# Visual Preference Survey

• For each slide, those surveyed ranked the image:

-3 = Dislike 0 = No Opinion 3 = Like

- Below the ranking, comments those surveyed had regarding the image are listed.
- This is about preference and desire, those surveyed gave a gut reaction.



- AVERAGE: 2 MEDIAN: 2
  - •Too Close
  - •Nice setback (2)
  - •Historic look/feel
  - •Nice and walkable
  - •Lots of green
  - •Ok, not great (2)
  - •Neighborhood feel
  - Very appealing
  - •Lots of green (3)
  - •Old house in good condition



- AVERAGE: 1 MEDIAN: 2
  - •Needs trees (2)

•Too sterile

- •Minimal landscaping
- •Porch is nice (3)
- •Too cookie cutter
- •OK, not great (2)
- •Fence feels standoffish
- •Old house in good condition
- •Set back is good

•Well kept

#### Residential - 3 AVERAGE: -1 MEDIAN: -2



- •Waste of water (2)
- •Can't do
- •Ugh
- •Florida
- •High density (2)
- •Kind of crowded no public access
- •No trees
- •No good
- Artificial
- •Too planned
- •Cookie cutter
- •Not ideal for Dover



```
AVERAGE: -3
MEDIAN: -3
```

- •Looks worse from the sky
- •Even worse (2)
- •Too crammed and over crowded (4)
- •Very high density
- •Eek big city
- •Yuck
- •Terrible
- •Cookie Cutter (2)
- •Not ideal for Dover



- AVERAGE: 0 MEDIAN: -1 •Not creative •Ugly power lines (4)
  - •Traditional neighborhood, remove p-lines
  - •Chain link fence is ugly
  - •Acceptable
  - •Boxy
  - •NE Box
  - •Nice square awful porch
  - •Ugly house



- Looks old
- •Nice walkway
- •Pleasant architecture and landscaping (2)
- •Affordable
- •Roof too steep
- •Houses very close
- •Where are the neighbors?
- •Imbalance in buildings (2)
- •OK (2)
- •Cozy



#### Residential - 7 AVERAGE: 0



### **MEDIAN: 1**

•Funky

•Too car centric

•Zoning should make size and style consistent

•Out of scale with neighbors (2)

•House close and odd size (2)

•Infill opportunity

•Needs trees

- •Small is good, mixed community
- •Disparity between homes



- AVERAGE: -1 MEDIAN: -1
  - •Too Crowded
  - •Needs cosmetic upgrades
  - •Like closeness, but not design
  - •Ok for downtown
  - •Affordable houses
  - •Would preserve exiting housing
  - •Crummy porch
  - •Too close
  - •Trashy house



- AVERAGE: -1 MEDIAN: -1
  - •Impossible
  - •Sprawl
  - •1984
  - •Over developed, convenient to build
  - •Not here
  - •No personality
  - •Tacky
  - •No neighborhood
  - •Cookie cutter (2)
  - •Needs open space

#### Residential - 10 AVERAGE: 0 MEDIAN: -1



•Obtrusive, needs shutters

•Needs better landscaping

- •Ok for downtown (2)
- •Nice varied facades (3)
- •OK for limited places
- •Conceptual for city
- •Affordable housing
- •Could be anywhere
- Cheap feel
- Too congested
- Needs older trees



```
AVERAGE: 0
MEDIAN: -1
```

•Front door not street level, unfriendly

- •Row house yes, uniformity – no
- •No variety
- •OK for limited places
- •Cookie clutter
- •High density
- •These are hideous
- •Some nice roof lines
- •Downtown feel
- •Out of place

#### Residential - 12 AVERAGE: 1 MEDIAN: 1



- •Only in OSS
- •Looks lonely too large
- •Typical NE (2)
- Looks historic
- •Nice rooflines
- •Good use of older buildings
- •Underground utilities

## Residential - 13 AVERAGE:-1 MEDIAN: -1



- •No community
- •OK for limited places
- •Boring
- •Traditional development
- •Nice neighborhood feel
- •Bad street
- •Ugly
- •Close together (3)
- •Garages?

#### Residential - 14 AVERAGE: 0 MEDIAN: 1



- •Sprawl
- •Should be clustered
- •As long as style is varied
- •Lot size is ok
- •Traditional development
- •Could be worse
- •Good setbacks
- •At least houses are different
- •OK
- •Preserve trees (2)



AVERAGE: 2 MEDIAN: 2

- •Keep development together don't separate open space
- •Good open space (3)
- •Leave the open space (3)
- •Green land

#### Residential - 16 AVERAGE: 2 MEDIAN: 2



•Not my style by nice

- •Pretty house (2)
- •Should be in limited places
- •Too much brick
- •Adorable
- •Quality house
- •Nice style

#### Residential - 17 AVERAGE: 0 MEDIAN: 1



•McMansion (6)

•Ugly design (2)

- •Disgusting irresponsible
- •Too many styles
- •Bad design
- •Ostentatious



- AVERAGE: -1 MEDIAN: -1
  - •Only in downtown
  - •Out of scale (5)
  - •Obviously built later
  - •Context (2)
  - •Should not be built
  - •Ugly/incongruent
  - •Too large for surrounding homes
  - •Too vertical (2)
  - •Box house
  - •Bad design
  - •Pre-fab

#### **Residential - 19** AVERAGE: -1



MEDIAN: -2

•Typical cul-de-sac

•Really don't like culde-sac

- •Too much density use OSS (4)
- •Who's your neighbor
- •No green space (2)
- Cookie cutter
- •Crowded/bland





- •Clustering a plus
- •Better, but needs contiguous open space
- •Better, but don't like cul-de-sac (4)
- •Too dense
- •Green space helps (2)
- •Move to CA
- •Neighborhood feel

•OK

#### 54 Units

### Residential - 21 MEI



- AVERAGE: -2 MEDIAN: -2
  - •Stark from ground

•Too crowded, lacks architectural variety (3)

- •BAD
- •Boring
- •High density
- •Help!
- •No green space
- •What a maze
- •Cookie cutter

# Residential - 22 AVERAGE: - MEDIAN: -1



AVERAGE: -1

•Where the cars live

- •Ugly (2)
- •Dated
- •Affordable
- •Small yard
- •Pave it
- •Poor design
- •Ugly and stark
- •Queens, NY?



AVERAGE: 1 MEDIAN: 1

- •No personality
- •No sidewalk
- •Should be an OSS
- •Good space between homes
- •No character
- •Boring
- •Neighborhood feel
- •Pre-fab
- •Not bab
- •NE like
- •Harmonious



**AVERAGE: 0 MEDIAN: 1** 

- •Sidewalk is nice
- •Needs open space
- •No variety (4)
- •Stepford
- •Little soldiers coifed
- •OK for limited places
- •Nice for downtown
- •Boring
- •High density boxes
- •Never find your way home
- •Close, but has potential



AVERAGE: -2 MEDIAN: -3

- •Ugh
- Tacky
- •Urban Sprawl ugh (2)
- •Rt 1 Saugus
- No sidewalks
- •No, No, No
- •Awful
- •Bad signage
- •Strip mall
- •Anywhere USA
- •Visual assault

#### Commercial - 2 AVERAGE: 2 MEDIAN: 2 AVERAGE: 2



•Could use more trees (2)

•Good varied use

•Ok

- •Good use of older building
- •Nice downtown feel
- •Where do you park?
- •Mixed use is good
- •More character
- •Harmonious



- AVERAGE: 1 MEDIAN: 1
  - •Can't judge by itself

•OK

- •Historic effect
- •Too many cars
- •Fairly attractive
- •Parking
- •Best use of space?



AVERAGE: -1 MEDIAN: -1

•Necessary service (2)

- •Looks too spacious for just a gas station
- •Not near residential
- •Pave over the world
- •Gas stations should be on the edge of town
- •No landscaping
- •"Old school"
- •Dirty
- •Too much concrete



AVERAGE: -2 MEDIAN: -2

•Vast asphalt wasteland

•Not pedestrian friendly (2)

•This is our community – not throughway

•Too many ads

•Boring

•Too much concrete



AVERAGE: 2 MEDIAN: 1

•Good downtown mixed use (2)

•Nice walkable shopping (2)

•Good if parking nearby

•A bit non decrepit

•Nothing green (2)

•Cute

- •Local businesses
- •Needs more parking

•Neat

- •Good sense of place
- •Better character





•Building is OK, but too isolated

•Boxy

•Nice landscaping (2)

•If must build

•Cut off from the rest of the world

•Ok (2)

•Auto centric



- AVERAGE: 1 MEDIAN: 1
  - •Weirdly bare/empty
  - •Strip mall trying to look good
  - •Needs more landscaping
  - •It's a store
  - •Flat front no good
  - •No cart corral
  - •Ok for a grocery store (2)
  - •Looks like any pharmacy
  - •Could be OK



AVERAGE: 1 MEDIAN: 1

•Out of place

•Good idea, but needs connection to the street

•Some good points

•Good blend of residential and commercial (2)

- •Buildings differ good
- •Nice reuse
- Possibility
- •Looks like good rehab
- •Streetscape is nice

#### Commercial - 10 AVERAGE: 1 MEDIAN: 2



- •OK, more greenery (4)
- •Good access
- •Needs more plants
- •Drive, drive, drive
- •Could be worse

# Commercial - 11 AVERAGE: -1 MEDIAN: -1



•Get rid of signs (3)

•Has potential though

Needs facelift

•Uses are bad, not building (2)

•Too rundown (3)

•Great "period character" lots of potential

•Funky and real

•Renovate it and it could work (2)
# Commercial - 12 AVERAGE: -1 MEDIAN: -1



- •Looks OK, but efficient use of space?
- •Strip mall
- •Too many ministrip malls
- •Clean it up
- •Ugly
- •More exhaust, please
- Not attractive
- Sprawl
- Not inviting

### Commercial - 13 AVERAGE: 0 MEDIAN: 0



•Hard to tell what it is

- •Not good next to residential
- •Pretending to be something else

•Nice look for a gas station (2)

# Commercial - 14 AVERAGE: 0 MEDIAN: 0



•Probably looks better from ground

•Step in the correct direction

•Good for suburbs, not downtown

•Too much asphalt (2)

•A necessary evil

•OK for groceries (3)

Needs landscaping

Looks fake

Impervious surface

### Commercial - 15 AVERAGE: 1 MEDIAN: 1



•Nice symmetry

•Prefer all the same

•Needs more angles

•But I hate angle parking

•Angle in parking isn't effective

•Too much pavement

•Nice downtown, could be cleaner (2)

# Commercial - 16 AVERAGE: -2 MEDIAN: -2



Unused concrete space is wastefulNice pavement

- Looks rundown
- •All about the cars
- •Asphalt desert
- •No imagination
- •Ugly
- •Parking is an eyesore

# Commercial - 17 AVERAGE: -1 MEDIAN: -1



•Out of place (2)

•Access management?

•Asphalt desert

•Landscaping?

•Looks abandoned, too much impervious surface

•Needs curbs, sidewalk

- •Powerlines are ugly
- •Not good for runoff

# Commercial - 18 AVERAGE: 0 MEDIAN: 0



•Big box in small space

- •Design isn't bad, but the location of the building is.
- •Fence should be painted
- •Boxy overhang is too big
- •Roof overhang is nice in rain
- •OK but too square
- •Don't like parking in front

# Commercial - 19 AVERAGE: -3 MEDIAN: -3



MEDIAN: -3

•These always look worse from above

- •Waterfront must be open to the public
- •More green space

•Strip mall

- •But a little urban
- •Concrete well
- •Too big
- •Needs open space
- •Too much pavement (2)
- •Cookie cutter

## Commercial - 20 AVERAGE: -2 MEDIAN: -2



•Storefronts would be nice

•Needs windows on first floor

- •A fact of life
- Looks rundown
- •Keep out

•Needs to be redeveloped

- •Abandoned (2)
- •Not aesthetically pleasing (2)

# Commercial - 21 AVERAGE: -2 MEDIAN: -2



•Bad sign (2)

•Mix of commercial and residential is OK

- •Outdated needs repairs
- •Ugly but I like mixed use (2)
- •Needs clean up
- •Rundown
- •Devoid of activity

### Commercial - 22 AVERAGE: 1 MEDIAN: 1



•Like brick sidewalks, but needs to be greener

- •Streetscape is good
- •Sidewalk is good (3)
- •Could be worse
- •Should be multistory
- •Human scale

### Commercial - 23 AVERAGE: 2 MEDIAN: 2



•Towering

•Large and imposing (3)

•Multi-use parking garage is what we need (2)

•Too modern looking (2)

•Not here (2)

Interesting design

# Commercial - 24 AVERAGE: 0 MEDIAN: -1



•Pedestrian friendly, mixed use

- •Looks friendlier than some more walk-ins
- •Orchard St could look like this
- •Older feel is good
- •Mixed use
- •Comforting scale (2)
- •Traditional NE design
- •Sense of place
- •Good use of building
- •Good for downtown
- •Harmonious design

## Commercial - 25 AVERAGE: 2 MEDIAN: 3



•Pretty but inefficient use of space

•Watch out for preserving open space with lots of these

- •Boxy/dated
- •Edge of town
- •No thanks
- •Turf is OK
- •Not all cement

# Commercial - 26 AVERAGE: 0 MEDIAN: 1



- •Enclosed look OK
- •Like "U" shape, not enough parking
- •Depending on location
- •Too fake looking
- •Too Crowded
- •Overdone curbing
- •Nice landscaping don't like parking
- •Would be nice in Newington
- •Too much concrete

# Commercial - 27 AVERAGE: 0 MEDIAN: 1



•Too much asphalt

•Too much impervious surface

•Watch out for preserving open space with lots of these

- •Like Cupolas
- •Too car friendly
- •Not very attractive
- •Too much space for a bank
- •Too much concrete

## Commercial - 28 AVERAGE: 0 MEDIAN: 1



•Watch out for preserving open space with lots of these

- •Grass near road is good
- •Sidewalk

## Commercial - 29 AVERAGE: 0 MEDIAN: 0



•Sidewalk's a plus

•Made for autos

•Sidewalk is positive

•Main roads become parking lots

•Good use of industrial coverage

- •Some green space
- •That's a lot of road
- •Greenery is good
- •Power line is ugly
- Too wide a road

### Commercial - 30 AVERAGE: 1 MEDIAN: 1



•Needs more context

•Watch out for preserving open space with lots of these

•Context (2)

•Boring, disconnected

•More trees (2)

## Commercial - 31 AVERAGE: 0 MEDIAN: 1



•Commercial and residential should be separated

- •Commercial? (2)
- •Poor signage
- •Limited uses ok
- •Ugly, but mixed use

# Commercial - 32 AVERAGE: -1 MEDIAN: -1



•Limited uses OK in residential

•Needs green space

•Ugly, sea of concrete

•Out of place

•Too much asphalt

•Eyesore

### Commercial - 33 AVERAGE: 1 MEDIAN: 1



•Like alternate use of old building

- •Good re-use
- •More quaint
- •Keep old buildings

•Like reuse of old building (3)

## Commercial - 34 AVERAGE: -1 MEDIAN: 0



•Wasted space share parking with others

- •Needs greenery
- •No landscaping
- •Powerlines

# Commercial - 35 AVERAGE: 0 MEDIAN: 1



•Commercial and residential should be separated

- •Blends well with neighborhood
- •How is it not residential? (2)
- •Very limited uses
- Unattractive
- •What is it?
- •Parking should be in rear

# Commercial - 36 AVERAGE: -2 MEDIAN: -2



 Must have some of these In an industrial park this is OK •Too boxy Industrial maybe •Sea of concrete •Unattractive •Ugly, no character (2) •Metal buildings have no place in Dover

#### Commercial - 37 AVERAGE: 1 MEDIAN: -1



- •Prisonlike (3)
- Blocky
- •Must have some of these
- •Federal Building
- •Boring
- •Could be worse
- Too institutional
- •Decent campus office building
- •Too much concrete

## Commercial - 38 AVERAGE: -1 MEDIAN: -1



•Fake façade is gross

- •Prefer 37
- •Must have some of these
- •Too much like apartments
- •Horrible brick pattern
- No landscaping
- •Out of date
- •Not best use of in town buildings
- •Too 50s

### Commercial - 39 AVERAGE: 1 MEDIAN: 1



### •Nice landscaping (2)

- •More interesting
- •Must have some of these
- •Dated too much brick
- •Trying harder
- •Not inviting
- •Green
- •Nice landscape, ugly building

# Commercial - 40 AVERAGE: 0 MEDIAN: 1



- •Like the roof
- •Ugly
- •Drive on in
- •Too much asphalt
- Needs landscaping

# Commercial - 41 MEL



AVERAGE: 1 MEDIAN: 1

- •Big building in middle of nowhere
- •Boring
- •Must have some of these
- •Too flat
- •Less impact on nature
- •Where does the bus stop
- •OK for size
- •Good in the right areas of the City
- •Decent Style
- Needs landscaping

# Commercial - 42 AVERAGE: 0 MEDIAN: 1



•Efficient use of space, too high rise looking

- •We need things like this
- •Traditional corporate HQ
- •Good use of existing space
- •A bit corporate for Dover
- •We have enough mills
- •Less impact on nature
- •Good in the right areas of the City



AVERAGE: 0 MEDIAN: -1

- •Looks like barn
- •Well disguised
- •Boxy
- •Butler building
- •Ugly
- •Unattractive façade
- •Clean
- •Modest attempt to make it pretty
- •Not harmonious



AVERAGE: 0 MEDIAN: -1

•Factory

•Green surrounds are nice

•Sign distracts from seeing building

•Like use of trees

•Car focused

•Good for Ind. Prk.

•Ugly building



AVERAGE: 2 MEDIAN: 2

•Not bad for university/school

•Passive solar – yes

- •Good design
- •Nice for industrial
- •Nice trees
- •Nice for what it is



```
AVERAGE: -2
MEDIAN: -1
```

- •Hidden in industrial park
- •Thrown together with no plan
- •Looks more compact – good next to residential land
- •Creepy
- •Ugly
- •Out of context
- •Too many different building elements



- AVERAGE: -1 MEDIAN: -1
  - •Boring
  - •Cleaner
  - •Sterile
  - •Some attempt to soften is needed


```
AVERAGE: -1
MEDIAN: -1
```

•Liked that its tucked away, but ugly

- •Limited use
- •Too much asphalt (2)
- •Needs makeover

•Not the best use of downtown



AVERAGE: 0 MEDIAN: 0

•No windows (2)

•Boxy

- •Ugly
- •Who wants to work here?
- •Feels out of place
- •Fine, in the right context
- •Stands out too much



AVERAGE: 0 MEDIAN: 0

> •Very interesting, European (2)

•Retro

•No truck terminals

•Cool design (2)

•Modern feel, doesn't feel industrial

•Need more innovative architecture



AVERAGE: 0 MEDIAN: -1

- •For lease for a reason
- •Too flat/boxy (2)
- •No wonder its for lease
- •Too close to road
- •Monolithic too big for site



AVERAGE: 0 MEDIAN: 0

•Better, but no greenery

- Needs landscaping
- •Hide in an industrial park

•Seen this everywhere

•Clean, need some green

•No trees



AVERAGE: 0 MEDIAN: -1

•Waste of good land (2)

- •Factory in middle of nowhere
- •Needs more trees

•Shame to have not worked into the surroundings

•Hide in an industrial park

•Doesn't enhance landscaping (2)

- •How do you get there?
- •Out of place





•Hideous

•Box

•Hide in an industrial park

•Looks like a house/apartment building

•Nasty entrance

•Could have been a lot better

•Needs landscaping



AVERAGE: 1 MEDIAN: 1

> •Enclosed area seems efficient for saving space

- •Pretentious
- •Hide in an industrial park
- •Well planned
- Too Southwest
- •Interesting
- •Nice concept
- •Interesting style



AVERAGE: 0 MEDIAN: 1

#### •Make it better

•To be used for something else?

•Has potential

•Great architectural character

•Convert to artists and artisans space

•Clean up (2)

•Rehab potential (3)

•Use what you've got

Looks abandoned



- AVERAGE: 0 MEDIAN: -1
  - •Big box
  - Stark
  - •Hide in an industrial park
  - •West coast feel
  - •Monolithic
  - •Good for want it is



AVERAGE: 0 MEDIAN: 0

> Interesting façade, line breaks

- Looks specialized
- •Cool design
- •What is it?
- •Modern Feel
- •No style ugly

AVERAGE: -1 MEDIAN: -1



- •Fix up
- •Love the old buildings, needs upkeep
- •Got potential
- Condominiums
- Looks forgotten
- •Shouldn't be on water
- •Bad use of waterfront property (2)
- •Lovely
- •Needs to be cleaned up



AVERAGE: 2 MEDIAN: 2

•Nice job with older buildings (2)

•Save history

•Convert to artists and artisans space

•Mill building

•Nice but not along waterfront (2)

•What a view

•Waterfront feel green

•Re-using existing structure

Beautiful building

AVERAGE: 2 MEDIAN: 2



•Stores should be on street, not separated so much

•Pretty

•Lots of brick and trees

•Like it

•Cozy, wide sidewalk (2)

•Good sense of place

•Good pedestrian



```
AVERAGE: 2
MEDIAN: 2
```

•Like sidewalks and bump-outs (2)

•No cars, yes

- •Streets are narrow
- •Get the bike off the sidewalk

<sup>•</sup>Like it



AVERAGE: -1 MEDIAN: 0

•No, too flat

•Trees? (3)

•Old City

•Urban Jungle (2)

•Not pedestrian friendly

•Too closed, uninviting

•Needs landscaping (2)

•Devoid of life



AVERAGE: 2 MEDIAN: 2

- •For people
- •Mix residential and commercial
- •West coast feel
- •Outdoor dining is good (2)
- •Sidewalk not wide enough



AVERAGE: -2 MEDIAN: -2

#### •For cars

- •Access management (2)
- •Its probably just the angle that's bad
- •Sprawl
- •Dull
- •Chaos
- •No sidewalk, ugly (2)
- •Not harmonious
- •Blah



AVERAGE: -2 MEDIAN: -3

- •Erosion waiting to happen
- •Sledding hill?
- •lck
- •Good for skiing
- •Unfinished
- •Concrete

#### Streetscape - 7 AVERAGE: 2 MEDIAN: 2



•Trees, street ending in focal point

•Faneuil Hall

•Cobblestone St is excellent

•Don't put cobblestone in streets

Quaint

•Inviting

•Street is too narrow

•Sense of place



AVERAGE: 2 MEDIAN: 3

•Park benches under trees (3)

- •Places to sit
- •Faneuil Hall
- •Few cars
- •Pedestrian friendly (3)
- •Sense of place
- •Nice materials
- Inviting
- •Historic feel



AVERAGE: -2 MEDIAN: -1

- •Someplace to rush by
- Too much concrete
- •Fact of life
- •Not welcoming
- Stark
- •Concrete jungle
- •Devoid of life
- Intimidating
- •Barren
- Institutional

## Streetscape - 10 AVERAGE: 2 MEDIAN: 2



•Who wants to sit next to a road?

•Nice try, needs personality

•Outdoor cafes are good (3)

•Where is the parking garage

•WOW

•Lots of brick and trees

•Much better

•Quality materials

•Good scale

## Streetscape - 11 AVERAGE: 0 MEDIAN: 1



•Good for cars, not people

- •Too long for a crosswalk
- •OK for a big city
- •Not here
- •Too many intersections
- •Too wide
- •Would you cross this street?
- Intimidating

## Streetscape - 12 MEDIAN: -1



#### •Bleech

- •Henry Law Ave after waterfront project completed
- •Too much traffic (2)
- •Is that a mile lane
- •Congested (2)
- Intimidating
- •Poorly maintained
- •Barren

## Streetscape - 13 MEDIAN: -2



•Windows please •Needs storefronts on building (3) •Power lines are ugly (2) •Needs to redevelopment •Poor vision •Building needs something to improve it

# Streetscape - 14 AVERAGE: 2 MEDIAN: 1



- •Like the one lane
- •A little precious
- •Sidewalk is nice
- •Good scale
- •Too close

# Streetscape - 15 MEDIAN: 2



 Like pedestrian malls

•Like street trees and lamps

•Needs benches and dining

Hooray for plazas

Artificial

•Bike and pedestrian friendly (2)

•Innovative use of mixed materials

## Streetscape - 16 MEDIAN: 2





- •We need a parking garage
- •Can't quite see it
- •Clean design
- •We need a plan like this
- •Pedestrian friendly

## Streetscape - 17 MEDIAN: 1



•Too wide (8)

•Road is wide and pedestrian unfriendly

- •Existing
- •Trees good
- •Could be worse
- •Trees need to be trimmed
- •Historic character

## Streetscape - 18 AVERAGE: 0 MEDIAN: 0



•Better, but still too wide (4)

- •Parking is rear diagonal (2)
- •Back in parking and bike lanes are great (2)
- •Don't like back in parking
- •Trees are to scale