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More Americans have died on U.S. roads since 9/11 than Americans killed in both World Wars combined Around the world, more people die on the roads every single day than in the 9/11 terrorist attacks

> How are we going to fix all this?









Hyperloop for the first time

Virgin Hyperloop completed the first test of its high-speed transportation technology with humans on board. The company's hyperloop pod traveled 500 meters and reached speeds of 100mph.























Asset management of sidewalks?









Los Angeles Times

CALIFORNIA

L.A. agrees to spend \$1.3 billion to fix sidewalks in ADA case



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CALIFORNIA

Vanessa Bryant recounts dealing with 'callous' L.A. County on day Kobe and Gianna died

MOVIES

Alec Baldwin is credited as a producer on 'Rust.' What does that really mean?

Adrcog » ut DRCOG + Planning a Great Region + Programs + Services and Resources + News and Events + Contact DRCOG + Services and Resources / Data, Maps and Modeling / Regional Planimetric Data Project Services and Resources Boomer Bond **Regional Planimetric Data Project** • Way to Go - Commuter Services ♥ Data, Maps and Modeling Community Profiles Denver Regional Aerial Photography Project (DRAPP) Regional Planimetric Data Project Regional Land Use Land Cover Project Regional Lidar Project Denver Regional Data Consortium > Denver Regional Visual Resources Economics and Land Use Travel Modeling Regional Data Catalog The Regional Planimetric Data Project is a data acquisition endeavor facilitated by DRCOG. This project uses high-resolution imagery captured as part of the Denver Regional Aerial Photography Project (DRAPP) as a reference to digitize features of the built environment. The project typically captures nine features, including: • building roofprint (polygons) edge of pavement (polygons) edge of pavement (lines) • parking lot (polygons) sidewalk (polygons) sidewalk (lines) • sidewalk ramp (points) • trail (lines) • driveway (polygons)

Planimetric Data























The future of transportation starts with good sidewalks...











we can do better...


"In 1990, bicycling and walking were described as "the forgotten modes" of transportation by the (FHWA)"













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"While geodata for automobile road networks are widely available in the United States, digital sidewalk geodata are scarce..."

Source: Bolten et al., 2017, page 2



"Surprisingly the academic literature is scant regarding studies on sidewalk GIS analyses ... "

Source: : Bise et al., 2018, pages 43-44





Planimetric Spatial Data & the Provision of Sidewalk Infrastructure in Cities

















Planimetric Data



Normalize the data

Extract Sidewalks & Roadways





Sidewalk Availability





Sidewalk Minimum Width





Agency	Document	Width
ADA	2010 ADA Standards for Accessible Design	3-foot (0.9m)
	Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way	4-foot (1.2m)
AASHTO	A Policy on Geometric Design of Highways and Streets	
FHWA	Designing Sidewalks and Trails for Access	5-foot (1.5m)
NACTO	Urban Street Design Guide	
ITE & CNU	Design Parameters for Walkable Urban Thoroughfares	6-foot (1.8m)

Sidewalk Land Coverage





Roadway Land Coverage









Deficiency in Sidewalk Availability





50% Sidewalk Availability





> 10% Failed to meet ADA (3-ft)











Sidewalk Static Obstructions and the Impact on Clear Width





Static Obstructions





Static obstruction

Static Obstructions







≥ 3-ft



≥ 5-ft





The (Un)Equal Distribution of Sidewalk Infrastructure Across 16 U.S. Cities





Which populations are most impacted?



TRR

Incorporating Equity into Pedestrian Master Plans

Amber Berg¹ and Gregory L. Newmark¹

Absract The reserved provides a functioned for addressing sequises shough manicipations' processorshow plane, which has all says requirements and have been given. India patience for incorporating equity. These pertention maker portstore plane, shown as This Three AX of Equity. Adversing more receipter a sequence of the plane and an unsuperation incorporation plane, shown and the Accouncie's greatest the equity material to be achieved by the set of the plane and Application identifies the incorporating equity. These pertentions are all the many the plane and adaptive the adversion of the adversion of the set of the plane and an unsuperation integrates to be allowed by the set of the adversion of the set of the plane adversion of the respect conditionation. The subject the set of the plane adversion of the respect to the adversion of the set of the plane adversion of the set of the plane adversion of the set of the plane adversion of the respect to the adversion of the set of the plane adversion of the plane adversion of the set of the set of the plane adversion of the set of the

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for incorporating equity into transportation framework, the Three A's of Transportation immends three equity elements:

Admossledgment, the recognition of equity as a value of the plan (e.g., identifying transportation Amber Berg, sherg23ppg(kaushe

train crash rates between moment rate as peles-train crash rates between moment groups): Accountability, the start histment of a commitment to advance equity through that plan (e.g., setting goals amed at achieving equity, such as relacing pediations fatalities in neighborhoods of color), and

SAGE

and *Application*, the planned actions to morease equity (e.g., proposing programs that address identified dispanities, such as a regular committee for inclu-are outmach).

ese Three A's of Th used to evaluate the sample PMP. for there to of equity. The plans were snowed for which help include the support of the start of the product of the start of the start of the product of the start of the start of the product of the start of the start of the help equity. In the days may account in the start of the 80% Apply equity, but only 67% do both, and ndear, frequently exclude mor as a dom considered throughout a plan' MPs in the sample, 73% Acknowled equity, but only 67% do both, and Department of Landscape Architecture and Regional & Co Planning, Kamas State University, Manhactan, KS

"cities are increasingly including equity into their pedestrian master plans ..."

Source: Berg and Newmark, 2020





"...agencies lack documentation on pedestrian and bicycle infrastructure." Source: FHWA, 2016

Lakewood Commerce City Round Rock

Sidewalk Availability







Sidewalk Width

Wider Average Width

Lower Income & Greater Non-White Block Groups

Wider Minimum Width

Lower Income & Greater Non-White Block Groups




















TRANSPORTATION LEARNING NETWORK

A partnership with MDT·NDDOT·SDDOT·WYDOT and the Mountain-Plains Consortium Universities

Thank you for participating!

Please take a moment to complete the evaluation included in the reminder email.

We appreciate your feedback.

Thank you to our partners:









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