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The Guidelines emphasise the need to design streets for all users and activities, including the social and economic activities that make Indian streets so vibrant. This quick reference guide highlights key concepts from the IRC Guidelines, including footpath design standards. The guide also draws from local and international best practice for some themes not covered in the IRC publication. Practitioners looking for more a more comprehensive resource on street design should refer to ITDP’s Better Streets, Better Cities. In addition, interested parties can reference ITDP’s Footpath Basics infographic to see the key aspects of high quality footpaths. Related Resources June 23, 2025 May 29, 2025 May 1, 2025 Share this publication Download this report Source: ITDP India Walking is fundamental to urban life. It is a healthy and pollution-free form of mobility and recreation. Pedestrian trips account for a quarter to a third of all trips in many Indian cities. 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Ped Crossing Experience: Ped Crossing Experience: • ADA Design-Build • RRFB • ADA Inventory & Retrofit • HAWK • RRFB • Accessible Signal Upgrades • HAWK • ADA Transition Plans • Equestrian Signal Design • Pedestrian Bridges • Accessible Signal Upgrades • Bulb-Outs • Bulb-Outs • ADA Training • Shared Use Paths • Shared Use Paths 2 THE AGENDA 1. Regulations & Policies 2. Pedestrian Crossing Elements 3. Crossing Treatments 4. Funding Options 5. Questions DISCLAIMER IMAGES, PROJECTS, and EXAMPLES have been sourced from many various locations/entities. WE ARE NOT CLAIMING THESE AS OUR OWN! 3 REGULATIONS & POLICY Manual on Uniform Traffic Control Devices (MUTCD) ! National standards governing all traffic control devices ! Two revisions accepted in 2012 ! Ensures uniformity of TC devices 4 REGULATIONS & POLICY Americans with Disabilities Act (ADA) 1990 ! Prohibits discrimination on the basis of disability by public entities (Title II). ! All publicly-owned intersections/facilities must comply with: " Americans with Disabilities Act Accessibility Guidelines (ADAAG) (Title III) Entities may choose to comply with… " Public Rights-of-Way Accessibility Guidelines (PROWAG) 5 REGULATIONS & POLICY A public entity shall: Evaluate its current services, policies,and practices, and the effects thereof, that do not or may not meet the“ requirements“ …Identify physical obstacles in the public [Show full text] Definition of Footpath and Road Margin Meanings of “footpath” and “road margin” in Land Transport (Road User) Rule 2004 The RURs provide the following definitions 1.6 Interpretation: footpath means a path or way principally designed for, and used by, pedestrians; and includes a footbridge road margin includes any uncultivated margin of a road adjacent to but not forming part of either the roadway or the footpath (if any) The definition of “footpath” encompasses the road space that is principally designed for and used by pedestrians. There is nothing in any of the rules that reference footpath that limits this to paved areas of the pedestrian space. The definition of “road margin” excludes any part of the footpath. The term is only used in RUR 6.2, 11.14 and 11.15. Both 11.14 and 11.15 refer to riders of horses. 11.14 requires horse riders to “when a reasonably adequate road margin is available, keep the animal on the road margin as far as practicable”, but prohibits riding “along a footpath, or on any lawn, garden, or other cultivation adjacent to or forming part of a road”. These words suggest that road margins do not exist on all roads. It appears that the term “road margin” only refers to areas set aside and formed for parking or stopping off the roadway References to “footpath” and “road margin” in other legislation Both terms appear with the same definitions in related legislation: the Land Transport (Offences and Penalties) Regulations 1999 (in a schedule of penalties for breaching rules in the RUR, and the Traffic Regulations 1976 (largely revoked and Replaced by the RUR). [Show full text] Pedestrian Crossings: Uncontrolled Locations Pedestrian Crossings: Uncontrolled Locations CENTER FOR TRANSPORTATION STUDIES Pedestrian Crossings: Uncontrolled Locations June 2014 Published By Minnesota Local Road Research Board (LRRB) Web: www.lrrb.org MnDOT Office of Maintenance MnDOT Research Services Section MS 330, 395 John Ireland Blvd. St. Paul, Minnesota 55155 Phone: 651-366-3780 Fax: 651-366-3789 E-mail: Acknowledgements The financial and logistical support provided by the Minnesota Local DATA COLLECTION Road Research Board, the Minnesota Department of Transportation (MnDOT), and the Minnesota Local Technical Assistance Program John Hourdos and Stephen Zitzow, University of Minnesota (LTAP) at the Center for Transportation Studies (CTS), University of PRODUCTION Minnesota for this work is greatly acknowledged. Research, Development, and Writing: Bryan Nemeth, Ross Tillman, The procedures presented in this report were developed based on infor- Jeremy Melquist, and Ashley Hudson, Bolton & Menk, Inc. mation from previously published research studies and reports and newly collected field data. Editing: Christine Anderson, CTS The authors would also like to thank the following individuals and orga- Graphic Design: Abbey Kleinert and Cadie Wright Adikhary, CTS, and nizations for their contributions to this document. David Breiter, Bolton & Menk, Inc. TECHNICAL ADVISORY PANEL MEMBERS Tony Winiecki , Scott County Pete Lemke, Hennepin County Kate Miner, Carver County Tim Plath, City of Eagan Mitch Rasmussen, Scott County Jason Pieper, Hennepin County Mitch Bartelt, MnDOT This material was developed by Bolton & Menk, Inc., in coordination with the Minne- Melissa Barnes, MnDOT sota Local Road Research Board for use by practitioners. Under no circumstances shall Tim Mitchell, MnDOT this guidebook be sold by third parties for profit. [Show full text] Truly Spectacular! Directions to Western Park Entrance Directions to Eastern Park Entrance Hiking Paths Observation Decks Sussex WESTERN PARK ENTRANCE Sussex Corner Fundy Trail All trail distances are one-way unless indicated with an * Accessible off trails within the parkway - may require a Parkway Easy Moderate Strenuous short hike Waterford St. Martins Hearst Lodge A Multi-Use Trail 10 km 1 Flowerpot Rock – 1 9 Sluiceway Observation Deck Alma Harbour 39 km Opening B Sea Captains’ Burial Ground Footpath 0.34 km 2 Flowerpot Rock – 2 10 Suspension Footbridge Sea Caves 2021 7 km H C Flowerpot Rock Scenic Footpath 1.5 km 3 Flowerpot Rock – 3 Observation Deck P9 I D 11 Interpretive Centre Bradshaw Scenic Footpath 0.6 km 4 Fuller Falls EASTERN PARK ENTRANCE Observation Deck E Pioneer Trail Loop * 0.48 km Observation Deck Fundy Trail Parkway 12 Tufts’ Plateau F Big Salmon River Loop * 1.2 km 5 Lighthouse Map Legend Lookouts Beaches G Suspension Footbridge Trail 0.39 km 13 Long Beach Observation Deck Easily accessed by driving James Catt Observation Deck 0 Beach 1 Melvin Beach L H 14 McCumber Brook 4 the parkway Monument 7 10 Hearst Lodge Scenic Footpath 2.7 km 6 Isle Haute EASTERN PARK Electric Vehicle Charge Station 2 Pangburn Beach I Cranberry Brook Loop * 4.8 km Observation Deck 1 1 Fox Rock Lookout Mitchell Franklin Bridge Observation Deck ENTRANCE S F Fundy Trail Parkway - 30 km 3 Big Salmon River Beach Suspension 6 J Big Salmon to Long Beach Footpath 4.4 km 15 McCumber Brook 2 Fownes Head Lookout 7 Waterfowl ROUTE TO (cars, buses, motorcycles) 4 Long Beach [Show full text] "2. Sidewalks". "Boston Complete Streets Design Guide." Sidewalk Zone Widths The width of the sidewalk contributes to the degree of When making decisions for how to allocate sidewalk space, comfort and enjoyment of walking along a street. Narrow the following principles should be used: sidewalks do not support lively pedestrian activity, and may create dangerous conditions where people walk in the Frontage Zone street. Typically, a five foot wide Pedestrian Zone supports > The Frontage Zone should be maximized to provide space two people walking side by side or two wheel chairs passing for cafés, plazas, and greenscape elements along build- each other. An eight foot wide Pedestrian Zone allows two ing facades wherever possible, but not at the expense of pairs of people to comfortably pass each other, and a ten reducing the Pedestrian Zone beyond the recommended foot or wider Pedestrian Zone can support high volumes of minimum widths. pedestrians. Pedestrian Zone Vibrant sidewalks bustling with pedestrian activity are not > The Pedestrian Zone should be clear of any obstructions only used for transportation, but for social walking, lingering, including utilities, traffic control devices, trees, and furniture. and people watching. Sidewalks, especially along Downtown When reconstructing sidewalks and relocating utilities, all Commercial, Downtown Mixed-Use, and Neighborhood Main utility access points and obstructions should be relocated Streets, should encourage social uses of the sidewalk realm outside of the Pedestrian Zone. by providing adequate widths. > While sidewalks do not need to be perfectly straight, the SIDEWALKS Pedestrian Zone should not weave back and forth in the When determining sidewalk zone widths, factors to consider right-of-way for no other reason than to introduce curves. [Show full text] Rulebook for Link Light Rail RULEBOOK FOR LINK LIGHT RAIL EFFECTIVE MARCH 31 2018 RULEBOOK FOR LINK LIGHT RAIL Link Light Rail Rulebook Effective March 31, 2018 CONTENTS SAFETY ..... 1 INTRODUCTION ..... 2 ABBREVIATIONS ..... 3 DEFINITIONS ..... 5 SECTION 1 ..... 20 OPERATIONS DEPARTMENT GENERAL RULES ..... 20 1.1 APPLICABILITY OF RULEBOOK ..... 20 1.2 POSSESSION OF OPERATING RULEBOOK ..... 20 1.3 RUN CARDS ..... 20 1.4 REQUIRED ITEMS ..... 20 1.5 KNOWLEDGE OF RULES, PROCEDURES, TRAIN ORDERS, SPECIAL INSTRUCTIONS, DIRECTIVES, AND NOTICES ..... 20 [Show full text] See Our Park Map of Water Bottle Refill Stations! D V L B S Spotts Park O’Reilly St T Sawyer St H I E Snover St Snover Jackson Hill St Hill Jackson THEWATERWORKS H Zane and Brady Washington Glenwood N Memorial Way HOUSTONAVE SHEPHERDDR Cemetery Cemetery buffalo BAYO U EORIALDR Carruth Overlook Carruth STUDEONTST Bridge EORIALDR Green Tree to Sixth Ward Nature Area 0.40 M.D. Anderson Buffalo Bayou has been a focal point in Houston’s Foundation Stairway Cleveland Park Fonde history since the Allen brothers founded the city in 0.42 Rec. Center (weekends and evenings aer 1836. Today, the bayou is once again the centerpiece Houston Police Tapley 5pm only) Hamill Foundation Stairway Officers’ Memorial Tributary St Sabine of its development. Rosemont Bridge Rusk St » St. Thomas High School 0.18 Buffalo Bayou Partnership (BBP) is the non-profit organiza- 0.80 0.56 Shepherd Gateway Scurlock Foundation Overlook LDR ORIA Lee & Joe Jamail Hobby Center tion revitalizing and transforming Buffalo Bayou from a gi from the Radoff Family E Sabine Promenade Jackson Hill Bridge Skatepark Bridge Shepherd Drive to the Port of Houston Turning Basin. From to Memorial Park 0.39 Jane Gregory spearheading capital projects such as the 160-acre Buffalo EORIALDR Hobby 1.14 Garden Center 0.45 Bayou Park to constructing hike and bike trails, operating Neumann Family Barbara Fish Daniel comprehensive clean-up and maintenance programs and Wortham Foundation Stairway Nature Play Area Waugh Grove offering thoughtful programming, Buffalo Bayou Partnership Bat Colony ALLENPKWY Brookfield Bridge « Walker St is reclaiming Houston’s unique waterfront. JOHNNYSTEELE Federal Reserve Bank City Hall Bud Light Amphitheater Crosby McKinney St » Annex This map will guide you as you walk, run, cycle or paddle LOSTLAKE DOPARK Outfall ONTROSEBLVD TAFTST Gillette St Gillette ELEANORTINSLEYPARK Bagby St City along the waterway and visit the many parks and historic SHEPHERDDR WAUHDR Sam Houston Park Hall sites. [Show full text] Roundabouts Applying the 'System' Roundabouts Applying the 'System' to Roundabouts Let us suppose that you are on a dual carriageway approaching a roundabout (400m away). You are currently in the left lane and you intend to turn right at the roundabout. Information: - Take - You see the roundabout and its triangular warning signs in the distance. There are no vehicles between you and the roundabout but you see vehicles on the roundabout. Mirror check. There are two vehicles behind, both in the left lane. - Use - You know that you have to change to the right lane and that you will need to signal to change lane and then to signal continuously on the approach and through the roundabout (the standard Highway Code procedure for turning right at a roundabout)- Give - After checking your mirrors you signal right to the vehicles behind. Position: The right signal remains on for a few seconds and then gradually you move to the right hand lane (Information-Use/Give). When the manoeuver is complete you cancel the signal. After a few more seconds the right signal is re-applied to confirm to the drivers behind that you intend to turn right at the roundabout. Information: The speed and position of the vehicles behind are monitored as you approach the roundabout. An assessment is made of the movement of vehicles on the roundabout and those approaching it from the right and left. You look over the roundabout to see, if possible, vehicles approaching it from the opposite direction (Information-Take). Speed: As you approach the roundabout you begin to brake and lose speed smoothly and progressively (Information-Give). [Show full text] The Effects of Roundabouts on Pedestrian Safety The Effects of Roundabouts on Pedestrian Safety Prepared for The Southeastern Transportation Center University of Tennessee – Knoxville Knoxville, Tennessee Prepared by John R. Stone, Ph.D KoSok Chae & Sirisha Pillalamarri Department of Civil Engineering North Carolina State University Raleigh, NC 27695-7908 Funded by The Southeastern Transportation Center With a Grant from The University Transportation Centers Program U.S. Department of Transportation August 2002 NCSU Preface This project examines the safety aspects of modern roundabouts with respect to pedestrians. Since the emergence of modern roundabouts in the US, safety has been recognized as a major concern for the effectiveness of roundabout performance. Pedestrians may be more prone to unsafe crossings at roundabouts due to new geometries, signalization (or lack of it), right of way assignments for pedestrians and vehicles, and visual and auditory cues. This project documents case study, statistical, and simulation analyses regarding pedestrian safety at roundabouts. The results suggest that roundabouts are safe with respect to pedestrians. This report includes the following topics: • literature review summarizing international and US experience with roundabouts and pedestrians, • alternative research approaches, • case study analysis of a candidate roundabout intersection in Raleigh, NC, • statistical analysis for pedestrian crashes at the case study intersection, and • simulation of the case study intersection vehicle and pedestrian movements with the original intersection and with the candidate roundabout. Copies of the report are available from the Southeastern Transportation Center, University of Tennessee – Knoxville. We hope that the results of this research will continue to prove valuable to the roundabout community. i NCSU Acknowledgements The faculty and students who worked on this project gratefully appreciate the financial support of a “seed grant” from the Southeastern Transportation Center at the University of Tennessee-Knoxville under the auspices of the USDOT University Centers Program. [Show full text] PLANNING and DESIGNING for PEDESTRIANS Table of Contents PLANNING AND DESIGNING FOR PEDESTRIANS Table of Contents 1. Executive Summary .....1 1.1 Scope of Guidelines..... 2 1.2 How the Pedestrian-Oriented Design Guidelines Can be Used..... 5 1.3 How to Use the Chapters and Who Should Use Them ..... 6 2. Pedestrian Primer .....9 2.1 What is Pedestrian-Oriented Design? ..... 9 2.2 Link Between Land Use and Transportation Decisions ..... 10 2.3 Elements of a Walkable Environment ..... 11 2.4 What Kind of Street Do You Have and What Kind Do You Want?... 12 2.4.1 "Linear" and "Nodal" Structures ..... 12 2.4.2 Interconnected or Isolated Streets ..... 14 2.4.3 Street Rhythm..... 15 2.4.4 "Seams" and "Dividers" ..... 16 3. Community Structure and Transportation Planning.....17 3.1 Introduction ..... 17 3.2 Land Use Types and Organization..... 18 [Show full text] Footpath Or Bridleway Leaves a Metalled Road the Highway Above 28 CH. 41 Countryside Act 1968 1967 c. 86. (9) Section 67 of the Countryside (Scotland) Act 1967 (grants to local authorities) shall have effect in relation to the expenditure of a local planning authority in Scotland in or in connection with paying compensation under this section as it has effect in relation to the expenditure mentioned in that section. Tree 26. In section 125(1) of the Town and Country Planning Act preservation orders: 1962, so far as it relates to tree preservation orders, and in compensation section 26(2) of the Town and Country Planning (Scotland) under Act 1947 (both of which sections provide for compensation for Planning refusal of consent under tree preservation orders) for the words Acts. " damage or expenditure " there shall be substituted " loss or 1962 c. 38. damage ". 1947 c. 43. Public rights of way Signposting 27.-(1) A highway authority, after consultation with the of footpaths owner or occupier of the land concerned, shall have and bridle- power to ways. erect and maintain signposts along any footpath or bridleway for which they are the highway authority. (2) Subject to subsection (3) below, at every point where a footpath or bridleway leaves a metalled road the highway authority shall in exercise of their power under subsection (1) above erect and maintain a signpost- (a) indicating that the footpath or bridleway is a public footpath or bridleway, and (b) showing, so far as the highway authority consider convenient and appropriate, where the footpath or bridleway leads, and the distance to any place or places named on the signpost. [Show full text] Won't Crosswalks Make It Safer to Cross Streets? About Cross Walks: Won’t Crosswalks make it safer to cross streets? A crosswalk is that area of a roadway where pedestrians have the right of way. Crosswalks may be “marked” or “unmarked”. A “marked crosswalk” is any crosswalk which is delineated by painted markings placed on the pavement. All other crosswalk locations are therefore “unmarked”. Under the Arizona Law, crosswalks exist at all intersections, extending across the street from the corner curbs, or on other parts of the street designated as pedestrian crossing locations by the painted lines, unless signed otherwise. Arizona State law states the following in ARS 28-793. Crossing at other than crosswalk A. A pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles on the roadway. B. A pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right-of- way to all vehicles on the roadway. C. Between adjacent intersections at which traffic control signals are in operation, pedestrians shall not cross at any place except in a marked crosswalk. Q: Are marked crosswalks safer than unmarked crosswalks? A: The City of San Diego conducted a study on the issue in the 1970's, and the report conclusions are often cited as the first comprehensive study of crosswalk safety. Investigators in San Diego observed over 400 intersections during a five-year study period. The results demonstrated that during the five- year period, 177 pedestrians were hit in 400 marked crosswalks compared to 31 pedestrians hit in 400 corresponding unmarked crosswalks. [Show full text] 0 ratings0% found this document useful (0 votes)867 views24 pagesThis document provides guidance on designing pedestrian networks and footpaths. It discusses the importance of providing footpaths wherever pedestrians will use them. It recommends dimension…AI-enhanced title and descriptionSaveSave Footpath design For Later0%0% found this document useful, undefined0 ratings0% found this document useful (0 votes)867 views24 pagesThis document provides guidance on designing pedestrian networks and footpaths. It discusses the importance of providing footpaths wherever pedestrians will use them. It recommends dimensions for different zones of footpaths, including the through route for pedestrians, street furniture zone, and frontage zone. Minimum widths are provided for different types of areas. It also discusses overhead and protrusion clearances to ensure safety and accessibility. Design considerations like passing places, drainage, street furniture, and driveways are covered. The focus is on creating a quality walkable environment for all.0 ratings0% found this document useful (0 votes)867 views24 pagesThis document provides guidance on designing pedestrian networks and footpaths. It discusses the importance of providing footpaths wherever pedestrians will use them. It recommends dimension…AI-enhanced title and description Join TheConstructor to ask questions, answer questions, write articles, and connect with other people. When you join you get additional benefits. Have an account? Sign In