

Performance Report for: http://trainz.com/

Report generated: Sat, Jan 11, 2025 5:05 AM -0800 (via API)
 Test Server Location: London, UK
 Using: Chrome 117.0.0.0, Lighthouse 11.0.0
 Analysis options: iPhone 13/13 Pro/13 Pro Max

B	Performance 89%	Structure 88%	L. Contentful Paint 713ms	T. Blocking Time 106ms	C. Layout Shift 0
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Top Issues

Med-High	Avoid an excessive DOM size	TBT	2,570 elements
Med-Low	Serve static assets with an efficient cache policy		Potential savings of 144KB
Med-Low	Avoid CSS @import	FCP LCP	1 resource found
Low	Use a Content Delivery Network (CDN)		4 resources found
Low	Use passive listeners to improve scrolling performance		1 event listener not passive

Focus on these audits first

These audits likely have the largest impact on your page performance.

Structure audits do not directly affect your Performance Score, but improving the audits seen here can help as a starting point for overall performance gains.

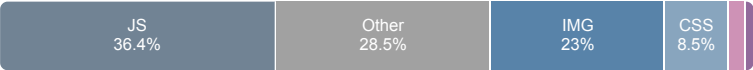
Page Details



Total Page Size - 2.03MB



Total Page Requests - 165



How does this affect me?

Modern web users have a short attention span and expect a fast and seamless website experience. Delivering that fast experience can result in more traffic, more conversions, and more happiness.

As if you didn't need more incentive, **Google use Page Speed and Page Experience (including Web Vitals) signals in their ranking algorithm.**

About TheNextLevel



Take your mobile experience to The Next Level. Design and launch your mobile application within a matter of hours using our app studio. Get access to a wide range of tools to help you engage better with customers from intelligent push messaging powered by AI to community builder giving customers the ability to interact with your brand within your mobile app.

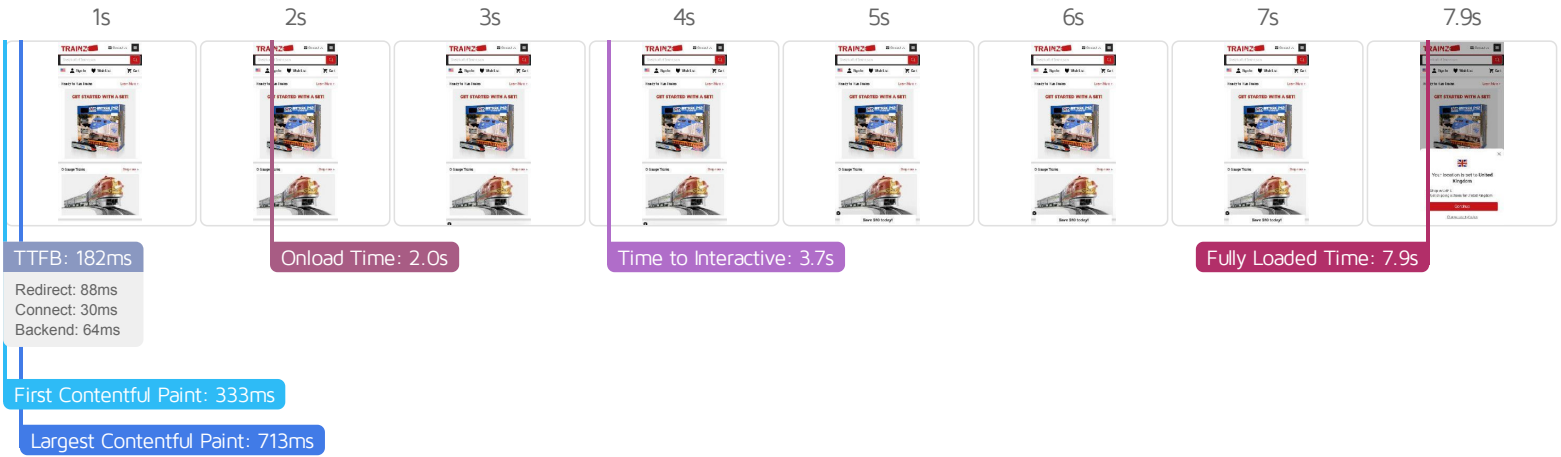
The waterfall chart displays the loading behaviour of your site in your selected browser. It can be used to discover simple issues such as 404's or more complex issues such as external resources blocking page rendering.

Trainz | Collectible Model Trains for Hobbyists

/	301	trainz.com	0	87ms				
/	200	trainz.com	77.8KB	104ms				
roboto_n4.da808834c231...	200	trainz.com	20.0KB	59ms				
roboto_n7.51ede27d5b58...	200	trainz.com	20.1KB	68ms				
home-O-Gauge-Trains-33...	200	trainz.com	10.8KB	31ms				
klaviyo.js?company_id=R...	200	static.klaviyo.com	2.29KB	77ms				
shopify-perf-kit-1.1.0.min.js	200	trainz.com	6.45KB	89ms				
hcoj5m8zwt	200	clarity.ms	707B	157ms				
base.css?v=14333225432...	200	trainz.com	12.5KB	61ms				
b740c64e3w77d0d2c6pffa...	200	trainz.com	41.8KB	47ms				
trekkie.storefront.1ba35b...	200	trainz.com	24.7KB	54ms				
shop_events_listener-209...	200	trainz.com	3.55KB	35ms				
component-search.css?v...	200	trainz.com	1.37KB	38ms				
component-cart-notificati...	200	trainz.com	1.55KB	38ms				
component-cart-items.cs...	200	trainz.com	2.23KB	37ms				
get-started-width-a-set-sl...	200	cdn.shopify.com	25.8KB	54ms				
fs-clearance-m.jpg?v=431...	200	trainz.com	12.5KB	57ms				
home_brand_2_logo_Lio...	200	trainz.com	5.50KB	90ms				
home_brand_2_logo_MT...	200	trainz.com	3.49KB	57ms				
home_brand_2_logo_Atla...	200	trainz.com	4.91KB	57ms				
home_brand_2_logo_LG...	200	trainz.com	5.43KB	90ms				
home_brand_2_logo_bac...	200	trainz.com	6.76KB	90ms				
home_brand_2_logo_mar...	200	trainz.com	2.82KB	89ms				
home_brand_2_logo_bro...	200	trainz.com	5.36KB	85ms				
home_brand_2_logo_Am...	200	trainz.com	6.66KB	59ms				
home_brand_2_logo_Usa...	200	trainz.com	5.63KB	89ms				
home-Pre-owned-Collecti...	200	trainz.com	10.7KB	84ms				
fs-international-shipping-...	200	trainz.com	8.92KB	64ms				
sbs.jpg?v=145874425730...	200	trainz.com	41.4KB	87ms				
home-road-name-PRR.jpg...	200	trainz.com	4.21KB	70ms				
home-road-name-UP.jpg?...	200	trainz.com	4.93KB	65ms				
home-road-name-NYC.jpg...	200	trainz.com	4.93KB	72ms				
home-road-name-SP.jpg?...	200	trainz.com	6.57KB	72ms				
home-road-name-NW.jpg...	200	trainz.com	5.52KB	69ms				
Chicago-Milwaukee-St-Pa...	200	trainz.co	10.1KB	97ms				
home-road-name-BO.jpg?...	200	trainz.com	4.91KB	69ms				
Atchison-Topeka-Santa-F...	200	trainz.co	8.63KB	93ms				
Denver-&-Rio-Grande-We...	200	trainz.co	9.54KB	399ms				
Parts-Diagrams.jpg?v=17...	200	cdn.shopify.com	25.2KB	87ms				
pixel.modern.js	200	trainz.com	4.88KB	33ms				
pixel.modern.js	200	trainz.com	2.68KB	20ms				
modern/	200	trainz.com	23.2KB	22ms				
modern/	200	trainz.com	22.9KB	23ms				
section-footer.css?v=165...	200	trainz.com	2.64KB	24ms				
component-newsletter.cs...	200	trainz.com	1.32KB	43ms				
component-list-menu.css...	200	trainz.com	1.14KB	42ms				
component-list-payment...	200	trainz.com	1.09KB	43ms				
component-list-social.cs...	200	trainz.com	1.12KB	41ms				
component-rte.css?v=16...	200	trainz.com	1.34KB	70ms				
disclosure.css?v=646595...	200	trainz.com	1.34KB	50ms				
fender_analytics.5423fef4...	200	static-tracking.klaviy...	12.4KB	38ms				
static.8d136cd44b74e818...	200	static-tracking.klaviy...	280B	35ms				
runtime.97cb18f0bdc4064...	200	static.klaviyo.com	7.61KB	29ms				

sharedUtils.e82919a2352...	200	static.klaviyo.com	18.0KB		38ms		
vendors~signup_forms~p...	200	static.klaviyo.com	4.00KB		28ms		
vendors~signup_forms~c...	200	static.klaviyo.com	2.85KB		33ms		
vendors~signup_forms.ff...	200	static.klaviyo.com	4.24KB		31ms		
default~signup_forms~on...	200	static.klaviyo.com	9.15KB		38ms		
signup_forms.3439ca692...	200	static.klaviyo.com	5.87KB		30ms		
vendors~signup_forms~p...	200	static-tracking.klaviy...	4.00KB		35ms		
post_identification_sync...	200	static-tracking.klaviy...	2.65KB		35ms		
POST produce_batch	200	trainz.com	0		143ms		
fbevents.js	200	connect.facebook.net	60.8KB		28ms		
analytics.js	200	google-analytics.com	20.5KB		39ms		
worker.modern.js	200	trainz.com	22.5KB		68ms		
worker.modern.js	200	trainz.com	22.5KB		71ms		
worker.modern.js	200	trainz.com	22.5KB		70ms		
worker.modern.js	200	trainz.com	22.5KB		36ms		
ob-currency-modal.css?v=...	200	trainz.com	2.29KB		51ms		
ob-currency-modal.js?v=...	200	trainz.com	1.70KB		54ms		
ob-country-detection.js?v=...	200	trainz.com	1.77KB		88ms		
POST produce_batch	200	trainz.com	0		122ms		
POST produce_batch	200	trainz.com	0		123ms		
POST produce_batch	200	trainz.com	0		122ms		
clarity.js	200	clarity.ms	28.4KB		11ms		
js?id=G-LVJ18B2TMZ	200	googletagmanager.c...	138KB		87ms		
onsite?company_id=RL6...	200	fast.a.klaviyo.com	510B		24ms		
full-forms	200	static-forms.klaviyo.c...	5.08KB		20ms		
POST produce_batch	200	trainz.com	0		131ms		
1587357484907173?v=2.9....	200	connect.facebook.net	14.8KB		292ms		
bat.js	200	bat.bing.com	14.2KB		47ms		
consent-tracking-api.js	200	trainz.com	5.89KB		44ms		
algolia-search-insights@...	200	trainz.com	3.16KB		42ms		
wish-list-service.js?v=338...	200	trainz.com	3.15KB		49ms		
global.js?v=24706814173...	200	trainz.com	6.50KB		54ms		
preloads.js?locale=en-US	200	trainz.com	1.96KB		66ms		
load_feature-1060834584...	200	trainz.com	4.14KB		53ms		
details-disclosure.js?v=1...	200	trainz.com	1.43KB		62ms		
details-modal.js?v=45117...	200	trainz.com	1.45KB		52ms		
cart-notification.js?v=311...	200	trainz.com	1.60KB		62ms		
algoliasearch-lite.umd.js?...	200	trainz.com	4.89KB		63ms		
algolia-instantsearch@4....	200	trainz.com	68.5KB		65ms		
algolia-autocomplete.js?v...	200	trainz.com	17.5KB		64ms		
algolia-autocomplete-plu...	200	trainz.com	2.87KB		50ms		
imageMapResizer.min.js?...	200	trainz.com	1.79KB		61ms		
dom-content-loaded.js?v...	200	trainz.com	1.00KB		61ms		
css2?family=Nunito+San...	200	fonts.googleapis.com	1.38KB		38ms		
destination?id=AW-49690...	200	googletagmanager.c...	91.0KB		35ms		
destination?id=MC-D9YN...	200	googletagmanager.c...	92.4KB		34ms		
POST collect	204	m.clarity.ms	0		265ms		
343027277.js	200	bat.bing.com	1.68KB		17ms		
POST queries?x-algolia-a...	200	ha37j7jvqs-dsn.algoli...	3.25KB		244ms		
POST queries?x-algolia-a...	200	ha37j7jvqs-dsn.algoli...	3.86KB		252ms		
POST produce_batch	200	trainz.com	0		135ms		
tr?id=1587357484907173...	200	facebook.com	273B		28ms		
496902787?random=1736...	200	googleadservices.com	2.53KB		46ms		
343027277	200	clarity.ms	919B		111ms		
0?ti=343027277&Ver=2&...	204	bat.bing.com	286B		16ms		
496902787?random=2886...	302	googleads.g.doublec...	42B		41ms		
496902787?random=2886...	302	google.com	42B		62ms		
clarity.js	200	clarity.ms	28.4KB		8ms		
c.gif	302	c.clarity.ms	0		50ms		
POST events?X-Algolia-A...	200	insights.algolia.io	29B		56ms		
POST events?X-Algolia-A...	200	insights.algolia.io	29B		45ms		
496902787?random=2886...	200	google.co.uk	42B		47ms		

c.gif?ctsa=mr&CtsSyncl...	302	c.bing.com	0						31ms	
c.gif?ctsa=mr&CtsSyncl...	200	c.clarity.ms	42B						13ms	
c.gif	200	c.clarity.ms	42B						48ms	
favicon.png?v=66308527...	200	trainz.com	2.54KB						25ms	
polyfills.CqZeYI46.js	200	cdn.shopify.com	14.9KB						54ms	
POST collect	204	m.clarity.ms	0						252ms	
app.BepfASJv.js	200	cdn.shopify.com	364KB						54ms	
page-Information.CK3xLo...	200	cdn.shopify.com	4.41KB						27ms	
AmazonPayPCIButton.CB...	200	cdn.shopify.com	3.64KB						36ms	
POST produce_batch	200	trainz.com	0						124ms	
ShopPayCaptcha.AT2Z7d...	200	cdn.shopify.com	3.22KB						36ms	
POST collect	204	m.clarity.ms	0						343ms	
CheckoutAsGuest.CkXr0...	200	cdn.shopify.com	2.60KB						32ms	
vendors~reviews~atlas~C...	200	static.klaviyo.com	7.58KB						6ms	
ClientStore.ac8d97b122f5...	200	static.klaviyo.com	20.0KB						8ms	
532.19b6acd49f1f2b52a24...	200	static.klaviyo.com	9.01KB						13ms	
styles.c55c43061a96111d...	200	static.klaviyo.com	3.57KB						7ms	
vendors~Render.92dcda4...	200	static.klaviyo.com	13.3KB						8ms	
Render.895189b37f47550...	200	static.klaviyo.com	36.6KB						18ms	
PrimeNotAvailable.DYVhi...	200	cdn.shopify.com	1.60KB						27ms	
DeliveryMethodSelectorS...	200	cdn.shopify.com	21.6KB						26ms	
useUnauthenticatedError...	200	cdn.shopify.com	1.57KB						29ms	
useRefEffect.skDgpEbd.js	200	cdn.shopify.com	1.74KB						23ms	
ShopPayLogo.Czm3QLDx...	200	cdn.shopify.com	2.27KB						27ms	
hooks.Bzf4rUP8.js	200	cdn.shopify.com	3.86KB						28ms	
useAmazonContact.UNQ...	200	cdn.shopify.com	3.62KB						20ms	
app.BtDbFeTa.css	200	cdn.shopify.com	22.8KB						24ms	
ShopPayCaptcha.CUoq2p...	200	cdn.shopify.com	953B						36ms	
CheckoutAsGuest.C0wR...	200	cdn.shopify.com	814B						23ms	
DeliveryMethodSelectorS...	200	cdn.shopify.com	2.97KB						30ms	
ShopPayLogo.D_HPU8Dh...	200	cdn.shopify.com	864B						28ms	
useAmazonContact.D-Ox...	200	cdn.shopify.com	920B						33ms	
roboto_n4.da808834c231...	200	fonts.shopifycdn.com	20.0KB						75ms	
roboto_n7.51ede27d5b58...	200	fonts.shopifycdn.com	20.1KB						42ms	
logo_71908be0-584a-4d80...	200	cdn.shopify.com	14.7KB						25ms	
js?id=AW-1072624270&l=...	200	googletagmanager.c...	101KB						49ms	
bat.js	200	bat.bing.com	14.2KB						31ms	
343027277.js	200	bat.bing.com	1.68KB						18ms	
POST collect?en=page_vi...	200	google.com	0						14ms	
1072624270?random=173...	200	googleads.g.doublec...	2.25KB						21ms	
343027277	200	clarity.ms	731B						88ms	
0?ti=343027277&Ver=2&...	204	bat.bing.com	293B						280ms	
1072624270?random=173...	200	google.com	64B						16ms	
1072624270?random=173...	200	google.co.uk	42B						18ms	
POST collect	204	m.clarity.ms	0						81ms	
script.js?shop=trainz.my...	200	geolocation-recomm...	22.8KB						162ms	
uppromote.js?shop=train...	200	d1639lhkj5l89m.clou...	6.07KB						47ms	
browsing_context_sugge...	200	trainz.com	1.58KB						73ms	
gb.svg	200	cdn.shopify.com	1.22KB						22ms	
POST collect	204	m.clarity.ms	0						80ms	
165 Requests		2.03MB (4.98MB Uncompressed)		7.9s (Onload 2s)						



Performance Metrics

First Contentful Paint How quickly content like text or images are painted onto your page. A good user experience is 0.9s or less.	Good - Nothing to do here 333ms	Time to Interactive How long it takes for your page to become fully interactive. A good user experience is 2.5s or less.	Longer than recommended 3.7s
Speed Index How quickly the contents of your page are visibly populated. A good user experience is 1.3s or less.	Much longer than recommended 4.7s	Total Blocking Time How much time is blocked by scripts during your page loading process. A good user experience is 150ms or less.	Good - Nothing to do here 106ms
Largest Contentful Paint How long it takes for the largest element of content (i.e., a hero image) to be painted on your page. A good user experience is 1.2s or less.	Good - Nothing to do here 713ms	Cumulative Layout Shift How much your page's layout shifts as it loads. A good user experience is a score of 0.1 or less.	Good - Nothing to do here 0

Browser Timings

Redirect	88ms	Connect	30ms	Backend	64ms
TTFB	182ms	First Paint	333ms	DOM Int.	1.2s
DOM Loaded	1.2s	Onload	2.0s	Fully Loaded	7.9s

IMPACT AUDIT

Med-High

Avoid an excessive DOM size TBT

2,570 elements

A large DOM will increase memory usage, cause longer style calculations, and produce costly layout reflows.

STATISTIC	ELEMENT	VALUE
Total DOM Elements		2570
Maximum DOM Depth	\$349.95 <s>	17
Maximum Child Elements	body.gradient <body class="gradient">	42

Med-Low

Serve static assets with an efficient cache policy

Potential savings of 144KB

A long cache lifetime can speed up repeat visits to your page.

URL	CACHE TTL	TRANSFER SIZE
https://trainz.co/Newsletters/shop-by-road-name-logos/Chicago-Milwaukee-St-Paul-&-Pacific.jpg	none	10.1KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Denver-&-Rio-Grande-Western.jpg	none	9.54KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Atchison-Topeka-Santa-Fe.jpg	none	8.63KB
https://www.facebook.com/tr/?id=1587357484907173&ev=PageView&dl=https%3A%2F%2Fwww.trainz.com%2F&rl=&if=false&ts=1736600707410&sw=390&sh=844&v=2.9.179&r=stable&a=shopify&ec=0&o=12318&fbp=fb.1.1736600707408.36019118838995445&ler=empty&cdl=API_unavailable&it=1736600706893&coo=false&eid=sh-5577de6f-A366-43A7-7059-B152AB2213A0&rqm=G&ET	none	273B
https://connect.facebook.net/en_US/fbevents.js	20 minutes	63.2KB
https://connect.facebook.net/signals/config/1587357484907173?v=2.9.179&r=stable&domain=www.trainz.com&hme=b8122d5d96cd6f542162ba4f497489972d1ebe228d24c39d34f560e30ae932ce&ex_m=70%2C122%2C107%2C111%2C61%2C4%2C100%2C69%2C16%2C97%2C89%2C51%2C54%2C173%2C176%2C188%2C184%2C185%2C187%2C29%2C101%2C53%2C77%2C186%2C168%2C171%2C181%2C182%2C189%2C132%2C41%2C191%2C192%2C34%2C144%2C15%2C50%2C197%2C196%2C134%2C18%2C40%2C1%2C43%2C65%2C66%2C67%2C71%2C93%2C17%2C14%2C96%2C92%2C91%2C108%2C52%2C110%2C39%2C109%2C30%2C94%2C26%2C169%2C172%2C141%2C86%2C56%2C84%2C33%2C73%2C0%2C95%2C32%2C28%2C82%2C83%2C88%2C47%2C46%2C87%2C37%2C11%2C12%2C13%2C6%2C7%2C25%2C22%2C23%2C57%2C62%2C64%2C75%2C102%2C27%2C76%2C9%2C8%2C80%2C48%2C21%2C104%2C103%2C105%2C98%2C10%2C20%2C3%2C38%2C74%2C19%2C5%2C90%2C81%2C44%2C35%2C85%2C2%2C36%2C63%2C42%2C106%2C45%2C79%2C68%2C112%2C60%2C59%2C31%2C99%2C58%2C55%2C49%2C78%2C72%2C24%2C113	20 minutes	14.8KB
https://www.google-analytics.com/analytics.js	2 hours	21.1KB
https://d1639lhkj5l89m.cloudfront.net/js/storefront/uppromote.js?shop=trainz.myshopify.com	4 hours	6.07KB
https://www.clarity.ms/s/0.7.59/clarity.js	24 hours	28.4KB
https://www.clarity.ms/s/0.7.59/clarity.js	24 hours	28.4KB
https://www.trainz.com/cdn/fonts/roboto/roboto_n4.da808834c2315f31dd3910e2ae6b1a895d7f73f5.woff2?h1=dHJhaW56LmNvbQ&h2=bWFya2V0cGxhY2UudHJhaW56YXVjdGlvbnMuY29t&h3=dHJhaW56LmFjY291bnQubXlzaG9waWZ5LmNvbQ&hmac=b271e4ffab6ee8bd4aeaa7b4449fcb5e4aa638795708f76f750612aed6174a86	30 days	20.6KB
https://www.trainz.com/cdn/fonts/roboto/roboto_n7.51ede27d5b58491d9cf07ad184108da52fef80b4.woff2?h1=dHJhaW56LmNvbQ&h2=bWFya2V0cGxhY2UudHJhaW56YXVjdGlvbnMuY29t&h3=dHJhaW56LmFjY291bnQubXlzaG9waWZ5LmNvbQ&hmac=5286dc9fbb529e4e8356a9d024d5284e8a8adc2fae6cb2a017b08a65edca3cde	30 days	20.5KB

Med-Low

Avoid CSS @import FCP LCP

1 resource found

Using CSS @import in an external stylesheet can add additional delays during the loading of a web page.

<https://fonts.googleapis.com/css2?family=Nunito+Sans:ital,wght@0,200;0,300;0,400;0,600;0,700;0,800;0,900&family=Poppins:ital,wght@0,100;0,200;0,300;0,400;0,500;0,600;0,700;0,800;0,900&display=swap>

Low Use a Content Delivery Network (CDN)

4 resources found

CDNs can give an equally fast web experience to your users across the globe.

URL

- https://www.google.co.uk/pagead/1p-conversion/496902787/?random=288669636&cv=11&fst=1736600707460&bg=ffffff&guid=ON&async=1>m=45be5190za200zb9106729323&gcs=G111&gcd=13t3t3t3t5l1&dma=0&tag_exp=101925629~102067555~102067808~102081485~102123608~102198178&u_w=390&u_h=844&url=https%3A%2F%2Fwww.trainz.com%2F&label=hxQpCLb9gOkBEIPF-OwB&tiba=Trainz%20%7C%20Collectible%20Model%20Trains%20for%20Hobbyists&hn=www.googleadservices.com&frm=0&did=dYmNjMT%2CdNzYwYj&gclid=dYmNjMT&edid=dNzYwYj>m_ee=1&rdp=0&npa=0&pscdl=noapi&aid=190377947.1736600707&uaa=&uab=&uafvl=&uamb=0&uam=&uap=&uapv=&uaw=0&fdr=QA&capi=2&data=event%3Dpage_view%3Bpage_path%3D%2F&fmt=3&ct_cookie_present=false&crd=CLHBsQllsMGxAgixw7ECCLrFsQlllwsmxAgjxrECCKPFsQlllcmxAgjTxbECIqEC&pscdl=IhMlscam4t3tigMvdSQGAB3DNTTr3MgIIAzICCAQyAggHMgIIICDICCakYAggKMgIIAjICCAyAggVMgIIHzICCBMyAggSOhdodHRwcovL3d3dy50cmFpbnouY29tL0JXQ2hFSWdNcUJ2QVIRakx6WW1NX0JyTGpiQVJJc0FTUJwM0E2dDRSamJZZ2ZYVlVXemFBA3F0Q0xSR3p2N3c2cFdIWDBrVxxtVEl1czh3czg4enY0alk0&is_vtc=1&cid=CAQSGwCa7L7dMrxbNnw6g2_Cq3mjvRL00wXQYQd-Ug&random=1253560415&ipr=y
- <https://c.clarity.ms/c.gif?ctsa=mr&CtsSynclid=BF5B94FE8845426387F28549FE3AC4BE&MUID=1607FF5B178963081DDCEA2A16B86229>
- <https://c.clarity.ms/c.gif>
- https://www.google.co.uk/pagead/1p-user-list/1072624270/?random=1736600709446&cv=11&fst=1736600400000&bg=ffffff&guid=ON&async=1>m=45be5190v896605707za200zb9106729323&gcd=13t3t3t3t5l1&dma=0&tag_exp=101925629~102067555~102067808~102081485~102123608~102198178&u_w=390&u_h=844&url=https%3A%2F%2Fwww.trainz.com%2F&hn=www.googleadservices.com&frm=0&tiba=Trainz%20%7C%20Collectible%20Model%20Trains%20for%20Hobbyists&did=dYmNjMT&gclid=dYmNjMT&rdp=0&npa=0&pscdl=noapi&aid=190377947.1736600707&uaa=&uab=&uafvl=&uamb=0&uam=&uap=&uapv=&uaw=0&fdr=QA&data=event%3Dgtag.config&rftm=3&fmt=3&is_vtc=1&cid=CAQSGwCa7L7dQ8ZxEa4TmROQdJlFM3SdeQBpx_RV0w&random=1754188817&rmt_tld=1&ipr=y

Low Use passive listeners to improve scrolling performance

1 event listener not passive

Consider marking your touch and wheel event listeners as `passive` to improve your page's scroll performance.

URL

LOCATION

- <https://static.klaviyo.com/onsite/js/vendors~reviews~atlas~ClientStore.dd9d02dd9fc376e8dd48.js>

Line:0

Low Avoid long main-thread tasks TBT

4 long tasks found

Lists the longest tasks on the main thread, useful for identifying worst contributors to input delay.

URL

START TIME

DURATION

- <https://www.trainz.com/cdn/wpm/b740c64e3w77d0d2c6pffaaa8c0m859bd135m.js>394ms129ms
- <https://www.googletagmanager.com/gtag/js?id=AW-1072624270&l=dataLayer&cx=c>m=45je5190v9106729323za200>3.7s64ms
- <https://www.clarity.ms/s/0.7.59/clarity.js>1.3s57ms
- <https://www.trainz.com/cdn/s/trekkie.storefront.1ba35b5f093ffd68a8c5f392f4d0d189b99599a5.min.js>570ms54ms

Low Reduce JavaScript execution time TBT

986ms spent executing JavaScript

Consider reducing the time spent parsing, compiling, and executing JS. You may find delivering smaller JS payloads helps with this.

URL	TOTAL CPU TIME	SCRIPT EVALUATION	SCRIPT PARSE
• Unattributable	690ms	36ms	0ms
• https://www.trainz.com/	603ms	234ms	15ms
• https://www.trainz.com/cdn/wpm/b740c64e3w77d0d2c6pffaaa8c0m859bd135m.js	194ms	161ms	6ms
• https://www.clarity.ms/s/0.7.59/clarity.js	180ms	128ms	3ms
• https://www.trainz.com/cdn/s/trekkie.storefront.1ba35b5f093ffd68a8c5f392f4d0d189b99599a5.min.js	89ms	79ms	9ms
• https://www.googletagmanager.com/gtag/js?id=G-LVJ18B2TMZ	71ms	57ms	6ms
• https://static.klaviyo.com/onsite/js/vendors~reviews~atlas~ClientStore.dd9d02dd9fc376e8dd48.js	68ms	56ms	0ms
• https://www.googletagmanager.com/gtag/js?id=AW-1072624270&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	67ms	62ms	4ms
• https://connect.facebook.net/en_US/fbevents.js	58ms	24ms	32ms
• https://www.trainz.com/cdn/shop/t/70/assets/dom-content-loaded.js?v=45391882823130871381664802100	53ms	46ms	0ms
• https://www.trainz.com/wpm@740c64e3w77d0d2c6pffaaa8c0m859bd135/custom/web-pixel-131194@8/sandbox/modern/	50ms	14ms	4ms

Low

Avoid enormous network payloads LCP

Total size was 2.06MB

Large network payloads cost users real money and are highly correlated with long load times.

URL	TRANSFER SIZE
• https://cdn.shopify.com/shopifycloud/checkout-web/assets/c1.en/app.BepfASJv.js	364KB
• https://www.googletagmanager.com/gtag/js?id=G-LVJ18B2TMZ	139KB
• https://www.googletagmanager.com/gtag/js?id=AW-1072624270&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	101KB
• https://www.googletagmanager.com/gtag/destination?id=MC-D9YN9KPYEB&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	92.7KB
• https://www.googletagmanager.com/gtag/destination?id=AW-496902787&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	91.1KB
• https://www.trainz.com/	77.8KB
• https://www.trainz.com/cdn/shop/t/70/assets/algolia-instantsearch@4.49.1.js?v=170343443126647640051678289958	68.5KB
• https://connect.facebook.net/en_US/fbevents.js	63.2KB
• https://www.trainz.com/cdn/wpm/b740c64e3w77d0d2c6pffaaa8c0m859bd135m.js	41.8KB
• https://www.trainz.com/cdn/shop/t/70/assets/sbs.jpg?v=145874425730855512721672255136	41.4KB

Low

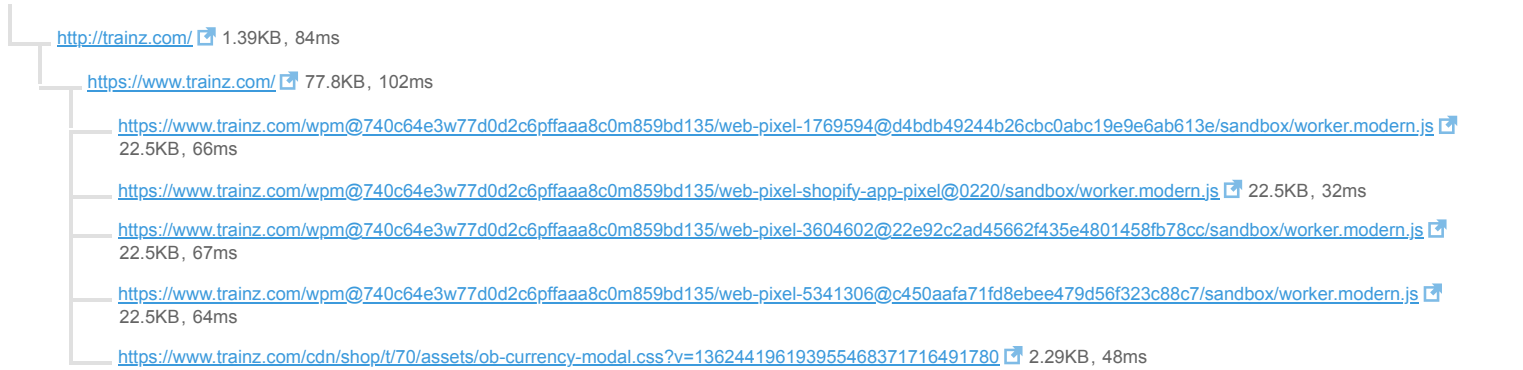
Avoid chaining critical requests FCP LCP

5 chains found

The Critical Request Chains below show you what resources are loaded with a high priority. Consider reducing the length of chains, reducing the download size of resources, or deferring the download of unnecessary resources to improve page load.

Maximum critical path latency: 767ms

INITIAL NAVIGATION



Low

Minify JavaScriptFCPLCP

Potential savings of 2.11KB

Minifying JavaScript files can reduce payload sizes and script parse time.

URL	TRANSFER SIZE	POTENTIAL SAVINGS
inline: let hasPromotion = false;const marke...	7.39KB	2.11KB

Low

Avoid multiple page redirectsFCPLCP

Potential savings of 85ms

Redirects introduce additional delays before the page can be loaded.

URL	TIME SPENT
http://trainz.com/	85ms
https://www.trainz.com/	0ms

Low

Efficiently encode images

Potential savings of 8.16KB

Optimized images load faster and consume less cellular data.

URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://trainz.co/Newsletters/shop-by-road-name-logos/Denver-&-Rio-Grande-Western.jpg	9.06KB	4.11KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Chicago-Milwaukee-St-Paul-&-Pacific.jpg	9.65KB	4.05KB

Low

Avoid non-composited animationsCLS

2 animated elements found

Animations which are not composited can be janky and increase CLS.

ELEMENT	NAME
div.needsclick <code><div data-testid="animated-teaser" class="needsclick kl-private-reset-css-Xuajs1" style="height: 100%; width: 100%; animation-timing-function: ease;"></code> Unsupported CSS Property: visibility	klaviyo-slidein down
Save \$10 today! <code><div data-testid="animated-teaser" class="needsclick kl-private-reset-css-Xuajs1" style="height: 100%; width: 100%;"></code> Unsupported CSS Property: visibility	klaviyo-slidein down

Low

Reduce unused JavaScriptLCP

Potential savings of 351KB

Reduce unused JavaScript and defer loading scripts until they are required to decrease bytes consumed by network activity.

URL	TRANSFER SIZE	POTENTIAL SAVINGS
https://www.googletagmanager.com/gtag/js?id=G-LVJ18B2TMZ	139KB	62.6KB
https://connect.facebook.net/en_US/fbevents.js	63.2KB	59.3KB
https://www.trainz.com/cdn/shop/t/70/assets/algolia-instantsearch@4.49.1.js?v=170343443126647640051678289958	68.5KB	53.1KB
https://www.googletagmanager.com/gtag/destination?id=MC-D9YN9KPYEB&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	92.7KB	51.7KB
https://www.googletagmanager.com/gtag/destination?id=AW-496902787&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	91.1KB	42.1KB
https://www.googletagmanager.com/gtag/js?id=AW-1072624270&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	101KB	39.2KB
https://connect.facebook.net/en_US/fbevents.js	63.2KB	21.7KB
https://static.klaviyo.com/onsite/js/Render.895189b37f47550a0b8a.js	36.8KB	20.9KB

Low

Defer offscreen images

Potential savings of 35.0KB

Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower time to interactive.

URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://cdn.shopify.com/s/files/1/1260/4747/files/Parts-Diagrams.jpg?v=1723041262	25.2KB	25.2KB
https://www.trainz.com/cdn/shop/t/70/assets/home-Pre-owned-Collectibles-335x175.jpg?v=25430119288635575411733761861	9.8KB	9.8KB

Low

Properly size images

Potential savings of 55.9KB

Serve images that are appropriately-sized to save cellular data and improve load time.

URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://www.trainz.com/cdn/shop/t/70/assets/sbs.jpg?v=145874425730855512721672255136	40.4KB	29.1KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Chicago-Milwaukee-St-Paul-&-Pacific.jpg	9.65KB	7.95KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Denver-&-Rio-Grande-Western.jpg	9.06KB	7.46KB
https://trainz.co/Newsletters/shop-by-road-name-logos/Atchison-Topeka-Santa-Fe.jpg	8.14KB	6.71KB
https://www.trainz.com/cdn/shop/t/70/assets/home-road-name-SP.jpg?v=175047274961526143231683724849	5.63KB	4.63KB

N/A

Minimize main-thread work TBT

Main-thread busy for 2.7s

Consider reducing the time spent parsing, compiling and executing JS. You may find delivering smaller JS payloads helps with this.

CATEGORY	TIME SPENT
Script Evaluation	1.2s
Other	829ms
Style & Layout	278ms
Script Parsing & Compilation	127ms
Parse HTML & CSS	99ms
Rendering	43ms
Garbage Collection	38ms

N/A

Reduce the impact of third-party code TBT

Third-party code blocked the main thread for 8ms

Third-party code can significantly impact load performance. Limit the number of redundant third-party providers and try to load third-party code after your page has primarily finished loading.

THIRD-PARTY	TRANSFER SIZE	MAIN-THREAD BLOCKING TIME
GOOGLE TAG MANAGER	424KB	8ms
https://www.googletagmanager.com/gtag/js?id=AW-1072624270&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	101KB	8ms
https://www.googletagmanager.com/gtag/js?id=G-LVJ18B2TMZ	139KB	0ms
https://www.googletagmanager.com/gtag/destination?id=MC-D9YN9KPYEB&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	92.7KB	0ms
https://www.googletagmanager.com/gtag/destination?id=AW-496902787&l=dataLayer&cx=c&gtm=45je5190v9106729323za200	91.1KB	0ms
SHOPIFY	591KB	0ms
https://cdn.shopify.com/shopifycloud/checkout-web/assets/c1.en/app.BepfASJv.js	364KB	0ms
Other resources	227KB	0ms
KLAVIYO	177KB	0ms
https://static.klaviyo.com/onsite/js/Render.895189b37f47550a0b8a.js	36.8KB	0ms
https://static.klaviyo.com/onsite/js/ClientStore.ac8d97b122f5bdb2dca0.js	20.3KB	0ms
https://static.klaviyo.com/onsite/js/sharedUtils.e82919a2352d77ce58ea.js?cb=1&v2-route=1	18.2KB	0ms
https://static.klaviyo.com/onsite/js/vendors~Render.92dcda48e90318e1e147.js	13.7KB	0ms
https://static-tracking.klaviyo.com/onsite/js/fender_analytics.5423fef494cd37ce24a4.js?cb=1&v2-route=1	12.8KB	0ms
Other resources	75.0KB	0ms
FACEBOOK	78.2KB	0ms
https://connect.facebook.net/en_US/fbevents.js	63.2KB	0ms
https://connect.facebook.net/signals/config/1587357484907173?v=2.9.179&r=stable&domain=www.trainz.com&hmc=b8122d5d96cd6f542162ba4f497489972d1ebe228d24c39d34f560e30ae932ce&ex_m=70%2C122%2C107%2C111%2C61%2C4%2C100%2C69%2C16%2C97%2C89%2C51%2C54%2C173%2C176%2C188%2C184%2C185%2C187%2C29%2C101%2C53%2C77%2C186%2C168%2C171%2C181%2C182%2C189%2C132%2C41%2C191%2C192%2C34%2C144%2C15%2C50%2C197%2C196%2C134%2C18%2C40%2C1%2C43%2C65%2C66%2C67%2C71%2C93%2C17%2C14%2C96%2C92%2C91%2C108%2C52%2C110%2C39%2C109%2C30%2C94%2C26%2C169%2C172%2C141%2C86%2C56%2C84%2C33%2C73%2C0%2C95%2C32%2C28%2C82%2C83%2C88%2C47%2C46%2C87%2C37%2C11%2C12%2C13%2C6%2C7%2C25%2C22%2C23%2C57%2C62%2C64%2C75%2C102%2C27%2C76%2C9%2C8%2C80%2C48%2C21%2C104%2C103%2C105%2C98%2C10%2C20%2C3%2C38%2C74%2C19%2C5%2C90%2C81%2C44%2C35%2C85%2C2%2C36%2C63%2C42%2C106%2C45%2C79%2C68%2C112%2C60%2C59%2C31%2C99%2C58%2C55%2C49%2C78%2C72%2C24%2C113	14.8KB	0ms
CLARITY	62.4KB	0ms
https://www.clarity.ms/s/0.7.59/clarity.js	56.8KB	0ms
Other resources	5.62KB	0ms
BING ADS	34.0KB	0ms
https://bat.bing.com/bat.js	29.3KB	0ms
Other resources	4.67KB	0ms
TRAINZ.CO	28.3KB	0ms
https://trainz.co/Newsletters/shop-by-road-name-logos/Chicago-Milwaukee-St-Paul-&-Pacific.jpg	10.1KB	0ms
https://trainz.co/Newsletters/shop-by-road-name-logos/Denver-&-Rio-Grande-Western.jpg	9.54KB	0ms
https://trainz.co/Newsletters/shop-by-road-name-logos/Atchison-Topeka-Santa-Fe.jpg	8.63KB	0ms
GOOGLE ANALYTICS	21.1KB	0ms
https://www.google-analytics.com/analytics.js	21.1KB	0ms
ALGOLIA	7.11KB	0ms
https://ha37j7jvqs-dsn.algolia.net/1/indexes/*/queries?x-algolia-agent=Algolia%20for%20JavaScript%20(4.15.0)%3B%20Browser%20(lite)%3B%20instantsearch.js%20(4.52.0)%3B%20JS%20Helper%20(3.11.3)&x-algolia-api-key=42566fec4d4af0a09d599a9edad9ac15&x-algolia-application-id=HA37J7JVQS	7.11KB	0ms
GOOGLE/DOUBLECLICK ADS	6.55KB	0ms
CLOUDFRONT.NET	6.07KB	0ms
https://d1639lhkj5l89m.cloudfront.net/js/storefront/uppromote.js?shop=trainz.myshopify.com	6.07KB	0ms

THIRD-PARTY	TRANSFER SIZE	MAIN-THREAD BLOCKING TIME
OTHER GOOGLE APIS/SDKS	1.80KB	0ms
GOOGLE FONTS	1.38KB	0ms

N/A	User Timing marks and measures	35 user timings
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Consider instrumenting your app with the User Timing API to measure your app's real-world performance during key user experiences.

NAME	TYPE	START TIME	DURATION
wpm:completed	Measure	226ms	1.3s
wpm:pixel:register:5341306:app	Measure	479ms	891ms
wpm:pixel:register:4587642:app	Measure	479ms	436ms
wpm:pixel:register:3604602:app	Measure	480ms	1.1s
wpm:pixel:register:2359418:app	Measure	480ms	585ms
wpm:pixel:register:1769594:app	Measure	481ms	958ms
wpm:pixel:register:131194:custom	Measure	481ms	796ms
wpm:pixel:register:shopify-app-pixel:app	Measure	482ms	966ms
wpm:pixel:register:shopify-custom-pixel:custom	Measure	482ms	820ms
shopify.content_for_header.start	Mark	214ms	0ms
shopify.content_for_header.end	Mark	218ms	0ms
wpm:start	Mark	226ms	0ms
wpm:pixel:register:started:5341306:app	Mark	479ms	0ms
wpm:pixel:register:started:4587642:app	Mark	479ms	0ms
wpm:pixel:register:started:3604602:app	Mark	480ms	0ms
wpm:pixel:register:started:2359418:app	Mark	480ms	0ms
wpm:pixel:register:started:1769594:app	Mark	481ms	0ms
wpm:pixel:register:started:131194:custom	Mark	481ms	0ms
wpm:pixel:register:started:shopify-app-pixel:app	Mark	482ms	0ms
wpm:pixel:register:started:shopify-custom-pixel:custom	Mark	482ms	0ms
wpm:pixel:register:completed:4587642:app	Mark	916ms	0ms
wpm:pixel:register:completed:2359418:app	Mark	1.1s	0ms
wpm:pixel:register:completed:131194:custom	Mark	1.3s	0ms
wpm:pixel:register:completed:shopify-custom-pixel:custom	Mark	1.3s	0ms
wpm:pixel:register:completed:5341306:app	Mark	1.4s	0ms
wpm:pixel:register:completed:1769594:app	Mark	1.4s	0ms
wpm:pixel:register:completed:shopify-app-pixel:app	Mark	1.4s	0ms

NAME	TYPE	START TIME	DURATION
wpm:pixel:register:completed:3604602:app	Mark	1.5s	0ms
wpm:pixels:resolved	Mark	1.5s	0ms
fbevents:start:unwantedDataProcessing_1587357484907173	Mark	1.7s	0ms
fbevents:end:unwantedDataProcessing_1587357484907173	Mark	1.7s	0ms
fbevents:start:unwantedParamsProcessing_1587357484907173	Mark	1.7s	0ms
fbevents:start:validateUrlProcessing_1587357484907173	Mark	1.7s	0ms
fbevents:end:validateUrlProcessing_1587357484907173	Mark	1.7s	0ms
fbevents:start:standardParamChecksProcessing_1587357484907173	Mark	1.7s	0ms

N/A

Avoid large layout shifts

CLS

5 elements found

These DOM elements contribute most to the CLS of the page.

ELEMENT	CLS CONTRIBUTION
Wish List 	0.00
Sign In <div class="dropdown">	0.00
Cart Cart 	0.00
div.header__icons > div.dropdown > span.link > svg <svg xmlns="http://www.w3.org/2000/svg" width="20.5" height="22.003" viewBox="0 0 20.5 22.003">	0.00
div.top-header-wrapper > div.header__icons > a.link > svg <svg xmlns="http://www.w3.org/2000/svg" width="22" height="22" viewBox="0 0 22 22">	0.00

N/A

Largest Contentful Paint element

LCP

710 ms

This is the largest contentful element painted within the viewport.

ELEMENT
get-started-width-a-set

PHASE	% OF LCP	TIMING
TTFB	20%	139ms
Load Delay	27%	191ms
Load Time	7%	48ms
Render Delay	47%	333ms

N/A

Reduce initial server response timeFCPLCP

Root document took 20ms

Keep the server response time for the main document short because all other requests depend on it.

URL	TIME SPENT
• https://www.trainz.com/	20ms

N/A

Avoid serving legacy JavaScript to modern browsersTBT

Potential savings of 32.2KB

Polyfills and transforms enable legacy browsers to use new JavaScript features. However, many aren't necessary for modern browsers. For your bundled JavaScript, adopt a modern script deployment strategy using module/nomodule feature detection to reduce the amount of code shipped to modern browsers, while retaining support for legacy browsers.

URL	POTENTIAL SAVINGS
https://www.trainz.com/cdn/shop/t/70/assets/algolia-search-insights@2.3.0.js?v=74512274931491196491678289958	10.9KB
Line:0 Column:2330	Obj ect.k eys
https://connect.facebook.net/en_US/fbevents.js	10.5KB
Line:23 Column:2302	@bab el/p lugi n-tr ansf orm- clas ses
Line:272 Column:15628	Arra y.pr otot ype. map
Line:272 Column:23417	Arra y.fr om
Line:272 Column:25990	Arra y.pr otot ype. filt er
Line:272 Column:29007	Arra y.pr otot ype. find
https://connect.facebook.net/en_US/fbevents.js	10.5KB
Line:23 Column:2302	@bab el/p lugi n-tr ansf orm- clas ses
Line:272 Column:15628	Arra y.pr otot ype. map
Line:272 Column:23417	Arra y.fr om
Line:272 Column:25990	Arra y.pr otot ype. filt er
Line:272 Column:29007	Arra y.pr otot ype. find
https://www.trainz.com/cdn/shopifycloud/shopify/assets/shop_events_listener-20905db421adb60b04582abab58b285362bc2e1011d17cd3eabb3bfe05798c59.js	71B

URL	POTENTIAL SAVINGS
Line:0 Column:400	@babel/pugin-transformer-classses
https://static.klaviyo.com/onsite/js/vendors~signup_forms.ffb16c5d33241b7ebc9d.js?cb=1&v2-route=1	62B
Line:1 Column:2166	@babel/pugin-transformer-classses
https://static.klaviyo.com/onsite/js/vendors~Render.92dcda48e90318e1e147.js	51B
Line:1 Column:2450	@babel/pugin-transformer-classses
https://connect.facebook.net/signals/config/1587357484907173?v=2.9.179&r=stable&domain=www.trainz.com&hme=b8122d5d96cd6f542162ba4f497489972d1ebe228d24c39d34f560e30ae932ce&ex_m=70%2C122%2C107%2C111%2C61%2C4%2C100%2C69%2C16%2C97%2C89%2C51%2C54%2C173%2C176%2C188%2C184%2C185%2C187%2C29%2C101%2C53%2C77%2C186%2C168%2C171%2C181%2C182%2C189%2C132%2C41%2C191%2C192%2C34%2C144%2C15%2C50%2C197%2C196%2C134%2C18%2C40%2C1%2C43%2C65%2C66%2C67%2C71%2C93%2C17%2C14%2C96%2C92%2C91%2C108%2C52%2C110%2C39%2C109%2C30%2C94%2C26%2C169%2C172%2C141%2C86%2C56%2C84%2C33%2C73%2C0%2C95%2C32%2C28%2C82%2C83%2C88%2C47%2C46%2C87%2C37%2C11%2C12%2C13%2C6%2C7%2C25%2C22%2C23%2C57%2C62%2C64%2C75%2C102%2C27%2C76%2C9%2C8%2C80%2C48%2C21%2C104%2C103%2C105%2C98%2C10%2C20%2C3%2C38%2C74%2C19%2C5%2C90%2C81%2C44%2C35%2C85%2C2%2C36%2C63%2C42%2C106%2C45%2C79%2C68%2C112%2C60%2C59%2C31%2C99%2C58%2C55%2C49%2C78%2C72%2C24%2C113	45B
Line:19 Column:2057	@babel/pugin-transformer-classses
https://www.trainz.com/cdn/shop/t/70/assets/algolia-instantsearch@4.49.1.js?v=170343443126647640051678289958	42B
Line:1 Column:1048	@babel/pugin-transformer-classses

N/A

Eliminate render-blocking resources

FCP

LCP

Nothing to do here, good job!