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Hello, and welcome to the catchily titled
Creating Context Art in the Open World of Saints Row's Santo Ileso.

ABOUT ME

- No, not the famous James Taylor
- Actually, been in the industry for 21yrs, 11 months.
- Have worked on:
 - Vehicles
 - Props
 - Materials
 - Environments
 - UI
 - Weapons
 - And some other stuff...



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I'm James Taylor,

and I've worked in the industry for 22 years,

with the last 19 being at Volition

Over that time I've worked on

Vehicles, Props, Materials, Environments, UI, Weapons, and more, many of those things have proved useful for the subject of this talk.

ABOUT ME



The games shown here have all been done in my time at Volition, which celebrates its 30th year of being founded as Parallax Software this year.

ABOUT ME



volition



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The studio is probably best known for the Descent, Freespace, Summoner, and Red Faction games, as well as the Saints Row series.

ABOUT SAINTS ROW



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Saints Row is the latest in a series of games beginning in 2006 with... Saints Row

The franchise is an open world crime drama with a wild and sometimes satirical edge

And occasional superpowers and aliens...

ABOUT SAINTS ROW

- New Saints, New Location, New Origin
- Santo Ileso, Kavanaugh County
- The South Western United States
- Mix of Saints Row 2 & 3
 - “Seriously Silly”
 - Tonal 80/20 Balance



This entry is a reboot, with New characters, a new location and a new origin story

The game is set in Santo Ileso in the SW USA

The goal was to present a game somewhere between the over the top Saints Row the Third, and the marginally more serious Saints Row 2.

Seriously Silly, if you will.

Tonally this meant 80% serious, and 20% silly, or what we called the 80/20 mix.



So you're here for a talk about context in Santo Ileso. What do we actually mean by "context" in this... context?

What is “Context Art”

“Context” = “Branding” In Universe

- Signage or other visual cues that help differentiate similar world elements from one another
- Giving a unique sense of space to a location
- Anything at block (and district) level that aids the player in identifying where they are in the city
- A layer of verisimilitude.



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Basically put, “Context” is effectively “In Universe Branding”, but we can’t say “Branding” because that confuses things with external groups.

It allows otherwise similar elements, like repeated buildings, to have distinction from one another. And you need that, because you generally can’t afford to have 4000 unique structures.

It can add a unique sense of space to a location – Helping define distinctive visual waypoints in the environment.

It can aid the players knowledge of where they are within the city – an additional layer on top of distinctive architecture, props, or colour schemes. In many cases it can even define a single city block as unique.

A layer of verisimilitude – which means Believability.

Real cities have signage, murals, advertisements, and so on, and so does Santo Ileso.

What is “Context Art”

“Signs shouldn’t be considered in a vacuum, they should be considered as part of a Context, and ultimately not just a physical context, but a sense of place.”

- Blair Kamin, architecture critic for the Chicago Tribune, via Stewart Hicks



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In a YouTube interview with Stewart Hicks, architectural critic Blair Kamin describes how signs work to add context,

But this is also applicable to other elements of that we came to describe as “context”. We’ll get to a fuller list of those elements later on, but this sums up Context pretty well, we’re generating a sense of place.



New City, New locale. Santo Ileso was always planned as a desert city, but what else could we bring to make it unique.

The Plan for Santo Ileso



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Well, as well as giving it a central lake, inverting the usual Open World layout of Islands surrounded by water, when designing and planning the city, we tried to learn from our past mistakes and successes on previous titles.

The Plan for Santo Ileso



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Saints Row 1 & 2 featured highly distinct districts, which are easy to navigate and remember, but it's harder to have that level of uniqueness with modern fidelity. Competitive expectations for quality and the amount of set dressing and signage are higher these days.

The Plan for Santo Ileso



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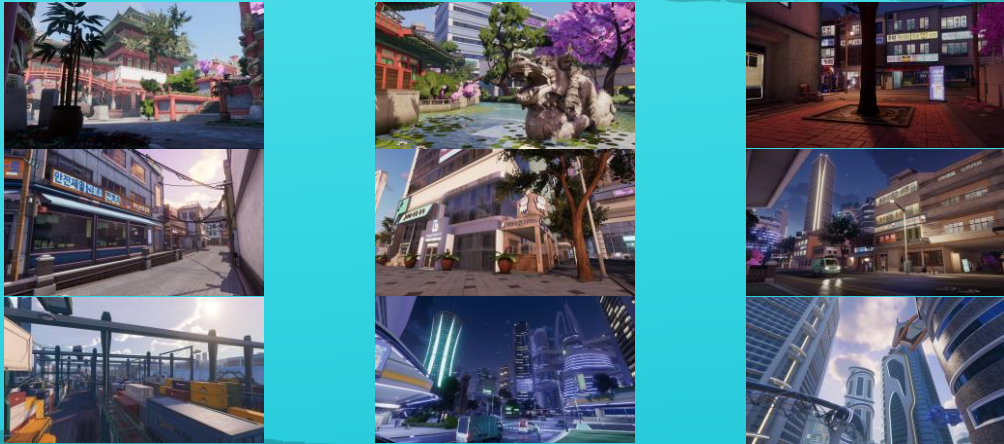
SR3 increased the individual asset quality and city size, but at the loss of variety.

Players often needed GPS to navigate effectively even when the city was known to them,

Many stores, buildings and Signs were repeated frequently across the city.

There are unique and interesting locations, throughout the world, but these are less pronounced than in Saints Row 2.

The Plan for Santo Ileso



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In AOM we had a hybrid method that worked well, with areas having their own distinct visual sensibilities.

Each area had a small number of associated brands and signs, just enough to let the player identify where in the city they were.

But it was a smaller city, with a simpler visual style.

The Plan for Santo Ileso



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So, we wanted to combine the unique districts of Agents of Mayhem
The block variety of SR2,
The scale at least that of SR3
All with modern fidelity

Signage variety and frequency would need to be higher than in any previous Volition title to present a believable but stylized, American city.

The Plan for Santo Ileso



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Each district required visual differences broken down by

socio economic makeup,
function within the city,
relationship with the controlling faction,
architectural type,
age,
and so on.

Signage needed to reflect the differences and similarities between areas – Some areas are more likely to have Laundries and hardware stores, others upscale restaurants, or Boutiques, and the style of those signs would need to match.

We were going to need a lot of signs.

The Plan for Santo Ileso



To aid with planning the city effectively, we referred to the book *The Image of the City*, a 63 year old title still held as one of the major texts of city planning.

It's astonishingly dry by today's standards, but I'd recommend it to anyone trying to build a city from scratch – an idea Kevin Lynch almost certainly wasn't considering when he wrote it.

The book could be the basis of a talk in itself, but keeping it relevant to context, the most important elements are districts, which we've already discussed, and Landmarks.

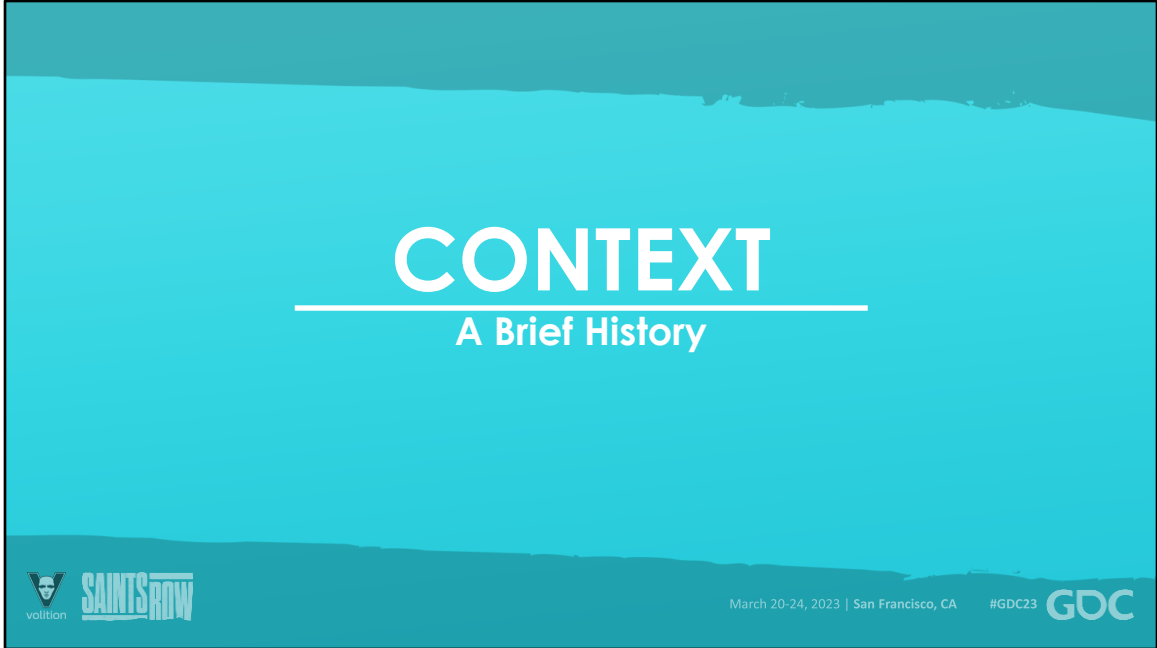
Landmarks generally fall into different "range" categories – Distant, District, and Local.

Distant landmarks might be called Weenies if you're a fan of theme parks, and include the Marshall Building, the Ileso Sign, and Panther Rock. Large, distinctive and easily visible from almost anywhere, these were planned early and required a lot of time to implement.

District landmarks such as La Playa, Meeker Square in Old town, or the Cactus Brothers in Lakeshore, are usually smaller, but still easily seen from a moderate distance. They're not planned as far in advance as Distant landmarks, and Context is generally involved in their creation.

Finally, the local Landmarks are almost exclusively created during the context pass. Visible from just a couple of blocks away, they help differentiate and reinforce the Districts through use of signage, paint, and advertising.

This is what the rest of this talk is about.



To begin at the beginning, we divided signage into 3 main levels.

Gold, Silver, and Bronze.

The Plan for Context “Levels”

GOLD



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Gold was for high priority locations like the Saints HQ, player owned criminal enterprises or major mission locations. These would have a high level of art direction, concepts, and custom built props and signs.

The Plan for Context “Levels”

SILVER



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Silver was for Major character conversations, less high focus mission locations, and for some landmarks. These might have simple concepts, but were more likely to just have a more focused Environment pass.

The Plan for Context “Levels”

BRONZE



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Other locations would be Bronze, and get the cheapest possible signage.

The context pass predominantly focused on the Silver and Bronze levels, since there was already an existing pipeline for gold.

Early Contextualization Attempts



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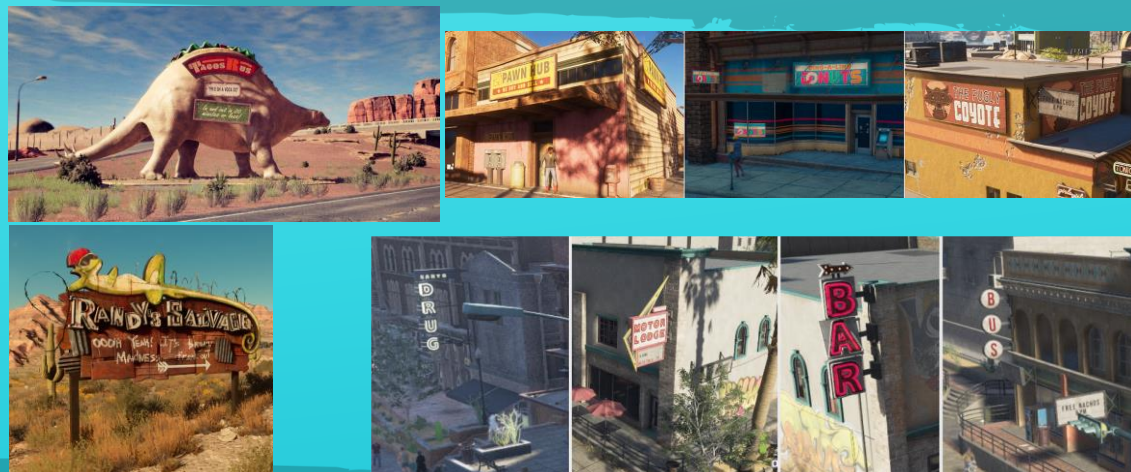
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Initial plans for what would later become Context used simple decal sheets of generic letters and symbols to create bronze signage, and outsourced props to create most silver signage, and other context details.

Unfortunately, the decals ended up looking cheap and unfinished, and the Outsourced signage ended up being relatively expensive and slow to produce in the numbers we needed.

Early Contextualization Attempts



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Another pass had Silver signs being built both internally and externally, but less of them, and individual Bronze signs were either painted by concept art for applying to boards or used detailed but generic building sign props placed in general locations.

All of these looked great, but the small range of formats and styles in the Bronze signs limited their visual variety, and a lack of understanding by many Environment Artists as to where and how to place them also caused some problems – This was a particular issue with foreign outsourcers, as they understandably lacked awareness of how signs are used in American cities.

I appreciate the irony, not being American myself

Despite this, these could be great for one suitable district, but probably weren't going to work for all of them. Also, the memory impact of the silver assets could be significant in a dense area.

Many of these early attempts did make it into the game in some form, through with new placement and additional optimization – they just weren't sustainable for the

entire project.

Other attempts were made, but in each case either the person assigned was rushing through things to get back to their preferred work, or were being missed by their previous disciplines and being rushed to return.

So after pre-pro, and a year into production, they realized they had a real problem.

Meanwhile, in odd job land...



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It was decided at this point that we clearly needed someone dedicated to Context, as there had not been enough focus in that area outside some key Gold and test locations and the lack was getting noticeable.

Previously I had done some related work on the project, such as vehicle company logos, Municipal Liveries, some formative context work, that sort of thing.

I was also not essential to any particular discipline - hopping between several of them as needed to help out.

So, with a knowledge of many areas, and a toe in this already, I was asked to stop irritating those other folks, and focus on bringing the signage goals to fruition.

And that's how the role of Context artist was born.

The Context Umbrella



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Between what had come before, and what I added later, the following things were eventually considered to be specifically covered under “Context Art”

Directional Highway Signs (not stop/speed limit signs, which are standard propping)

Billboards

Banners and Flags

Logo design

The Context Umbrella



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Murals

Commercial Signage

Other signage, including most Pop-Up Stores and advertisements

Specific Themed Context passes for many mission spaces

The Context Umbrella

- Empire map and other non-UI maps
- Sign Placement
- Naming most non-gold brands
- Interdiscipline context coordination
- Branding Library



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Creating the empire map graphic and other non-UI maps

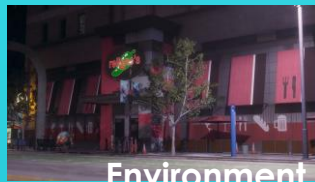
Placing many of these context Elements and others throughout the world

Naming, unless deemed important enough to be named by Narrative

Communicating with multiple disciplines to reach the best context solutions

Maintaining the Branding Library which we'll delve into later.

The Context Umbrella



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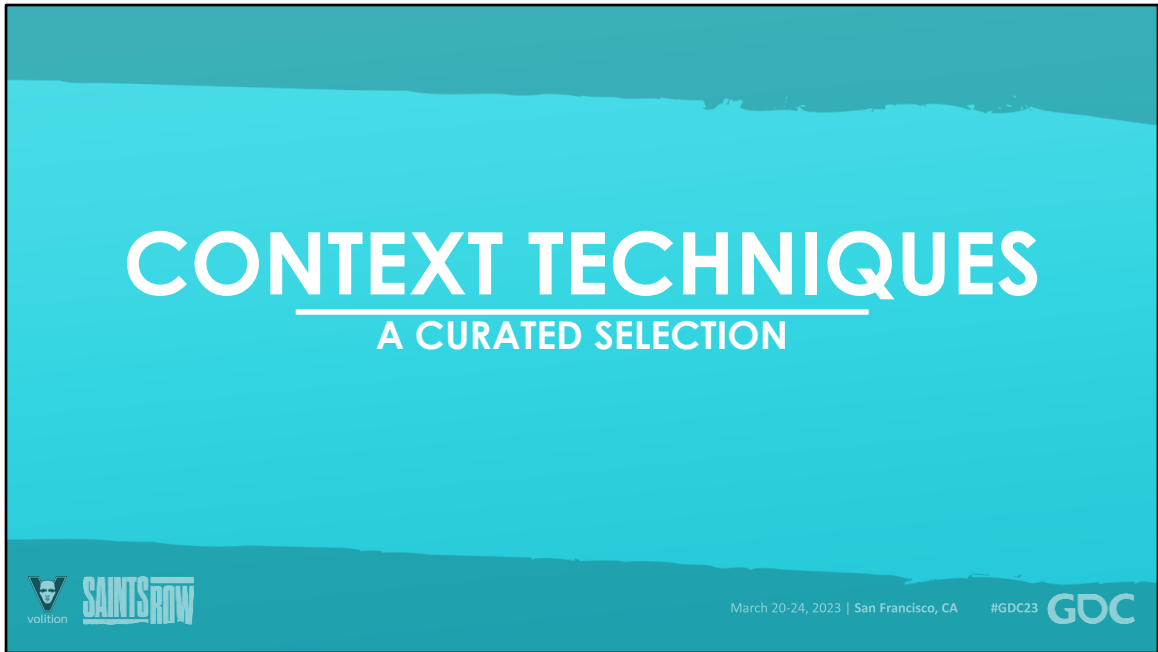
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Of these things, some was heavily art directed, such as the central Casino area

Or handled by our external partners, like outsourced mural paintings or some large sign props

Some were handed off to a different teams, such as EA Chris Dubois handling Foliage related context elements, or our Environment Lead Sean Koske handling much of the ground level context in Lakeshore.

But the majority was either handled or tracked by The Context Lead, which was me.

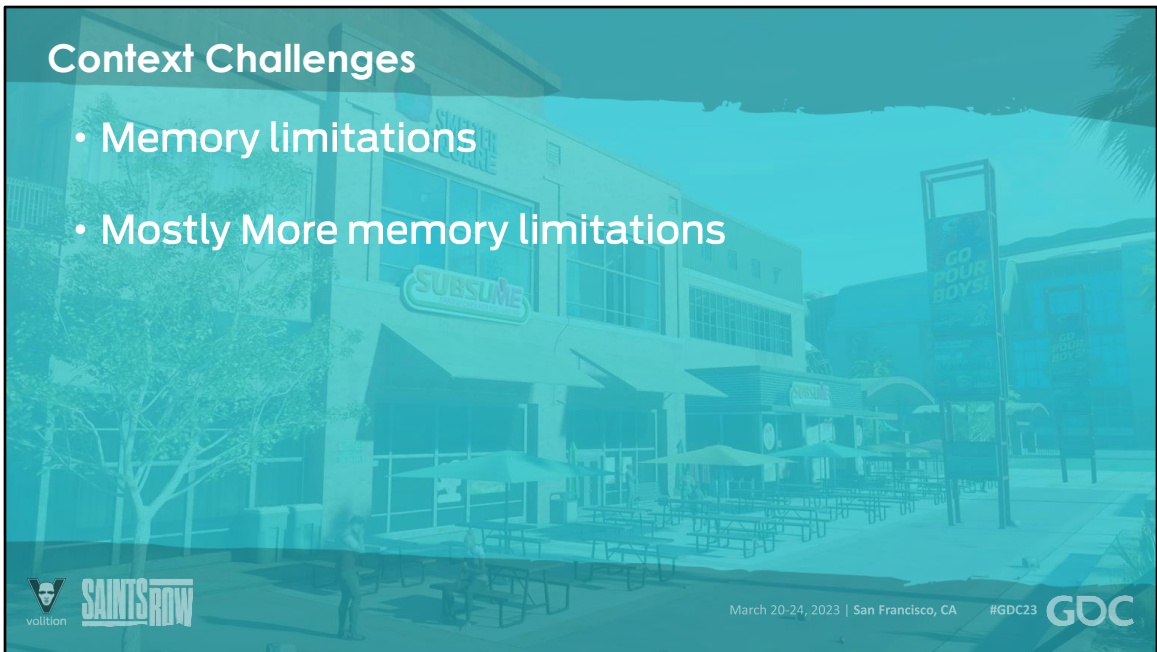


OK, so now we know what Context is and some of the issues with the initial attempts to do it.

What changed to make to make it more successful?

Context Challenges

- Memory limitations
- Mostly More memory limitations



Some challenges faced by context passes:

Memory limitations

Mostly More memory limitations

Really, the vast majority of issues were memory or object count related.

The density of details in our city, combined with the frequent changes in theme and occasional groups of “Gold” locations being too close together led to many memory issues.

There are only so many fully destructible items you can cram into a space, and due to a desire to leave driving as free as possible, a LOT of our world props were fully destructible.

If they were static, the impact would be less, since the objects could be baked into the shell of the world, but they weren't.

Context Challenges

- Memory limitations
- Mostly More memory limitations
- Limited bandwidth of people
 - 80% me
 - 20% outsource/EA support
- Time limitations



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For similar reasons, there wasn't as much bandwidth to dedicate to Context as might have been ideal.

All those diverse destructible props took a lot of people and time to make, so if a sign wasn't a Gold or Silver level item we needed to find more efficient ways to make them.

That wasn't to say there was no support in other areas – there certainly was: in larger props and mural decals for example, but the goal was to reduce this as much as possible.

And due to the sheer size of the city, and the desire for diversity, each location needed to have signage and other context added very quickly in order to get an acceptable level of coverage.

This would need to average a couple of blocks a day to get through the city and make time for other things such as highway signs or mission specific locations. There was no real way to do this using previous techniques.

Using the techniques we'll cover in a moment, it was possible to get through 5 blocks a day in some areas at the end, but the very first block took almost a week since the pool of Sign assets was low, and I hadn't started accumulating my knowledge of techniques yet.

Context Solutions

- Faux 3D Sign Decals
- Billboard Solutions
- “Sign Kits”
- An Approach to Highway Signs
- Murals



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I don't have time to cover every solution, but these were probably the most impactful ones.

What do all these refer to? Easiest to dive in with the Faux 3D sign shader – something that became the adjustable wrench of context

Faux 3D Sign Decals



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This started early in the project as an experiment based on an Agents of Mayhem shader used for futuristic recessed signage.

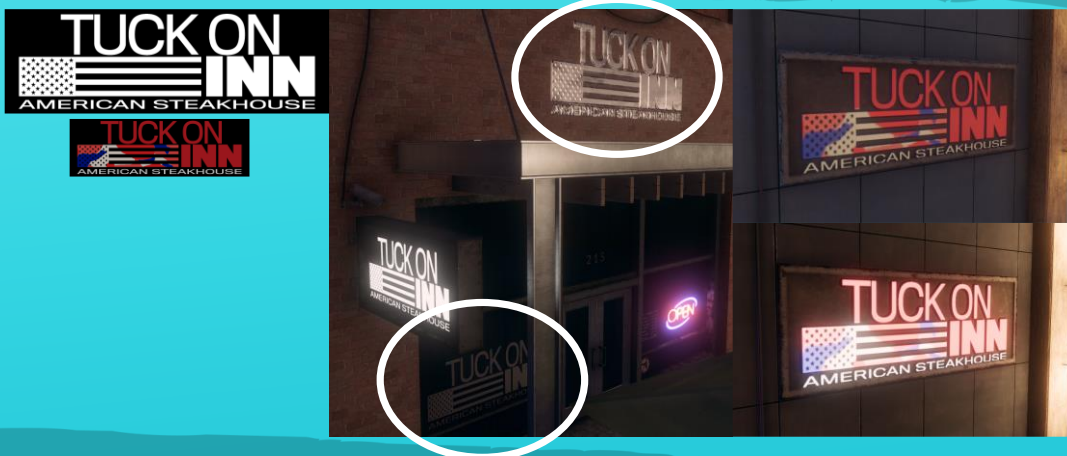
It was conceived as a way to fake a little depth in decals, and create apparent dimensional signage for minimal memory and no object count. Just the cost of the material, one or two small textures such as this Mask, and a handful of verts for the decal itself.

The effect is subtle, but is distinct from a flat decal of the same image.

The result held up better than expected, even at surprising scales.

It didn't take much to add an emissive, or to allow the same mask to be cropped for multiple uses, such as in the windows here which uses a standard decal.

Faux 3D Sign Decals



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The exact same shader allowed for faking beveled metal signs...

...with the standard decal shader allowing for things like window vinyls from the same texture.

The addition of a smaller coloured texture allowed for multi-coloured versions...

...which could increase consistency, and still support emissive.

Faux 3D Sign Decals



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A little lateral thinking gave Embossed effects, and a cheap neon outline (though it doesn't hold up to close examination...), all from the same shader.

Faux 3D Sign Decals



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This gave an enormous number of options of signs from a small and simple 2D mask and an even smaller diffuse.

The examples here are for just one logo, but there are more potential alternatives.

These logos were assembled into associated and themed indexed sheets to make selecting them with our decal system simple, allowing for high flexibility with minimal memory overhead.

Faux 3D Sign Decals

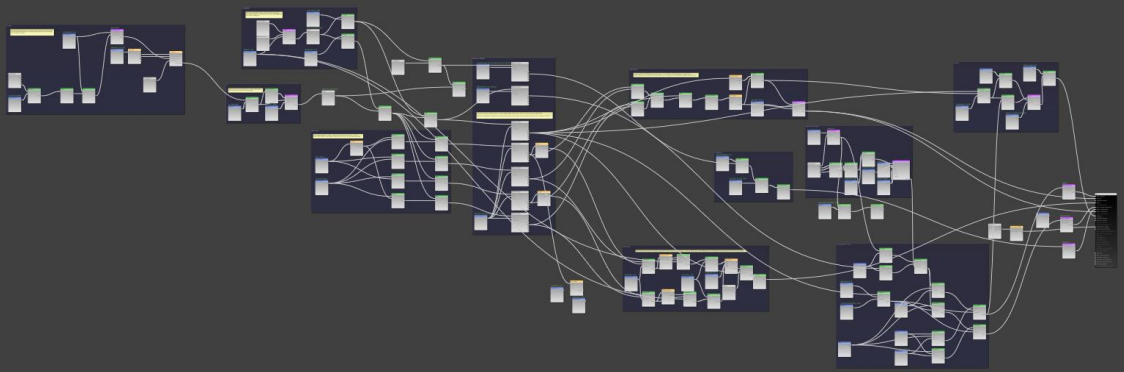


In all we had over 140 companies on these indexed sheets, with additional one-off cases also using the same shader.

Probably 70% of the signage was done with this one shader.

If you're wondering how to make one of these yourselves. its very easy...

Faux 3D Sign Decals



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I'll give you an overview, since the shader itself looks like spaghetti.



The shader starts with the greyscale map,

CLICK

and then offsets it in 4 directions

CLICK

Subtracting the original greyscale gives us an outline, which we can use for that cheap neon

CLICK

Then, tinting the upper and left offsets green, and the lower and right offsets red...

CLICK

Basically gives us a normal map for the edges that can be used to simulate some height.

Faux 3D Sign Decals



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A little bit of parallax offset based on camera position, and we have a fairly convincing 3D sign.

CLICK

We can then use the generated masks or the diffuse to tint it, mask the emissive in various ways, or just make the whole thing metallic and let our fake normal do the work of selling depth.

A more expensive version with 8 offsets could potentially create far more believable 3D signs, but for the purposes of Saints Row, this was sufficient and still efficient on last gen systems.

Context Solutions

- Faux 3D Sign Decals
- Billboard Solutions
- “Sign Kits”
- An Approach to Highway Signs
- Murals



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Why would billboards need a solution?

Well, firstly we needed a memory efficient way to allow a large number of them to be sufficiently varied, including not only the billboard images themselves, but variety in weathering and animations for modern LCD billboards.

Another issue was that many billboards had already been placed by the Environment Art team when I started the context role, and they only had a single billboard texture. I needed an efficient way to retroactively alter them, and make it easy to vary any placed in future.

Billboard Basics



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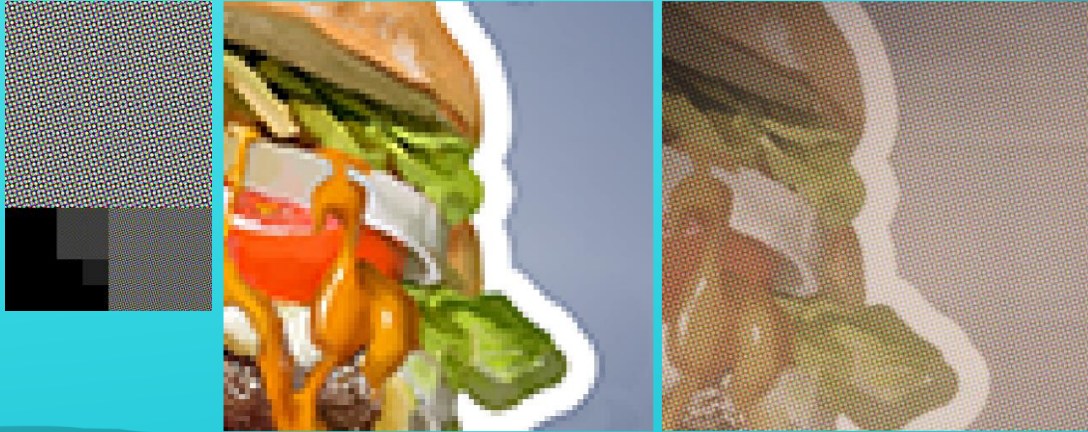
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Let's cover the potential memory cost of lots of billboards first.

The easiest way to make a big image more memory efficient is to just make it smaller. Obviously that's not going to look so great if the player can get up close.

CLICK

Billboard Basics



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Fortunately, nobody prints billboards at 300dpi.

This means that anyone who's ever seen a billboard or magazine up close might expect to see this distinctive print pattern. Adding this pattern over the pixelated image immediately smooths the harsh edges in a way that's consistent with most people's expectations.

This is fudged a bit to allow for tiling, but most people would never notice.

Auto-Mipping this would result in some ugly moire patterns, so the mips fade to black allowing the pattern to fade with them – it's balanced so that its gone by the time the image is shown at its native resolution.

Billboard Basics



SAINTS ROW

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Using this technique we could use much smaller textures, and it meant we could now get 4 images on a sheet for less than the previous price of one.

The other issue with Billboards was that many had already been placed with that single billboard texture

the Olde Steel one in the top left, to be exact.

Manually replacing this for every existing billboard in the city would be extremely time consuming, even assuming I could even find them all.

Was there a way to alter them without doing them one at a time? Could I also make it easier to get variety into future placements?

The existing billboard shader got an update to deal with it. Indexing became controlled by world space coordinates referencing an atlas texture like this...

Billboard Basics



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The art used on the board would be randomly selected based on the location.

Specific art from the index could be selected by simply moving the mesh, and different types of billboards had different billboard sheets to cycle through. These could be easily overridden with other index sheets, or even specific images when needed. But it was good to have a varied baseline.

This also allowed specific themes to be assigned to different areas – El Dorado has predominantly Casino billboards for example.

Billboard Basics



The addition of a grime map that could be multiplied over any billboard completed the potential variation – this had world space coordinates controlling opacity and horizontal offset.

Three signs from the same sheet placed next to each other would have slightly different levels of grime each time.



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Billboard Basics



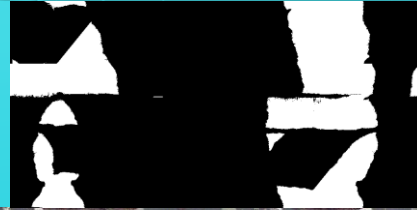
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Here we can see this system in action. Note how minimally a sign needs to be moved to adjust both the image and grime levels. This meant that specific signs could still be placed, while an Artist who just needed detail could throw a Billboard anywhere, and it would just work.

Torn & Dirty Billboards



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An extension of this was used for even more worn boards, particularly in the desert. These rips and tears are also dynamic based on world position.

These use a simple mask to blend between the billboard art and a generic old "ripped" image, assembled from billboard in previous Saints Row games.

Torn & Dirty Billboards



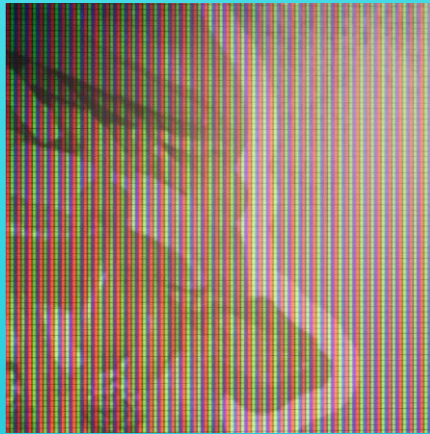
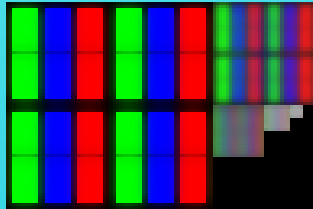
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In this case, moving the billboard scrolls the mask, as well as controlling the visible image, and the grime.

“Animated” Billboards



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If we need a modern animated billboard instead of a traditional one, we can handle that, within reason.

We do the same thing we did with the print pattern, but with an LCD light one. This time we multiply the texture instead of adding it.

This breaks down more up close, but these are usually harder to stand right next to.

“Animated” Billboards



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To solve the “Animated” aspect, we took an existing shader that faded an emissive map between two textures, and modified it to also allow for a transition between different images on the same Index sheet through use of a small indexed mask.

This allowed for the same billboard sheets to be used for Print and Animated Billboards – another benefit for not having the grime painted in.

The system works by revealing an offset version of the indexed texture through the mask.

“Animated” Billboards



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This image probably shows this system a little more clearly.

The mask reveals the next texture on the index sheet, then the underlying image catches up. The transition snaps to the other end of its reveal, and the whole thing repeats again.

Other features were added to allow scrolling elements, additional masks, and more, so this shader became another multitasker. It's the basis for the largest and most visible signs in the city.

Context Solutions

- Faux 3D Sign Decals
- Billboard Solutions
- “Sign Kits”
- An Approach to Highway Signs
- Murals



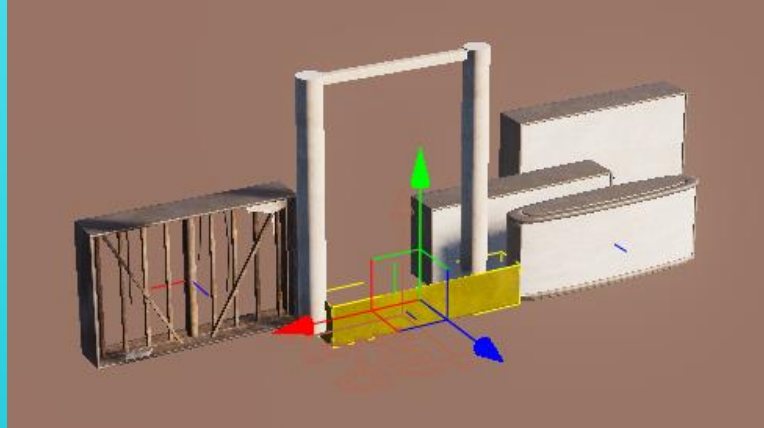
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Sign kits were initially created because American strip malls have signs at the entrances with all the businesses listed. Since we had an entire commercial district, there would be a good number of these, and needed them to match the relevant stores.

Sign Kits



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These particular “Mall Stack” Sign Kits became quick method of creating custom signage for a specific mall, using low cost pieces designed to work together.

Sign Kits



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It's possible to assemble the objects into various configurations, giving visual variation even before decals are applied.

And when they are, each sign board gets two decals: one for the "backing" to give a little fade to the back lighting, and then an illuminated version of the same decals covered before.

These could be built as grouped "Prefabs", allowing them to be reused on other entrances to a mall for no additional cost.

Sign Kits



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All the pieces are very low cost, and the logos all correspond to textures you already have loaded for the mall, so they're effectively free.

This does mean that each stack of signs takes time to make with the custom layout and decal placement, but you can get a Mall-specific sign in just 15 to 30 minutes. Not only that, but their unique nature means they're fairly effective local landmarks too.

Sign Kits



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This same technique, with a different kit, was also used for individual store signage, to give more variety.

Combining the various methods, we've covered meant a large number of signs could be produced quickly and with minimal overhead.

Context Solutions

- Faux 3D Sign Decals
- Billboard Solutions
- "Sign Kits"
- An Approach to Highway Signs
- Murals



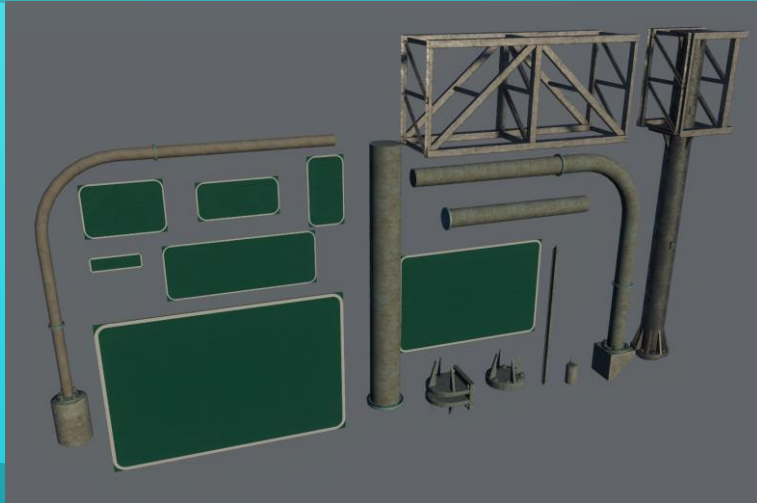
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A further extension of the sign kit method, Highway signs were custom built for the majority of intersections, taking approximately 2 weeks to do the entire city.

And boy THAT was a fine thing to discover was also considered part of context at the 11th hour.

An automated system would have been nice, buuut would require some dedicated tech and programmer support, and would take more than the two weeks to set up.

Highway Signs

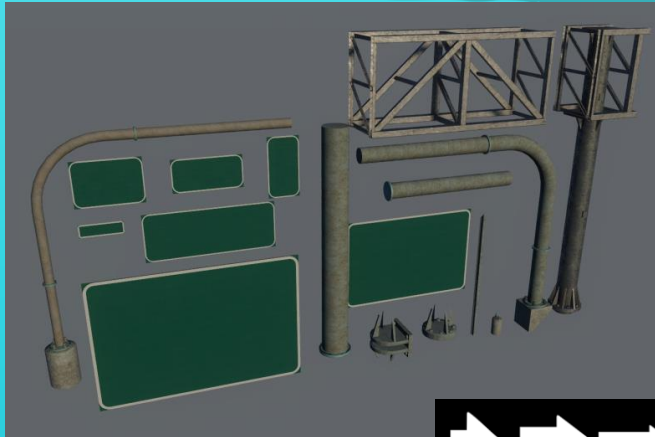


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Like Mall stacks, we started with a small kit of components to assemble the signs from. Surface detail was achieved almost exclusively through indexed decal sheets like these

Highway Signs



Santo Ileso	Fort Cullen	NEXT LEFT
Old Town	Panther Rock	NEXT RIGHT
Monte Vista	Cranston	NEXT EXIT
Marina del Lago	Cemetery	EXIT
Lakeshore	The Strand	NORTH
Sanatorium Flats	Smelterdome	SOUTH
El Dorado	Downtown	EAST
Rancho Providencia	Uptown	WEST
Mercado	Scenic Overlook	AHEAD
Smelterville	McQuarry	TO
West	The Frontier	STAY
East	Civic Center	IN LANE
North	Red Light District	ENDS
South	Meeker Mall	LANE MERGES
Gehenna Badlands	Padilla Bridge	Parking
Rojas Desert	Museum	ATTRACTIONS

0 1 2 3 4 5 6 7 8 9



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GDC

Why not create a texture for each billboard instead of using the decal sheet?

Because creating a whole new texture for an intersection in a dense area would add a lot of memory. And making hundreds of layouts as textures would give one more set of assets to fit on disk, and track if something needed changing.

Here, we're only paying the cost of these 4 index sheets for the entire city, and since there are only a finite number of destinations, they can point you pretty much anywhere. We did use some custom textures for a handful of signs, but these decals handled the vast majority.

Highway Signs



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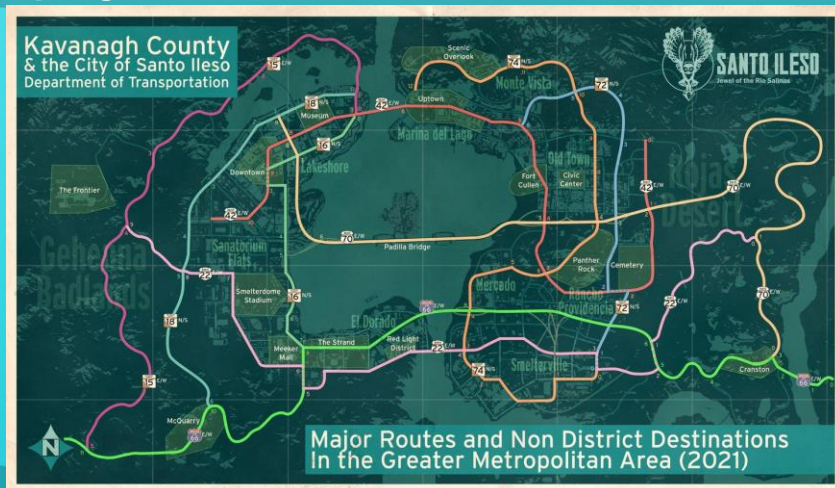


Here is an example of each layer of the decals being added, and where they are on the sheet.

There was no grid for this – the large variety of possible configurations meant it was generally easier and quicker to eyeball it.

This method meant most highway signs could be created in under 20 minutes. The real issue for highway signs was actually making sure they all pointed somewhere useful.

Highway Signs



To achieve that, we created a map of major routes throughout the city and named each of them. We added major locations such as Panther Rock, Uptown, the Stadium, and so on, as well as the districts.

Using this we could rapidly reference where a given route was going to pass through and make signs to match. Only highlighted routes usually got signs, and the numbers allowed us to reference other routes to other places.

Context Solutions

- Faux 3D Sign Decals
- Billboard Solutions
- “Sign Kits”
- An Approach to Highway Signs
- Murals



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Murals sounds like an easy one – just hire a talented Graffiti artist to paint some cool pictures. And at first, that’s basically what we did, but this had some limitations.

Murals



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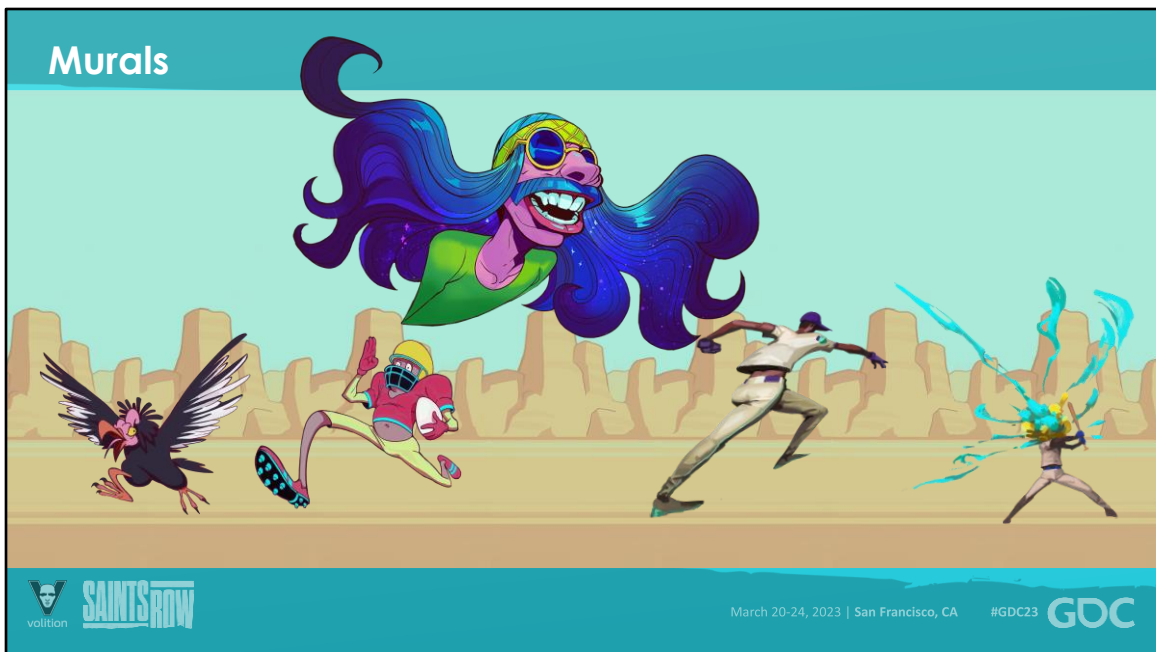
#GDC23 GDC

Custom painted murals worked well, and looked AMAZING, but they ate memory for lunch, and It was difficult to fit them to most walls without visible stretching.

We could have had them painted in a variety of formats, but it was difficult to plan them for walls that didn't yet exist.

We used them all anyway of course. Only a fool would leave these things laying on the table, we were just limited to where they could go.

For murals that fit more locations, we needed to think less traditionally.



Instead of one decal, we had a set of background patterns, and a group of themed foreground images.

This allowed the mixing of foregrounds and backgrounds and adjusting them to fit whatever location they were being applied to.

These could be baked into a single texture just for that location, but more often it was faster, more efficient, and flexible, to just stamp the decals atop each other in place.

This wasn't a huge rendering impact as long as the underlying surface was not too complex, and it was memory efficient because much like the Sign decals, the images were generally already loaded in the immediate area.

Murals



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This set comes from the Marina district, and we can see how these were mixed in different ways.

While they can get a little repetitive in memory starved locations, it does allow at least some variation and flexibility to how Murals are used, which helps with the context, and is still much better than no murals, or ones that really don't fit where they're being placed.

Murals



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GDC

In many places in the city it was possible to create some really unique feeling murals using this method.

The background or foreground images can also be isolated and used alone in many locations.

CONTEXT IN CONTEXT

CASE STUDY



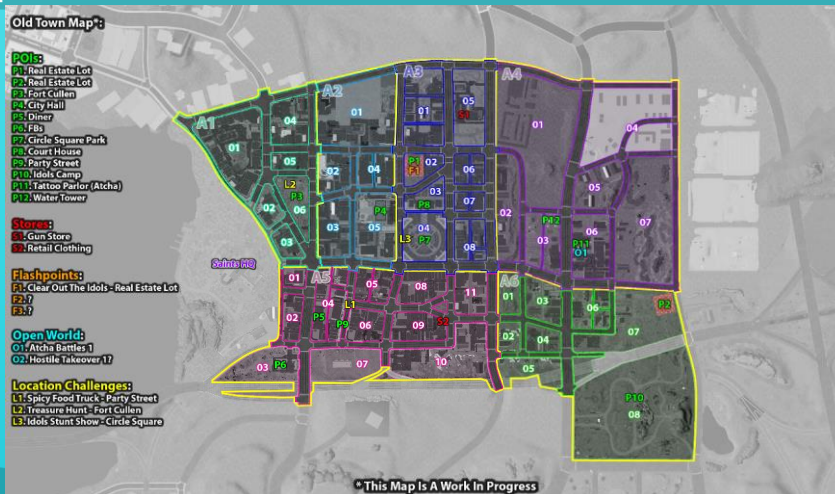
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Let's take a look at how some of these techniques were used on an average city block, and how a Context artist needs to think through a scenario.

Example District : Old Town West



Here's an early map of Old Town. Old Town is split two districts: East and *West,

Which we can see here

Old Town West consists of 30 blocks; the densest commercial area in the city, and is sub divided into several dev focused areas.

We'll focus on the South Western subdivision.



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Example District : Old Town West



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We decided to make this the area have the strongest use of American iconography: Stars and Stripes and red white and blue and so on. This is a common theme throughout Oldtown, but in this Subdivision it is at it's densest.

This makes it easier for the player to subconsciously recognize which part of the district they're currently in.

This area of Old Town was tight on memory, so the goal was to effectively leave it using no more memory than when I started in it.

Example District : Old Town West



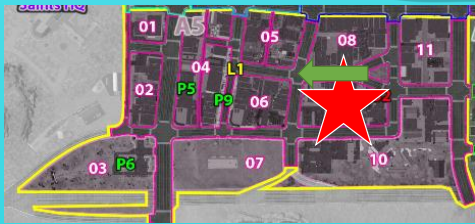
The first Context step is to take screenshots of each block, and make notes as to what sort of work is needed in each.

Some Notes may come from the art director, if there's a specific need, but in most cases this is done by me as the Context lead.

In general, very little art direction was provided beyond that already created for each district. Sometimes things were specifically requested, such as the American theming for Old Town coming from the Art Director, but for the most part I was trusted to complete the pass using my own judgement.

Some blocks will require no work - In this case, one of the blocks contains a pre-branded FB's, our Universe's major fast food chain, but no other buildings, so that block required no additional work.

Example Block



"PUT SOMETHING DISTINCTIVE ON THE TWO WALLS SHOWN AS EASY NAVIGATION MARKERS, SINCE THIS IS ONE BLOCK OUT FROM PARTY STREET. ADDITIONALLY, THE NORTH SIDE MIRRORS A5-08, SO MAKE THIS A MAIN STREET."



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We'll focus on this one block: as you can see, there was already a lot of ground work, but the buildings looked plain.

The goal of the Context pass is to reinforce the district art direction, make plain locations more memorable, particularly on major intersections, and to make each overall area look more distinctive. This can be achieved through use of Murals, store colouration, logos, billboards, and so on.

The notes I made for this block were

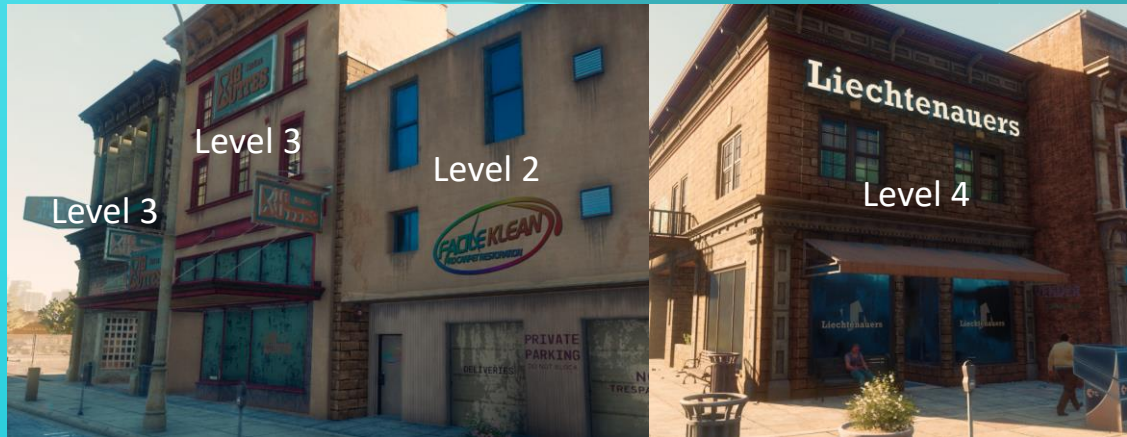
CLICK

"Put something distinctive on the two walls shown as easy navigation markers, since this is one block out from Party street. Additionally, the north side mirrors A5-08, so make this a main street."

“Party street” was a Silver level pedestrian area to the West, with distinctive bar signage.

Since this was not the first block dealt with in Old Town, we already had a selection of pre-branded buildings and signs we could use – Those could simply be swapped out for their matching counterparts on the block.

Example Block



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Here's an example of buildings that were just reused from previous locations in Old Town, though they're distinct on this block.

These use a combination of techniques we discussed before, though Liechtenauers had a modelled sign from an earlier appearance in Marina Del Lago.

The choice of which existing stores to use is driven by a variety of factors:

The Branding Library, which we'll cover later, has a note of the "Quality" of a given brand or store, and then each area of the district is also given a quality rating.

Appropriate companies for an area are usually within + or - 1 of the area rating - Old Town West has a value of 3, so some level 2 stores, and some level 4 stores were used.

Higher levels tend to stick to the major roads, lower ones to side roads.

There are other factors considered – is the store a big brand? a financial institution? A Mom n' Pop? City infrastructure?

In a real city, many of these things tend to stick to specific areas, and the same is true in Santo Ileso : Generally tracked by the Context artist based on the Art Direction.

Example Block



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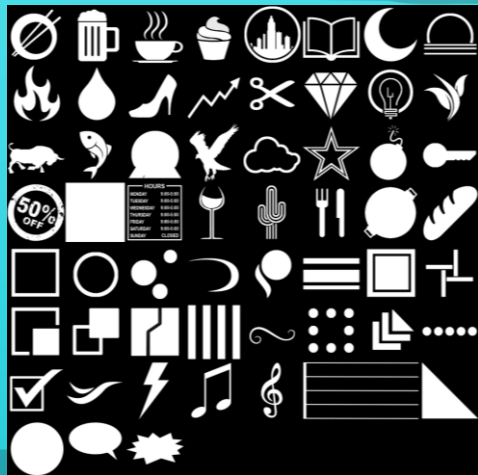
Here we can see how two properties on the block share the same structure, but feel very different thanks to some context and a lick of paint.

One of these is a higher “status” establishment than the other, but both fall within the range valid for this area,

Restaurants and Café’s are already defined as part of the Old town makeup.

They are also examples of some of the more playful establishment names. Naming such minor things was usually left to me as the Context Lead, though with 300+ things to name I was happy to take suggestions from the rest of the team.

Example Block



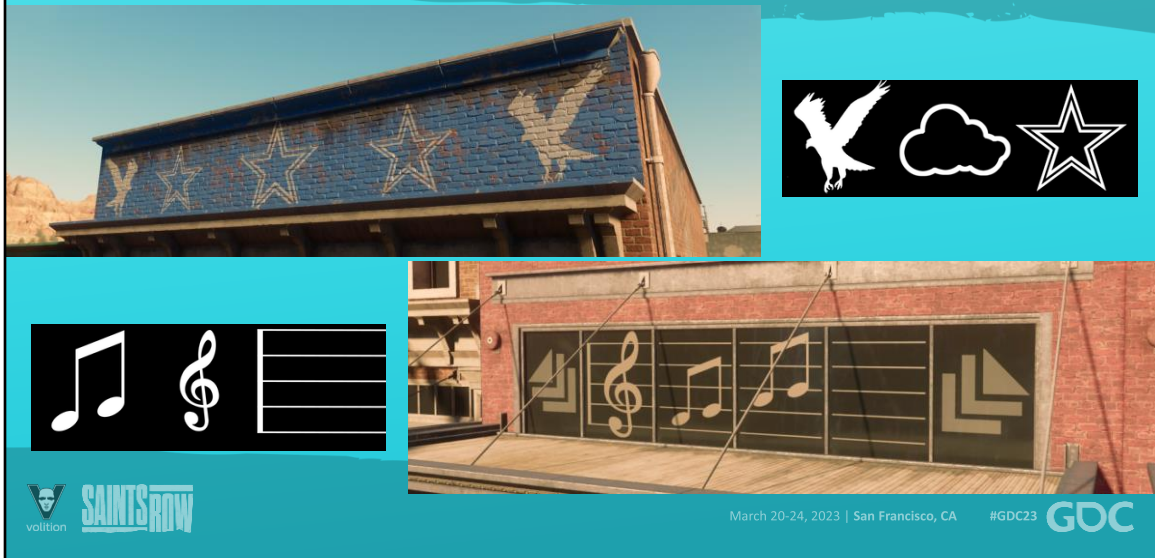
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Remember this decal set from the very first attempt at Context? Well, it didn't get used as the basis of the whole city, but it did get used for smaller accents.

Example Block



Here we can see it being used as a little extra detail for the music store, and as some ghost sign paintings

Oh, did we not mention Ghost Signs yet?

Example Block



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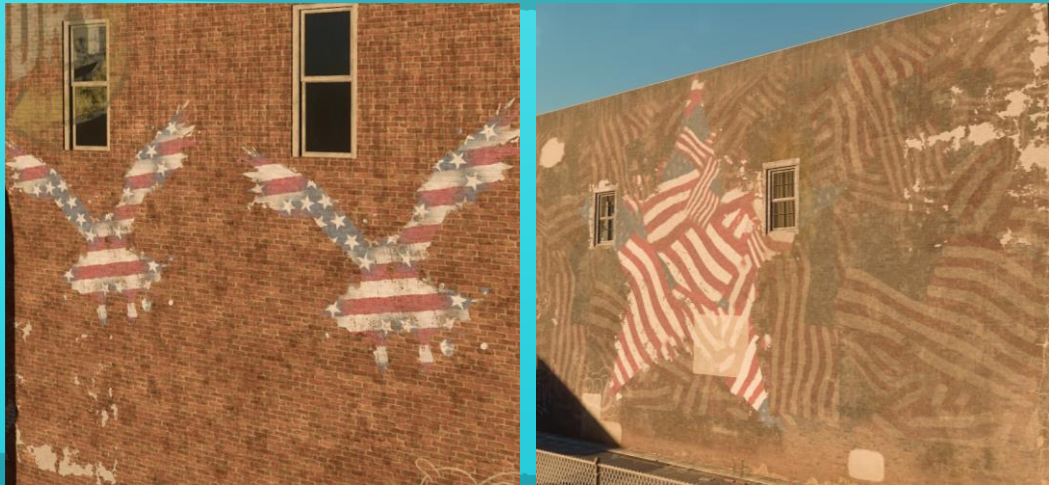
#GDC23

GDC

Ghost signs are just where signage was painted directly on a building many years ago, and never got painted over again, leaving a faint ghost of the faded paint..

Very common on older brick buildings in the US, so of course entirely appropriate in Old Town. Ghost signs also come under the remit of Context art as a type of Mural.

Example Block



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Other murals in Old Town consisted of tiling Stars and Stripes patterns, masked by a rough painted symbol associated with the US. In this case, eagles and a star.

This pattern was also used as a faded background.

This was done to save memory here - The shapes are just a single channel index map, and the star and stripes patterns are a separate image sheet. This means that they can easily be used for both background patterns and Mural foregrounds.

Example Block



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Another common mural trick here was to reuse a texture from a billboard as a faded sign – Billboard textures were loaded already in most places, and the wear mask was also used frequently, so it's an (almost) free decal.

Speaking of billboards...

Example Block



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Billboards help a lot with breaking up flat areas for the eye. In this case, advertising Fort Cullen, another Old Town location, and the ubiquitous Apollos coffee.

That one is a special kind of billboard however – once the player has bought a property in the city It is no longer a generic billboard, but one advertising one of the players Criminal Enterprises.

Example Block



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GDC

Here is the same board advertising Let's Pretend as well as Apollos. We tried to include a handful of these special boards in each district.

Example Block



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Two new branded versions of existing buildings were made initially for this block – one reused branding from elsewhere, and one was new and unique to Old Town. Both of these building storefronts would be reused around the rest of the district.

Apollo's is always good for filling space – just like Starbucks in Real Life. It's so common that it was one of a few bronze "brands" that got a full signage kit made for it,

Including custom window decals, modelled signs and so on.

Example Block



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There were a handful of other stores that got this more detailed pass, and these were useful when a location needed a higher level of Context detail, perhaps as a background to a character conversation, or as part of a cutscene, but we could use them elsewhere too.

Example Block



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The diner is of note mostly because it uses a sign kit, faux 3D signage, US Flag stars as Ghost Signage, the decal letter kit from way back in the beginning,

and a cheap neon effect on the window. This one building uses almost every trick in the book... And of course, fittingly for this area, what's more American than a classic Old Town Diner?

Example Block



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The last major building on the block is this bar. We can really see the “Americana” pass in these shots – Bunting on the balconies, flags and pennants hung across the street, that sort of thing.

Other than the standard mounted flags, these elements were all created specifically for this district’s context pass – and similar prop elements were created for other districts.

A little extra to sell the flavor and differentiate things. After this the bunting was reused for use in the first mission of the game.

Example Block



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The bar also got a modelled sign, since we already had one handy, and a 3D decal since it was on the same sheet as some other businesses nearby.

The big modelled “Bar” sign is a common one around the district, but it hadn’t been used for a couple of blocks.

Example Block



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And to finish it off there was this set of neon decals for bar windows we used all over the city. They don't use the Faux 3D Decal, but were made specifically for this purpose, since we knew we'd have a lot of bars.



This is a similar street a couple of blocks away before the Context Pass, since I didn't have a good before shot of the block we just looked at. You can see that after the context pass it changes from this...

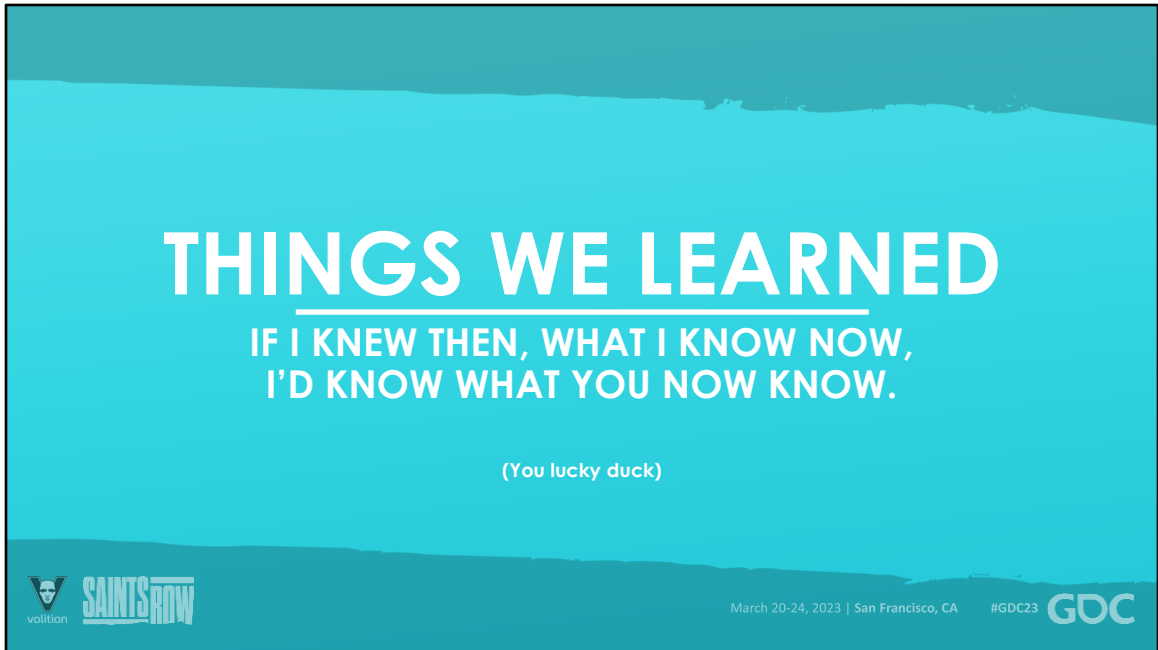


...To this!

And thus we populated the rest of the city, and not a single thing went wrong...

Not one...

Oh, no, hang on,...



Things did go wrong, of course they did, they always do. But a lot was learned from them, and we've actually covered a lot of those solutions in this talk so far. There were issues we never got a solution for,

I Got Nothin'

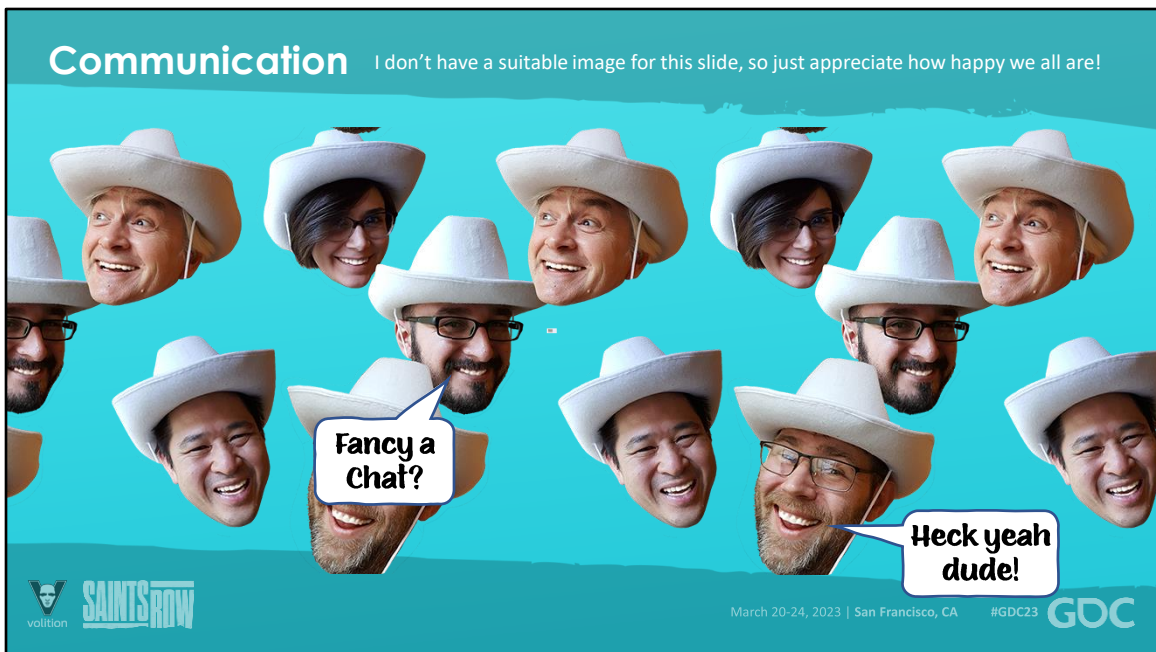


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Like Overrides sometimes being lost or misaligned on buildings we'd already done a pass on, but fortunately unsolved issues were rare.

One last thing that was learned was the specific use of communication relating to Context.



Context Communication is something that improved as the project went on,

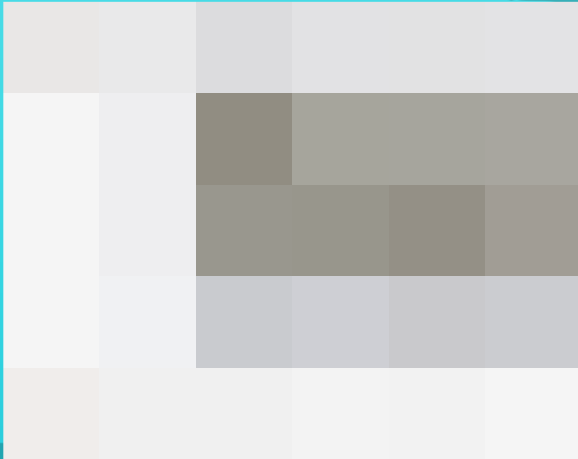
but initially, since there wasn't a clear point of contact on the art side, the writers would add references to products and places, and then have nobody to transmit that information to. They didn't even have a mechanism to know they might need to.

When I took on the Context role, they didn't go back through two years worth of writing to find it all (and who can blame them), and so some things were lost or missed as a result.

This was compounded with the move to Work From Home that many of us are all to familiar with – communication through things like Teams is pretty incredible all things considered, but it took some getting used to.

We solved this by using a specific "Branding chat" Channel...

Communication



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This allowed Writers and Context to ask if something already had a name before doing work on it,
to discuss ideas for new brands,
comment on logos,
and generally all be in the loop on what was going on with Context Branding.

This chat also included representatives of UI, the Art Director, PMs, and anyone else that might need to know about context art or naming needs.

There were still some issues, mostly stemming from those Times Before Context, but when we caught them solutions could be found and discussed quickly, without long email chains or breakout meetings.

As an example, the artis Village in Marina has two names on the map...

Communication



As an example, the artis Village in Marina has two names on the map...

The characters refer to it as "the galleria", one of those names added long before having a context lead, but this wasn't known when we made the sign.

So we nod to that being a colloquialism on the map, just in case someone thinks to question it.

This would have been missed entirely if not for the constant and easy communication, even though it was otherwise too late to account for. The chat allowed us to work around a few issues like this when we found them later on.

Issues like this were much easier to solve once there was suitable and direct communication between departments. Next time around we can have one running from the beginning and avoid such issues occurring in the first place.

Takeaways



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The lesson from all this is just to take the Context signage of the city seriously from the get go, and set up relevant lines of communication and areas of responsibility as early as possible.

Can you do all this without having one artist solely focused on it? Certainly, but it's going to be slower going as things work through the pipeline, and you'll need someone focused on planning that pipeline out.

A dedicated context artist can identify the need for a sign, name it, design it, build it, and place it in the space of a few hours.

Pushing that same sign through a pipeline that touches multiple people in different disciplines can take days or weeks, and need special tracking, but can still work if you're OK with having placeholder assets for an extended period of time; in some cases we did exactly that.

It is absolutely possible to divide the work between non-dedicated, artists and teams in this way, but it takes a lot of coordination and trust to do so. You may still need someone acting as a context lead to coordinate it all, but they might not need to be

an artist.

Takeaways

Map of 280 unique locations
in and around Santo Ileso



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Many games have exceptional signage – maybe they created them in exactly this way, maybe they created it in a completely different way that works better still, but they're not presenting this year

I can only speak to my own experiences on this one project.

And based on those experiences; in order for it to all gel at the *scales we were working at*, there needed to be a central point of contact to own it and drive it. Someone who knows what signs are available, which ones are needed, where they can best be implemented, and to help come up with the solutions to the problems presented by them.

A smaller or more linear world might be able to make do with much less – fewer locations needing context, or perhaps a different kind of context. You don't need neon signs in Sherwood Forest, for example. But in a modern city, and a world this size, I'm not sure there was any other way we could have done it than with a dedicated artist.

Our early efforts didn't fail because the artists responsible weren't good, or knowledgeable, or smart – they failed because their attentions were divided with

other areas of focus so they couldn't step back and take a holistic look at the whole world. They couldn't focus on how to make it all work consistently.

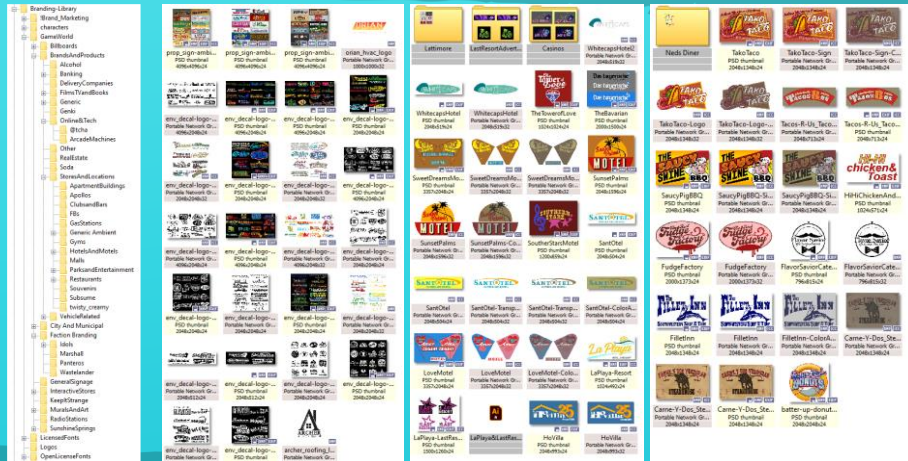
For that, on Saints Row, we needed a Context Lead.

And a Branding Library!



Oh, right, the Branding Library!

The Branding Library



I mentioned it before, but never looped back around to explain what it was.

When you have more than 500 brands, billboards, logos, liveries and more to keep track of across multiple disciplines, it helps if there's somewhere central to keep it all so that anyone can easily reach things. Preferably organized logically so that I don't need to be asked where everything is (that didn't go so well, but you can find things if you poke a little).

We divided ours into various categories, mostly focused around the game world, but also including Licensed Fonts, Character specific elements such as tattoos, and the official logos for the game.

It's nothing clever – just a bunch of standard PNG files kept in standard folders and checked into the depot so that any artist can access it, whether internal or external (as long as they're synced to it – it's quite large). It has PSD source files wherever possible, in case things need to be repurposed.

The Branding Library



Even vector logos are stored as PSD's when they can be – simple reason being that pretty much everyone has access to Photoshop, while Illustrator is rarer. Some things had to be kept as Illustrator files though – they can get pretty complex.

Another major advantage – everything in the library has gone past legal, so on the next project, Saints Row or not, we have a collection of brands know we're safe to reuse and repurpose, assuming they're contextually suitable.

That's really all the Branding Library is, just a big repository of logos in a loose folder structure with an Excel file to keep track of related details. I recommend keeping one, it can make finding and tracking things much, much easier.



And using techniques like these, we added context signage and props to the rest of the city.

The game has over 400 brands, some with multiple logos (Over 500, if we include vehicles)

25 standard billboard designs, with another dozen unique instances and 15 Criminal Enterprise ones.

Over 200 highway signs, accurately pointing the way

More murals and Graffiti than I can count

2 memorials, which I was honored to design

4 in universe maps, separate from those within the phone app

23 "Pop Ups Stores" and 8 enterable ones.

7 unique sets of context for mission spaces

And a lot more!

QUESTIONS?

And Answers, Presumably...

[linkedin.com/in/james-taylor-a5760924a/](https://www.linkedin.com/in/james-taylor-a5760924a/)
[Fb.me/ThatOneGuyOnTheWeb](https://www.facebook.com/ThatOneGuyOnTheWeb)
[artstation.com/harlequinqb](https://www.artstation.com/harlequinqb)
[youtube.com/@HarlequinQB](https://www.youtube.com/@HarlequinQB)

If you want to email me a question, that's cool, I'd love to hear from you - but you'll need to figure out the email yourself.

I'm not responsible for hiring or licensing though, so please don't ask ☺



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Questions?