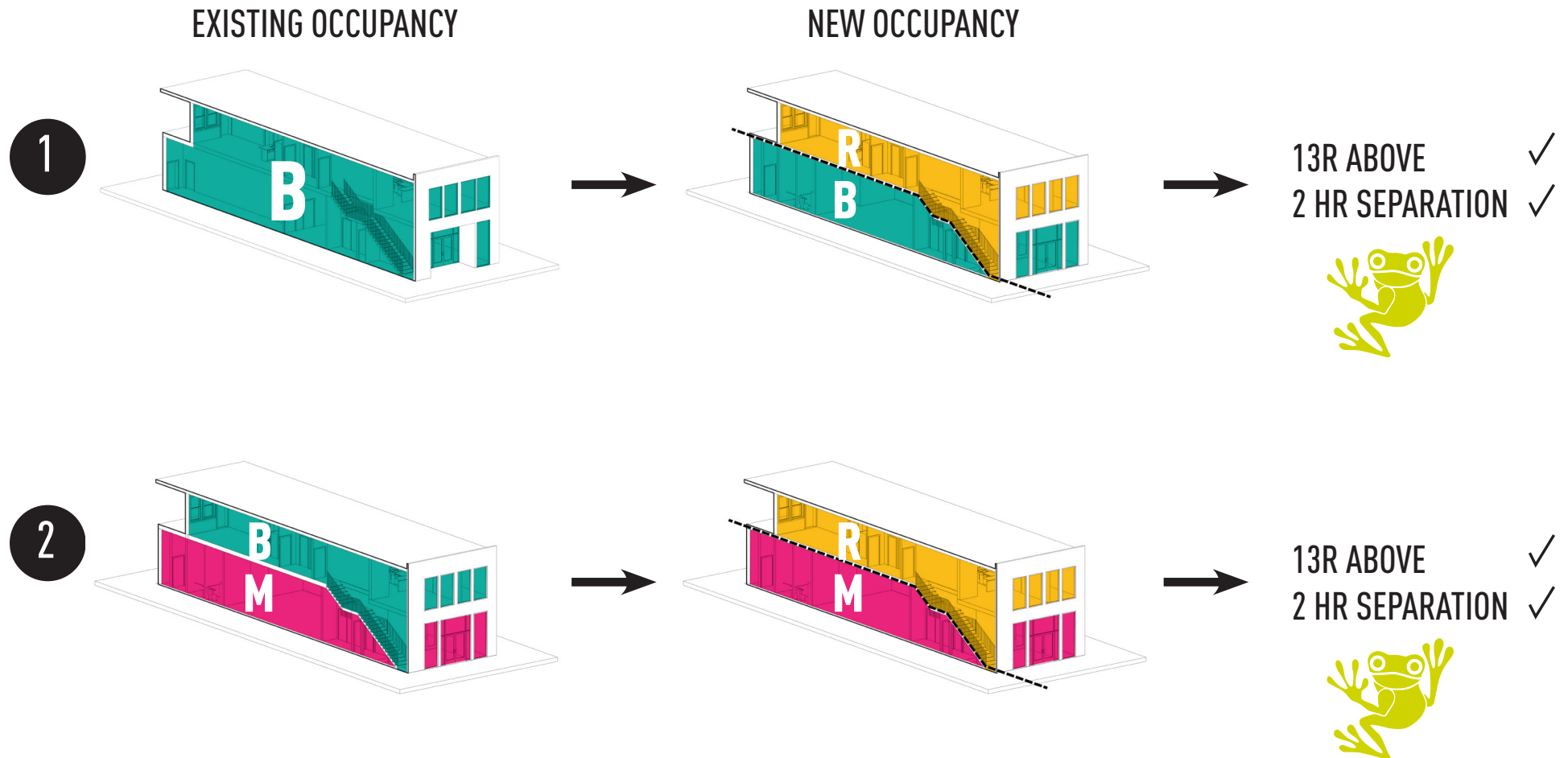
OPTION 2

RESIDENTIAL ABOVE? 13R + SEPARATION!



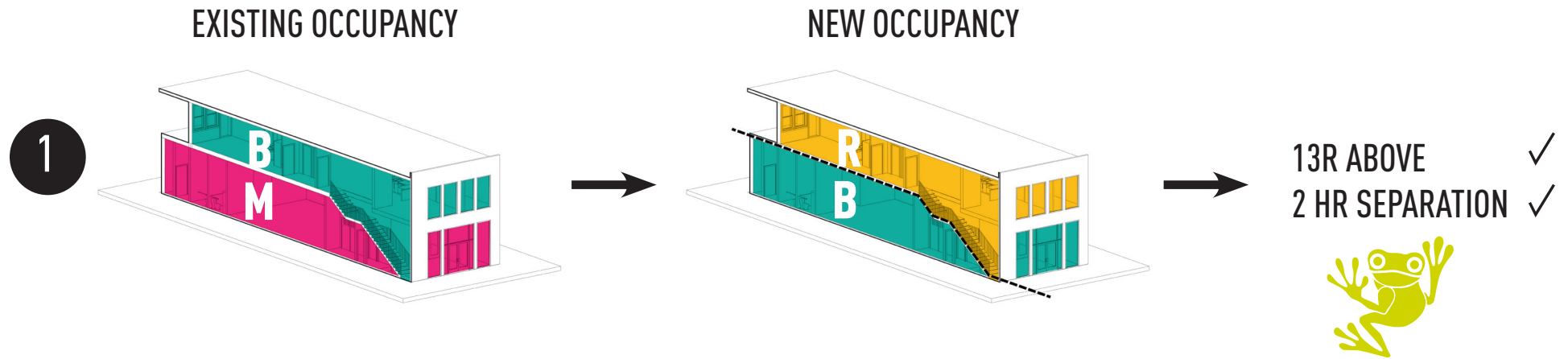
OPTION 2

RESIDENTIAL ABOVE, NO CHANGE OF OCCUPANCY BELOW:



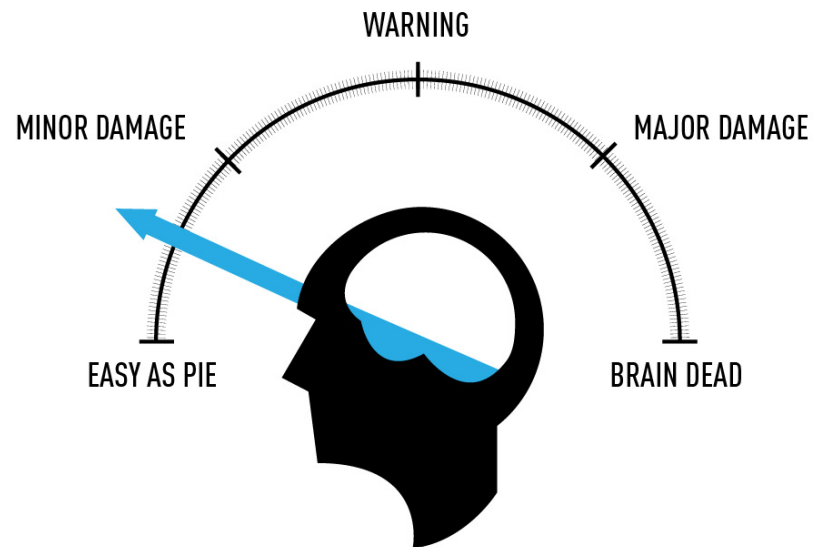
OPTION 2

RESIDENTIAL ABOVE, CHANGE TO A LESS HAZARDOUS OCCUPANCY BELOW:



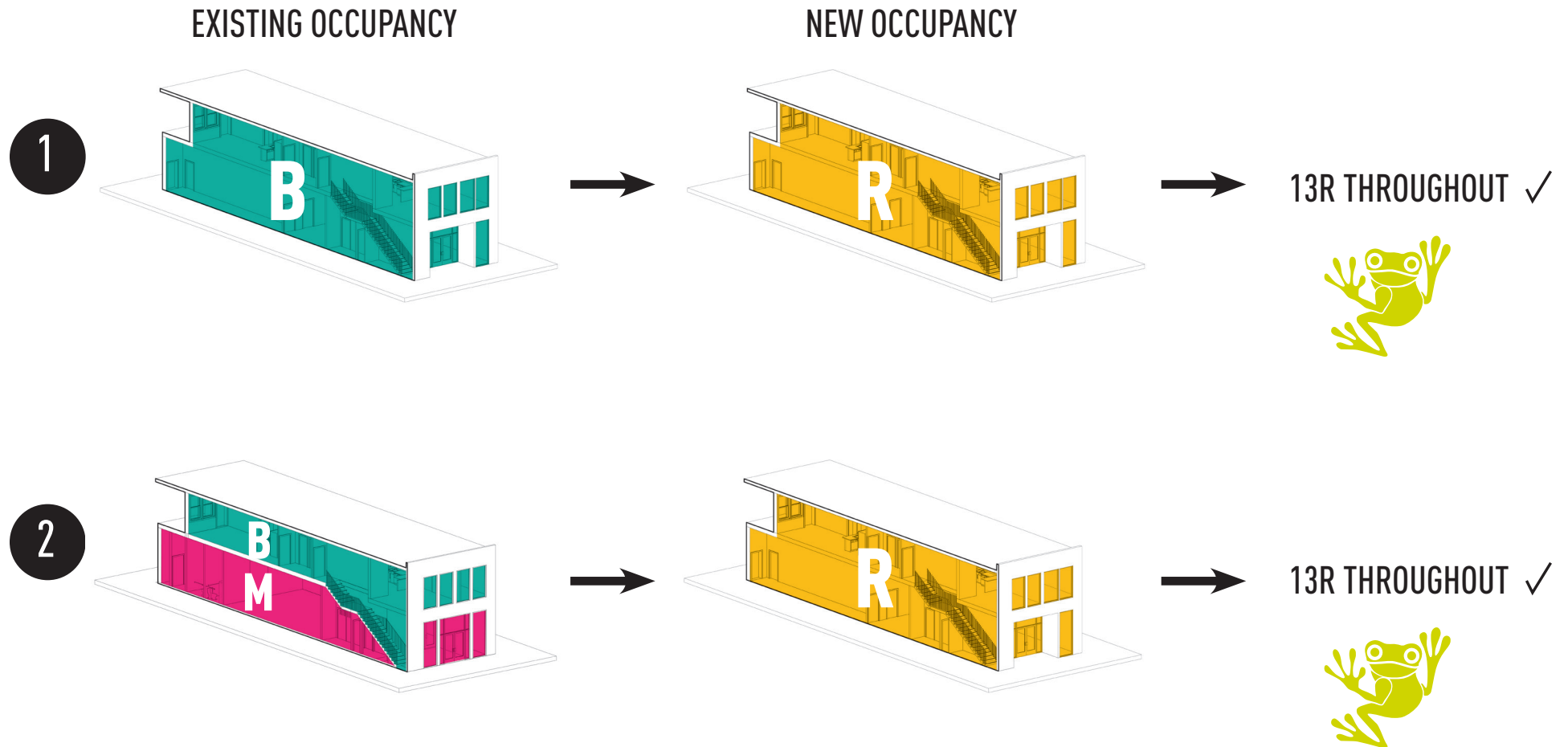
OPTION 3

LIVE/WORK? 13R ONLY!



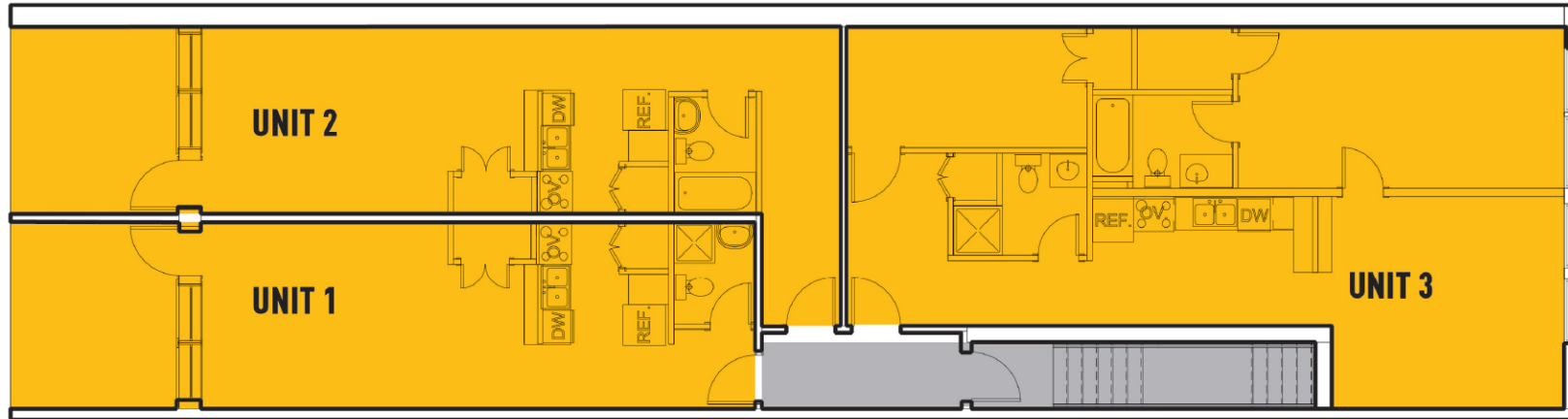
OPTION 3

RESIDENTIAL ABOVE, LIVE/WORK BELOW:



OPTION 3

SECOND FLOOR:

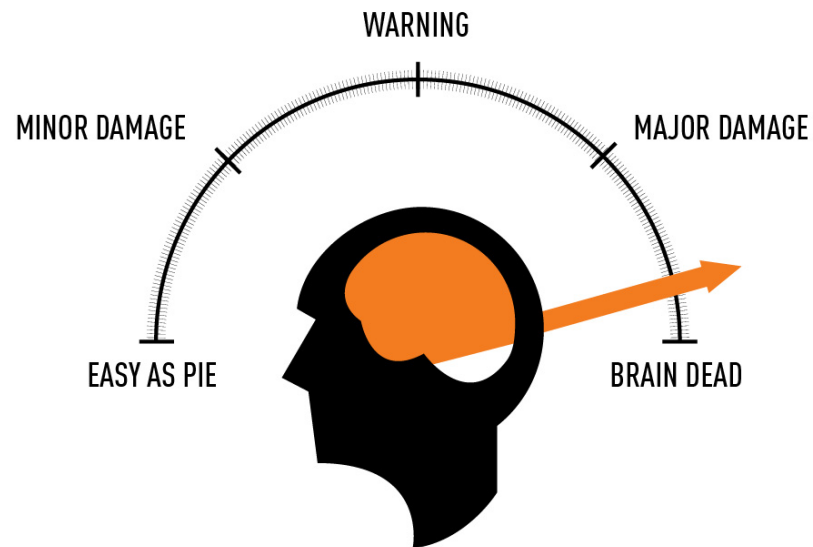


FIRST FLOOR:



ALMOST ANY OTHER OPTION

BRAIN DEAD OR TOO MUCH MONEY



The best option, in our opinion, is...

LIVE/WORK!

This option requires a 13R sprinkler throughout, which helps you leverage the best of the IEBC historic designation. It requires minimal brain damage and allows for residential and commercial uses without breaking the bank.

UNDERSTANDING ADA: A GUIDE FOR SMALL DEVELOPERS

A VERY BIG THANK YOU TO STEVE JONES

Steven R. Jones

Senior ADA Architect

Georgia State Financing and Investment Commission

State ADA Coordinator's Office

steve.jones@gsfic.ga.gov

404.463.5647

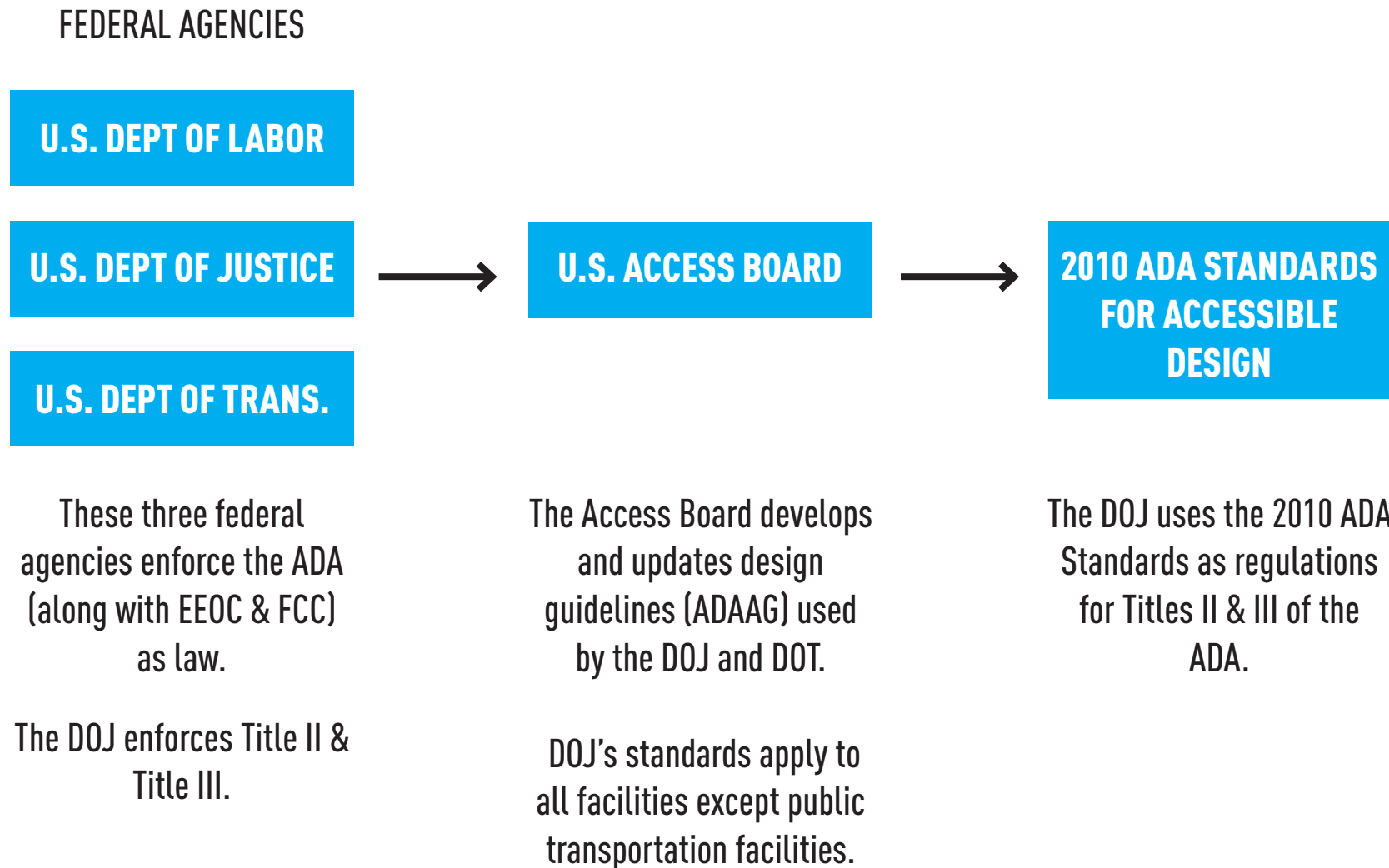


WHAT IS ADA?

The Americans with Disabilities Act (ADA) is a civil rights law passed in 1990 that prohibits discrimination against people with disabilities in employment, transportation, public accommodation, communications, and governmental activities.



WHO ENFORCES THE ADA?



WHAT PART OF THE ADA SHOULD I BE FAMILIAR WITH?

TITLE II (State & Local Government)

The Department of Justice regulations that implement the ADA for state and local governments

Title II of the ADA prohibits discrimination against qualified individuals with disabilities in all programs, activities, and services of public entities. It applies to all state and local governments, their departments and agencies, and any other instrumentalities or special purpose districts of state or local governments. It clarifies the requirements of section 504 of the Rehabilitation Act of 1973, as amended, for public transportation systems that receive federal financial assistance, and extends coverage to all public entities that provide public transportation, whether or not they receive federal financial assistance. It establishes detailed standards for the operation of public transit systems, including commuter and intercity rail (e.g., AMTRAK). This title outlines the administrative processes to be followed, including requirements for self-evaluation and planning; requirements for making reasonable modifications to policies, practices, and procedures where necessary to avoid discrimination; architectural barriers to be identified; and the need for effective communication with people with hearing, vision and speech disabilities. This title is regulated and enforced by the U.S. Department of Justice.

TITLE III (Public Accommodations)

The Department of Justice regulations that implement the ADA for businesses and non-profit service providers (public accommodations and commercial facilities)

This title prohibits private places of public accommodation from discriminating against individuals with disabilities. Examples of public accommodations include privately-owned, leased or operated facilities like hotels, restaurants, retail merchants, doctor's offices, golf courses, private schools, day care centers, health clubs, sports stadiums, movie theaters, and so on. This title sets the minimum standards for accessibility for alterations and new construction of facilities. It also requires public accommodations to remove barriers in existing buildings where it is easy to do so without much difficulty or expense. This title directs businesses to make "reasonable modifications" to their usual ways of doing things when serving people with disabilities. It also requires that they take steps necessary to communicate effectively with customers with vision, hearing, and speech disabilities. This title is regulated and enforced by the U.S. Department of Justice.

WHAT DOES THE ADA REQUIRE?

The ADA requires that **all newly constructed facilities** housing places of public accommodation, as well as commercial facilities such as office buildings, **be accessible**.

WHAT DOES **PUBLIC ACCOMMODATION** MEAN?

A facility whose operations affect commerce and fall within at least one of the following 12 categories:

1. Places of lodging (e.g., inns, hotels, motels, except for owner-occupied establishments renting fewer than six rooms)
2. Establishments serving food or drink (e.g. , restaurants and bars)
3. Places of exhibition or entertainment (e.g. , motion picture houses, theaters, concert halls, stadiums)
4. Places of public gathering (e.g. , auditoriums, convention centers, lecture halls)
5. Sales or rental establishments (e.g. , bakeries, grocery stores, hardware stores, shopping centers)
6. Service establishments (e.g. , laundromats, dry-cleaners, banks, barber shops, beauty shops, travel services, shoe repair services, funeral parlors, gas stations, offices of accountants or lawyers, pharmacies, insurance offices, professional offices of health care providers, hospitals)
7. Public transportation terminals, depots, or stations (not including facilities relating to air transportation)
8. Places of public display or collection (e.g. , museums, libraries, galleries)
9. Places of recreation (e.g. , parks, zoos, amusement parks)
10. Places of education (e.g. , nursery schools, elementary, secondary, undergraduate, or postgraduate private schools)
11. Social service center establishments (e.g. , day care centers, senior citizen centers, homeless shelters, food banks, adoption agencies)
12. Places of exercise or recreation (e.g. , gymnasiums, health spas, bowling alleys, golf courses).

WHAT STANDARDS MUST FACILITIES FOLLOW?

PLACES OF PUBLIC ACCOMMODATION

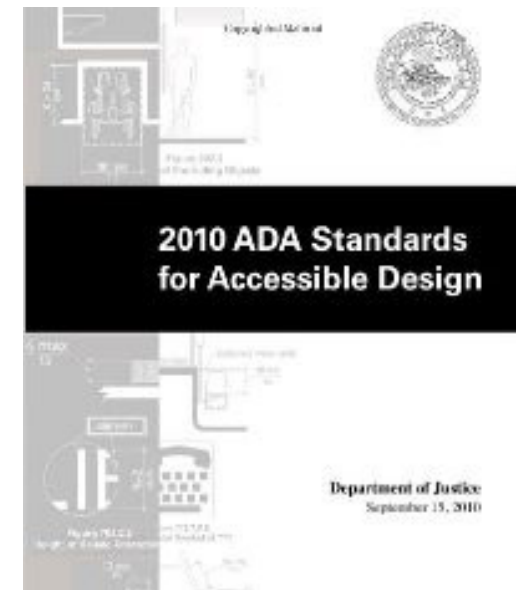
must follow the 2010 ADA Standards for Accessible Design for barrier removal, new construction and alterations.

COMMERCIAL FACILITIES

must follow the 2010 ADA Standards for Accessible Design for new construction and alterations.

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

set minimum requirements – both scoping and technical -- for newly designed and constructed or altered public accommodations and commercial facilities to be readily accessible to and usable by individuals with disabilities.



MUST EVERY FEATURE OF A NEW FACILITY BE ACCESSIBLE?

No, there are some exceptions and exempted spaces.

Certain nonoccupiable spaces such as elevator pits, elevator penthouses, and piping or equipment catwalks need not be accessible. There are also certain exempted spaces, such as raised areas less than 300 sq.ft. and mezzanines in one story buildings. See ADAAG 4.1.1(5)(b) for more detailed information.

ELEVATOR EXEMPTION

36.401(d)

Elevators are generally not required in facilities **under three stories**
OR with fewer than 3,000 square feet per floor, unless the building is a shopping center or mall; the professional office of a health care provider; a terminal, depot, or other public transit station; or an airport passenger terminal.

WHAT ABOUT BUILDINGS BUILT BEFORE THE ADA?

36.402(a)(1)

For places of public accommodation / commercial facilities that existed on or before January 26, 1992, any alterations undertaken after this date shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities.

Translation: An existing building not undergoing alterations is not obligated to the same standards as a building undergoing alterations, but rather is obligated to 'readily achievable barrier removal.'

WHAT DOES “READILY ACHIEVABLE” MEAN?

“ ... easily accomplishable and able to be carried out without much difficulty or expense.” (§36.104)

You should:

- Identify existing barriers
- Create a plan to address these barriers
- Address said barriers as your resources permit (barrier removal is ongoing)

Priorities for barrier removal:

- Getting in (parking, exterior routes, entrance, etc.)
- Areas where goods and services are available
- Restrooms
- Other elements

WHAT IS AN ALTERATION?

36.402(b)(1)

A change to a place of public accommodation or a commercial facility that **affects or could affect the usability** of the building or facility or any part thereof.

Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, resurfacing of circulation paths or vehicular ways, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. **Normal maintenance, re-roofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.**

WHAT IS AN ALTERATION & WHAT IS NORMAL MAINTENANCE?

Factors to consider in determining whether changes are alterations under the 2010 Standards:

- The overall **cost** of the change relative to the size (physical and financial) of the facility or relevant part thereof. Large and expensive changes or significant reconfiguration are alterations.
- The **scope** of the change (including what portion of the facility or relevant part thereof was modified).
- The **reason** for the change (including whether the goal is maintenance or improvement, and whether it is to change the purpose or function of the facility).
- Whether the change **affects** only the facility's surfaces such as painting and floor covering or also structural attachments and fixtures that are part of the facility.

MUST EVERY FEATURE OF AN ALTERED FACILITY BE ACCESSIBLE?

In short, no.

SO WHAT DO I NEED TO UNDERSTAND?

36.403(a)

An alteration that affects or could affect the usability of or access to an area of a facility that contains a **primary function** shall be made so as to ensure that, to the **maximum extent feasible**, the **path of travel** to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is **disproportionate** to the cost of the overall alteration.

UNDERSTANDING THE ABOVE STATEMENT IS IMPERATIVE! LET'S BREAK IT DOWN.

And remember: the law is there to protect equal access, and this should never be undermined by technicalities.

PRIMARY FUNCTION AREA

WHAT IS A PRIMARY FUNCTION AREA?

36.403(b)

A primary function is a major activity for which the facility is intended.

Areas that contain a primary function include, but are not limited to, the customer services lobby of a bank, the dining area of a cafeteria, the meeting rooms in a conference center, as well as offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, and restrooms are not areas containing a primary function.

WHY IS IT IMPORTANT?

When alterations affect the usability of or access to a primary function area, an accessible path of travel to the altered area must also be provided. The bathrooms, telephones, and drinking fountains serving that area are considered part of the path of travel.

Translation: Only alterations affecting primary function areas trigger an expanded scope of work, and then only to improve accessibility to the primary function area and amenities serving the area.

WHAT DO ALTERATIONS INCLUDE?

36.403(c)(1)

Alterations that affect the usability of or access to an area containing a primary function include, but are not limited to –

- (i) Remodeling merchandise display areas or employee work areas in a department store;
- (ii) Replacing an inaccessible floor surface in the customer service or employee work areas of a bank;
- (iii) Redesigning the assembly line area of a factory; or
- (iv) Installing a computer center in an accounting firm.

MORE IMPORTANTLY, WHAT IS NOT INCLUDED?

For the purposes of this section, normal maintenance, alterations to windows, hardware, controls, electrical outlets, and signage shall not be deemed to be alterations that affect the usability of or access to an area containing a primary function.

MAXIMUM EXTENT FEASIBLE

WHAT DOES 'MAXIMUM EXTENT FEASIBLE' MEAN?

36.402(c)

The phrase “to the maximum extent feasible” applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration.

In these circumstances, the alteration shall provide the maximum physical accessibility feasible. Any altered features of the facility that can be made accessible shall be made accessible. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would not be feasible, the facility shall be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments).

WHY IS IT IMPORTANT?

36.402(a)(1)

Any alteration to a place of public accommodation or a commercial facility, after January 26, 1992, shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs.

Translation: If accessibility standards would require something “technically infeasible”, the alteration should accommodate accessibility only as is feasible and appropriate. For example, altering a load-bearing structural member would be considered technically infeasible.

HOW DO I DOCUMENT FEASIBILITY?

No particular decision making process is required to determine that an accessibility improvement is not technically feasible, but the best practice is to document the decision to explain the decision in any later compliance review.

WHAT IF MY BUILDING IS HISTORIC?

36.405(a)

Alterations to buildings or facilities that are eligible for listing in the National Register of Historic Places under the National Historic Preservation Act (16 U.S.C. 470 et seq) or are designated as historic under State or local law, shall comply to the **maximum extent feasible** with this part.

36.405(b)

If it is determined that it is not feasible to provide physical access to a historic property that is a place of public accommodation in a manner that will **not threaten or destroy the historic significance** of the building or the facility, alternative methods of access shall be provided pursuant to the requirements of subpart C of this part.

FOR EXAMPLE:

Exceptions for Qualified Historic Facilities

(where compliance would threaten or destroy a facility's historic significance)

Vertical access to stories above or below the accessible story is not required (§206.2.3, Ex. 7).



At least 1 unisex **toilet room** or 1 men's and 1 women's room is required to comply (§213.2, Ex. 2).



At least 1 **accessible route** is required from a site arrival point to an accessible entrance (§206.2.1, Ex. 1).

At least 1 **public entrance** is required to be accessible (if that would also threaten the historic significance, access can be provided to a non-public entrance but a notification or remote monitoring system is required for locked entrances) (§206.4, Ex. 2).



If an accessible entrance (a ramp or lift) would threaten the historic significance of the structure, access can be provided to a non-public entrance with the addition of a doorbell or remote monitoring system at the public entry.

PATH OF TRAVEL

WHAT IS THE PATH OF TRAVEL?

36.403(e)

(1) A “path of travel” includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility.

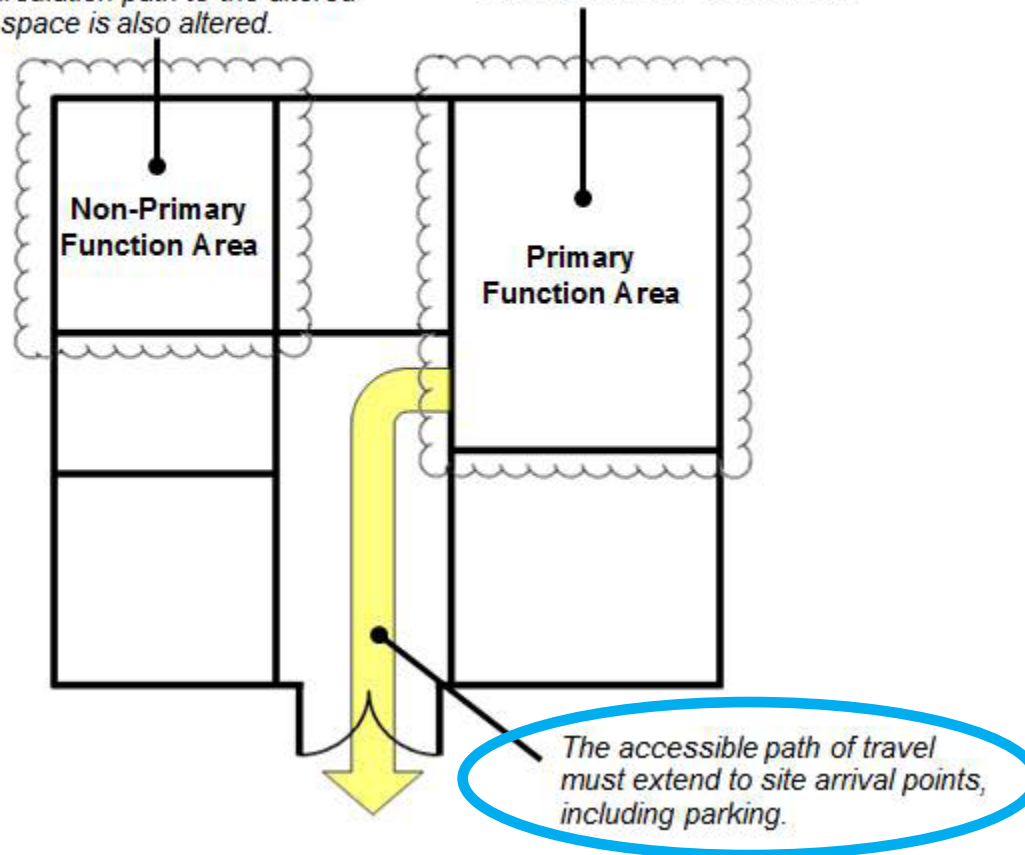
(2) An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements.

(3) For the purposes of this part, the term “path of travel” also includes the restrooms, telephones, and drinking fountains serving the altered area.

WHERE DOES IT BEGIN?

Altered elements and spaces are required to comply. In areas not containing a primary function, an accessible route to an altered element or space is required only when the circulation path to the altered element or space is also altered.

Alterations made to areas containing a primary function also require an accessible path of travel to the extent that it is not "disproportionate" to the cost.



WHAT IF I'M A TENANT AND NOT THE BUILDING OWNER?

36.403(d)

If a tenant is making alterations as defined in § 36.402 that would trigger the requirements of this section, those alterations by the tenant in areas that only the tenant occupies do not trigger a path of travel obligation upon the landlord with respect to areas of the facility under the landlord's authority, if those areas are not otherwise being altered.

Translation: The landlord is not required to make path of travel improvements if a tenant is making improvements to just their space.

DISPROPORTIONALITY (THE 20% RULE)

WHAT IS THE 20% RULE?

36.403(f)(1)

Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.

Translation: Costs exceeding 20% of the applicable costs (alteration costs to the primary function area) are considered disproportionate.

HOW DO I CALCULATE IT?

If one were to spend \$100,000 to alter a primary function area, one would have to spend up to an additional \$20,000 towards creating an accessible path of travel to the altered area and the restrooms, telephones, and drinking fountains. Any expenses of creating an accessible path of travel in the alteration of the primary function area in excess of the 20% would be considered disproportionate and therefore not required.

$$\text{NET ALTERATION COSTS} * 20\% = \text{MAXIMUM PATH OF TRAVEL COSTS}$$

Note that alteration costs should only include costs that are planned that in no way increase the accessibility of the primary function area, or to already accessible elements.

WHAT COUNTS TOWARDS MY NET ALTERATION COSTS?

Only alterations **that affect the usability of or access to the primary function area** of the building / facility being altered should be applied towards your construction cost.

Examples of exempt costs include:

- Alterations to windows
- Hardware
- Controls
- Electrical outlets
- Lighting
- Signage
- Normal maintenance
- Re-roofing
- Painting
- Wallpapering
- Asbestos removal
- Changes to mechanical & electrical systems (HVAC)
- Installation or alteration of fire protection systems (IBC)

$$\begin{array}{r} \text{OVERALL COSTS} \\ - \text{EXEMPT COSTS} \\ \hline \text{NET ALTERATION COSTS} \end{array}$$

These items are permissible only if allowable under the established criteria, and as enforced by the DOJ. If you have specific questions about non-contributing costs, contact your state ADA representative.

WHAT COUNTS TOWARDS MY PATH OF TRAVEL COSTS?

36.403(f)(2)

Costs that may be counted as expenditures required to provide an accessible path of travel may include:

- Providing an **accessible entrance** and an accessible route to the altered area, for example, the cost of widening doorways or installing ramps;
- Making **restrooms** accessible, such as installing grab bars, enlarging toilet stalls, insulating pipes, or installing accessible faucet controls;
- Providing accessible **telephones**, such as relocating the telephone to an accessible height, installing amplification devices, or installing a text telephone (TTY);
- Relocating an inaccessible **drinking fountain**

These expenses also consist of items such as walls, flooring, ceiling, painting, doors, door hardware, moving electrical and/or mechanical systems to work with revised layouts. Accessible elements contained within the spaces such as grab bars, water closets, pipe insulation, and accessible controls are also included in the expenses. Relocating existing items such as grab bars, lavatories, and accessories may also be included.

WHAT HAPPENS IF MY PATH OF TRAVEL COSTS EXCEED 20%?

36.403(g)(1)

When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be **made accessible to the extent that it can be made accessible without incurring disproportionate costs.**

WHICH PATH OF TRAVEL ELEMENTS SHOULD BE PRIORITIZED?

36.403(g)(2)

In choosing which accessible elements to provide, priority should be given to those **elements that will provide the greatest access**, in the following order:

- (i) An accessible entrance;
- (ii) An accessible route to the altered area;
- (iii) At least one accessible restroom for each sex or a single unisex restroom;
- (iv) Accessible telephones;
- (v) Accessible drinking fountains; and
- (vi) When possible, additional accessible elements such as parking, storage, and alarms.

If your 20% cost is not enough to cover the first priority (an accessible entrance), you would do upgrades until you reach your maximum required cost. For example, if achieving required maneuvering clearances at your front door would require reconfiguring the building and exceed your 20% cost requirement, you could instead provide an automatic door opener. The cheapest means necessary to attain the goal (access) is acceptable as long as it meets the requirements. It would be a good idea to document a plan to finish those improvements as part of a future renovation.

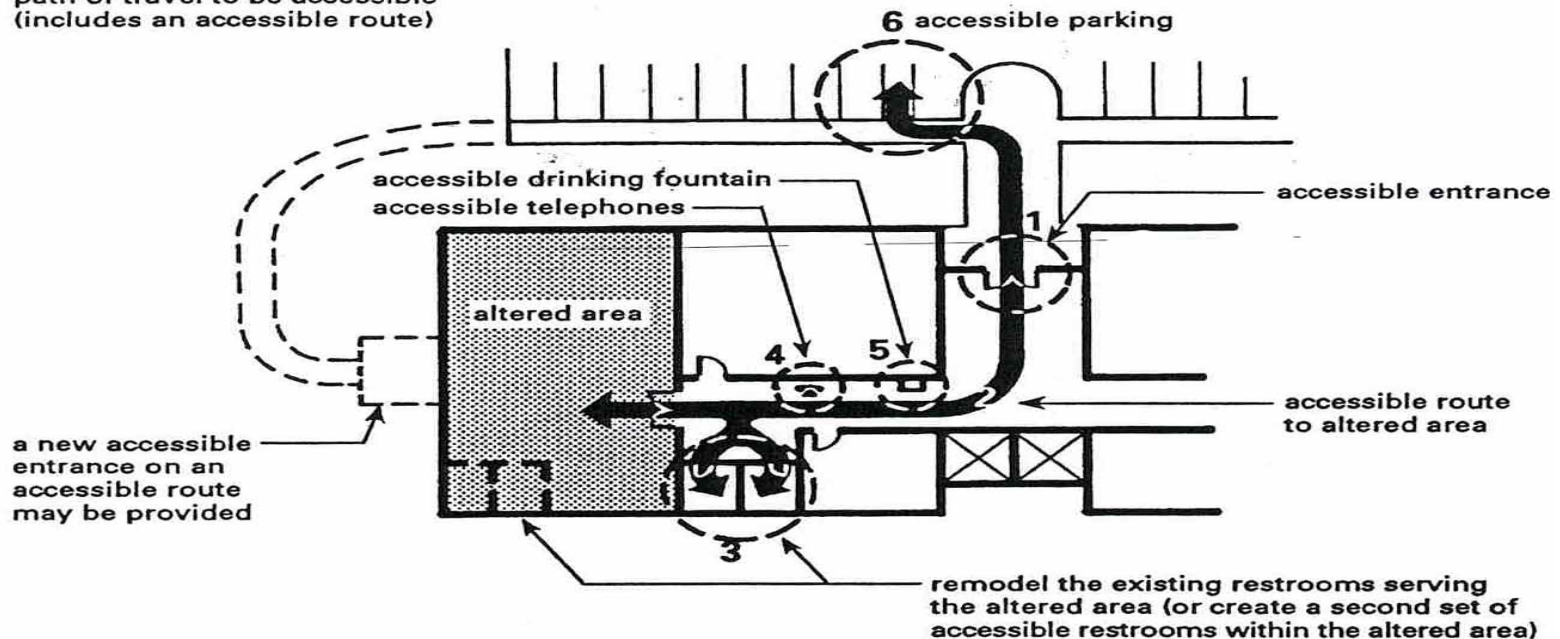
WHICH PATH OF TRAVEL ELEMENTS SHOULD BE PRIORITIZED?

1. entrance
2. route to primary function area
3. elements serving the primary function area

Priorities for Providing Accessible Path of Travel and Accessible Elements When Disproportionate Costs Exist:

1. an accessible entrance,
2. an accessible route to the altered area,
3. at least one accessible restroom for each sex, or an accessible unisex restroom
4. accessible telephones,
5. accessible drinking fountains, and
6. additional accessible elements such as parking, storage, and alarms.

alteration to primary function area triggers the requirement for the path of travel to be accessible (includes an accessible route)



WHAT DOES AN ACCESSIBLE ENTRANCE INCLUDE?

- Providing access to your entrance from site arrival points (public sidewalks, parking areas, passenger loading zones, public transportation). It's not necessarily an "or" situation, HISTORIC REQUIRES NO MORE THAN 1 ACCESSIBLE ROUTE FROM A SITE ARRIVAL POINT TO AN ACCESSIBLE ENTRANCE.
- Entrance Doors; ideally the main, public entrance. If using an alternative accessible entrance, it must be able to be used independently and open (unlocked) during the same hours as the main entrance. If not all entrances are accessible, provide a sign for the accessible entrance.

HOW DO I DOCUMENT MY 20% COSTS?

Documentation should be coordinated with your AHJ (authority having jurisdiction). Some AHJ's have forms to fill out.

NAU WORKSHEET	
ADA path of travel improvements, 20% Disproportionate costs	
NAU Project Number: _____	
Project Name: _____	
Name, Title of person completing this worksheet: _____	
#1 Net Construction Cost of "Alteration" to the "Primary Function" areas (1')	#2 Required 20% cost (2')
\$ _____ Overall Costs - Exempt Costs = Net Costs	\$ _____ Net Costs - 80% = 20% Disproportionate Costs
28 CFR 35.151(b)(4)(iv) (B), (1) thru (6): In choosing which accessible elements to provide, priority should be given to those elements that will provide the greatest access, in the following order (3')	
#4 Costs associated with providing An accessible entrance; (4')	+\$ _____
#5 Costs associated with providing An accessible route to the altered area; (5')	+\$ _____
#6 Costs associated with providing At least one accessible restroom for each sex or a single unisex restroom; (6')	+\$ _____
#7 Costs associated with providing Accessible telephones; (7')	+\$ _____
#8 Costs associated with providing Accessible drinking fountains; (8')	+\$ _____
#9 Costs associated with providing additional accessible elements such as parking, storage, and alarms. (9')	+\$ _____
#10 Total cost of accessible element upgrades to the "path of travel" (10')	= \$ _____

Page 3 of 8
5-10-2012

NAU WORKSHEET ADA path of travel improvements, 20% Disproportionate costs

https://nau.edu/uploadedFiles/Administrative/Finance_and_Administration/Facility_Services/Documents/FS-Toolbox/Plan_Review,_Permit/FS%2035A%20WORKSHEET%20ADA%20path%20of%20travel%20improvements%2020percent%20Disproportionate%20costs%205-10-2012.docx

LET'S REVIEW.

36.403(a)

An alteration that affects or could affect the usability of or access to an area of a facility that contains a **primary function** shall be made so as to ensure that, to the **maximum extent feasible**, the **path of travel** to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs, unless the cost and scope of such alterations is **disproportionate** to the cost of the overall alteration.

...and now we know disproportionate means **exceeding 20% of net alteration costs to the primary function area.**

But remember, the law is there to protect equal access, and this should not be undermined by technicalities.

MORE INFORMATION

- <https://www.access-board.gov/attachments/article/999/alterations.pdf>
- <https://www.ada.gov/smbusgd.pdf>
- <https://www.ada.gov/taman3.html>

PRESENTATION PDF AVAILABLE ON:

- www.kronbergwall.com/blog/

SMALL SCALE REDEVELOPMENT IS NOT IMPOSSIBLE!

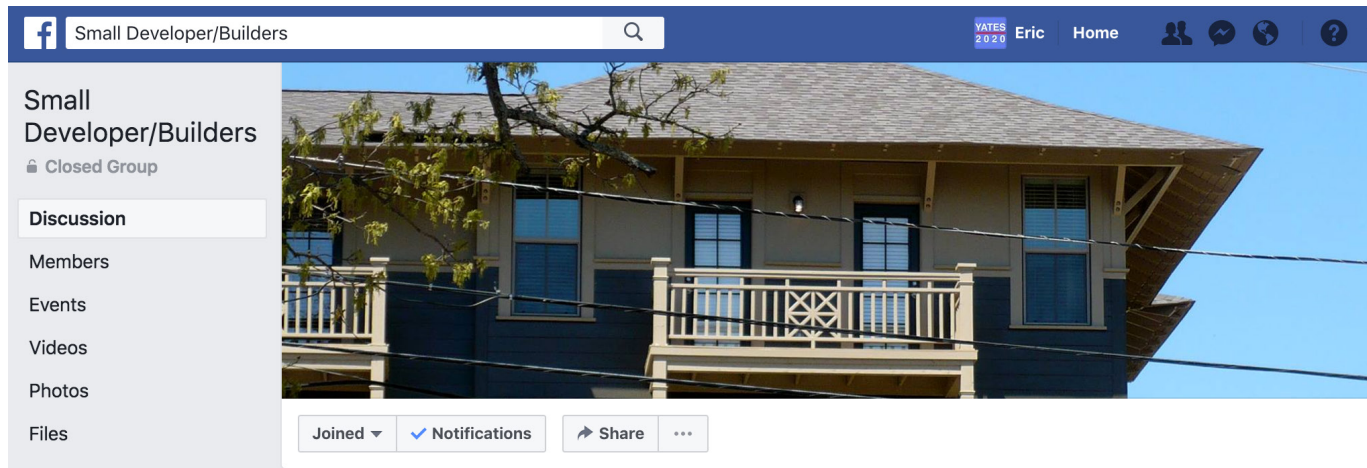


If you understand the hurdles and solutions to these hurdles, and you can make it happen!

OTHER SOURCES: Check 'em out!



<http://www.incrementaldevelopment.org/>



<https://www.facebook.com/groups/smalldevelopersandbuilders/?ref=bookmarks>

Now you're ready to get going.

THANK YOU!



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