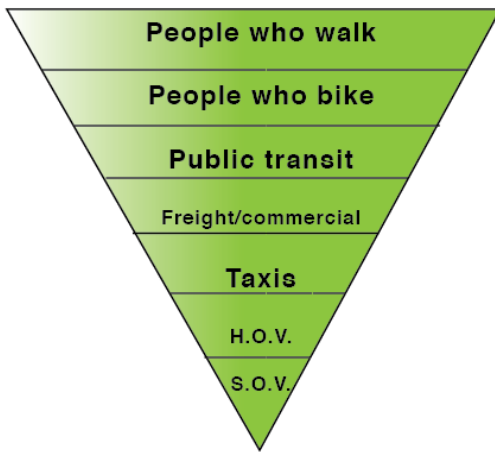


October 10, 2014

In December of 2013, a group of Seattlites began meeting to discuss the update of the Right of Way Improvement Manual (ROWIM). We met over the course of the next eight months because we believe the ROWIM has the potential to reflect the aspirations of a Vision Zero, carbon neutral, equitable, healthy city that prioritizes people who walk, bike and use transit.

The ROWIM Committee represents people in Seattle who serve on City Boards & Commissions, people who staff active transportation advocacy groups, students, and interested community members. Here is a summary of our comments. Some of our comments are about policy, some are really digging into the weeds. We hope you find them all helpful.

1. **Mode hierarchy.** Choices about mode hierarchy will happen from now on with every project. SDOT has uncompromising standards for level of service and safety for the movement of motorized vehicles. We need to invest in equally rigorous standards for all modes and have clear expectations for level of service for all modes of travel. Our recommendation is to place the comfort and safety of people walking and biking at the top of our mode hierarchy.
2. **Build to Vision Zero standards.** Safe streets are SDOT's number one concern. The ROWIM needs to include information on traffic control devices, traffic calming on arterials, and traffic calming on residential streets. In order to reach Vision Zero by 2030, every project -- especially every major capital project --- needs to be designed to achieve zero deaths and serious injuries in the ROW, not just "improve" safety conditions.
3. **Reflect anticipated land use strategies on a 20-year timeframe.** Seattle will be denser and greener. We will thrive without prioritizing the use of single occupancy vehicles in the allocation and design of our limited right of way resources.
4. **Be context sensitive.** Make street improvements be context specific. There is a huge difference in residential, commercial, industrial property, yet many street uses have a one-size-fits-all approach for street trees, curb ramps, sidewalks, driveways, lighting and so on.
5. **Demand excellence. Allow SDOT to innovate and encourage pilot projects.** Seattle is known as an innovative city. We've embraced NACTO, and we're one of the most highly educated cities in the nation. Our ROWIM should allow us to continually experiment and learn.
6. **Make safe streets legal.** We want to see new concepts and ideas in this version of the ROWIM. There are a variety of street classifications, safety tools, livable street elements, and intersection treatments that need to be defined and permitted for future use.
7. **Collaborate interdepartmentally, with other agencies, and with the public on right-of-way improvements.** From a community perspective, public land is public land. We don't much care if it is managed by Parks, SDOT, SPU, Schools, Libraries, Metro etc. It belongs to all of us. Let's start making plans and rules for our public spaces collectively. This approach will be needed if we are to build a new connected, citywide grid of low-stress biking and walking routes.
8. **Format the ROWIM for easy use.**



### 1. **MODE HIERARCHY**

The ROWIM is built around rules the City chooses to prioritize and reflects how those priorities are conveyed to developers and the public. The current ROWIM is a manual designed to manage cars in the built environment. The existing manual has little information or “real estate” devoted to managing the pedestrian zone, bicycles, or the transit zone.

Prioritizing all modes equally is currently the City of Seattle’s default policy. This is a huge step forward and levels the playing field for walking, biking and using public transportation. **The goal of the ROWIM should be standards of design that are equally rigorous across all modes.** We think the ROWIM offers an opportunity to go

further. If the updated ROWIM seeks to be relevant in the coming decades, it is time to prioritize people first. Loving all travel modes equally, in truth, prioritizes none of them.

One quick metric to look at is overall, how much “real estate” or pages in the updated ROWIM are given to sidewalks, bicycle facilities, and transit specifications. This is an indicator of how much time and care these realms will be accorded during street development in the future.

**Choices about mode priority will happen from now on with every project.** SDOT has uncompromising standards for the movement of motorized vehicles, we need equally rigorous standards for all modes and a clarity of expectations for all modes of travel that place people walking and biking at the top. We can use mode prioritization language from Vancouver, Portland, Victoria, or Transportation Alternatives:

<http://www.transalt.org/sites/default/files/news/magazine/012Spring/09hierarchy.html>

The updated ROWIM should give SDOT staff guidelines to inform decisions, not “balance needs”. Once priorities are understood, good decisions become much easier to make and defend. Mode prioritization is the first step to Vision Zero. Mode hierarchy can be the legacy of [Sher Kung](#) in Seattle. By listing Mode Hierarchy in the ROWIM, we can make future decisions based on real priorities.

### 2. **Build to Vision Zero standards.**

Safe streets are SDOT’s number one concern. The ROWIM needs to include information on traffic control devices, traffic calming on arterials, and traffic calming on residential streets. In order to reach Vision Zero by 2030, every project -- especially every major capital project --- needs to be designed to achieve zero deaths & serious injuries in the particular ROW, not just "improve" safety conditions. All of the following examples derive from prioritizing people first in the right-of-way.

- **Define complete sidewalk standards.** Sidewalks are used by everyone in the city. The current ROWIM devotes far more space to describing parking standards than to sidewalks. Prioritize people first. Visibility and obstructions on sidewalks are regularly violated. Usable **sidewalk width** should never be sacrificed to increase building footprint or lane width.
- **Define safe intersections. Reduce the length of crosswalks.** A shorter walk across the street is a safer one. This can be done in a number of ways, but most commonly by extending the sidewalk out into the intersection. Define Curb radius standards and always minimize corner **radii at intersections.** Sweeping street corners encourage drivers to drive fast around corners without stopping or looking for pedestrians.
- **Make crosswalks more visible.** Elevate them to curb level (known as speed tables), or brightly mark them with wide swaths of paint. Light them appropriately.
- **Driveways need to trigger significant review.** Since driveways impact walking and biking safety, more SDOT advice is needed on driveways including sight triangles, and extent of curb cuts.

- **Parking near intersections** is a safety concern. Design to 20 or 30-foot standards. Place motorcycle and bicycle parking near intersections as a buffer. Remove Short Term, on-street parking as a Priority Design Feature and add 5-minute load zones.
- **Define and encourage traffic control devices** such as diverters, speed tables, and median islands. Update as more devices are piloted and adopted in Seattle.
- **Major arterials and state highways need better definition.** These are the locations of our businesses as well as the locations of our traffic serious injuries and fatalities. Design for success of business and traffic safety. Define speeds, volumes, separated bike lanes if applicable, sidewalk widths, priority design features. **Reduce the number of travel lanes on wide streets** wherever possible. **Reduce the width of vehicular travel lanes to 10 feet.** Wide lanes encourage drivers to speed up. Make a toolbox available for arterial traffic calming through business districts.
- **Create pedestrian streets, bridges and underpasses** in busy areas where other measures are not feasible to minimize conflict with traffic and enhance the convenience of walking and biking.
- **Define current signal specifications.** Pedestrian signal priority, signal timing for vulnerable people, describe signals for bicycle transportation.
- **Define AAA bike lane design.** Require physically protected bicycle facilities or all ages and abilities greenways along corridors where parallel Neighborhood Greenways are impractical or unlikely, especially on bridges and overpasses.
- **Add pass-through raised medians islands on busy streets** as a refuge for people who walk or bike.
- Define a higher standard of safe street **design at bus stops.** Pedestrians often rush across the street to catch their bus, not paying attention to oncoming traffic.
- **Demand mitigation and alternative routes** during construction for walking and biking. and replace affected sidewalks/bike lanes with materials and design of equal or better quality that provide a seamless transition to existing lanes after construction.

**3. Reflect anticipated land use strategies in a 20-year timeframe.** Seattle will be denser and greener. We will thrive without as much focus on single occupancy vehicles

- **Recognize the urgency of greening the streets.** SPU has been incrementally treating stormwater through bioswales and other green factor improvements. More pilots that make extensive use of green materials and pavement reduction may be more in keeping with the City's climate and stormwater goals.
- **Free parking is growing much more uncommon.** Plan for new uses of street property freed of car storage including parklets, more protection for the pedestrian and bicycle zone, more commercial use of street right-of-way.
- **Seattle is likely to become a high density city.** Our limited right-of-way is most efficiently used for walking, bicycling, transit, and freight.
- **The driving economy is not a thriving economy.** The business and public health case for walking, biking and transit is becoming overwhelming. Our ROWIM should reflect this coming reality.

#### **4. Be context sensitive.**

**Make street improvements context specific.** There is a huge difference in residential, commercial, industrial property, yet many street uses have a one-size-fits-all approach for street trees, curb ramps, sidewalks, driveways, lighting and so on. Here are some examples of contextual design.

- **Sidewalk standards need to reflect context.** Width, materials, curb ramps will vary with street type and land use classification. Preserve pedestrian mobility by moving fixed objects closer to the curb face. Poles, signs, signal cabinets, and bike share docks can serve to protect pedestrians from motor vehicle encroachment. They should be placed as close to the curb line as possible, to ensure plenty of sidewalk width for ADA access. When things get tight today, the path of pedestrian travel is the first to be sacrificed, due to today's rules. Point obstructions currently dot our sidewalks, and sidewalks do not curve around the point obstructions to provide the required 4 feet of clear width. Vegetation in the form of hedges often encroaches several feet from the property side, leaving little to no room to

pass at all. While 4 feet of minimum clear width is ok, the manual needs clearer prescriptive language that is enforceable and implementable.

- **Call out special transit hub improvements** with safety and with street use. Depending on context, allow frontage zone to be increased in certain areas to promote street café's etc. Make room for bicycle parking and bike share.
- **Crosswalks.** Allow pilots of other crosswalk types other than “ladders”. When using a stop bar, always place it before any curb ramps and crosswalks so pedestrians are not sent directly into the location where drivers are expected to stop. Seems obvious, but many current examples put pedestrians in harms way by putting the ADA ramp ahead of the stop bar. Let's not allow this any more.
- **Street lighting** is context sensitive along residential, commercial, and transit corridors, with considerations such as height, wattage, and spacing for people walking and biking. All cars have headlights. Prioritize street lighting to provide illumination for people walking, waiting for transit, and biking.
- **Design criteria for different levels of speed:** street typologies and street concept plans can be contextual.
- **Greenway intersections are context sensitive** (we have a complete chart of intersections attached). Each of these cases need to be defined: when a Greenway crosses a heavily-used 2-way street (1-lane each direction, and parking on both sides of the street); when a Greenway Crosses a 3-lane arterial (1-lane each direction, a center turn lane, and parking on both sides of the street); when a Greenway Crosses a 4-lane arterial (2-lanes each direction and parking on both sides of the street); when a Greenway crosses a 5-lane arterial (2-lanes each direction and a center turn lane. No parking); when a Greenway Crosses a Residential Street.

## **5. Encourage innovation and pilot projects**

Seattle is known as an innovative city. We've embraced NACTO, and we're one of the most highly educated cities in the nation. Our ROWIM should allow SDOT and the community to continually experiment and learn.

- **Empower SDOT staff to do better work than the minimum acceptable design standards,** without undue burden of documentation and indemnity.
- **Encourage local creativity.** Allow, without onerous permitting costs and barriers, interesting and unique developments on sidewalk and planting strip land, as long as it does not interfere with pedestrian movement. Sandboxes and other play spaces, Rain gardens, benches, Little Free Libraries, trees are all street uses that currently require extensive permitting, annual costs, and inspections. Streamline the use of this living space.
- **Describe evaluation.** How do we collect useful data that informs future permitting and other built environment decisions? How can we improve? Evaluation is especially critical to pilot projects because they inform future development.
- **Include a health impact review element** to the ROWIM, both parcel by parcel and as a network. Evaluate baseline health impacts vs. proposed design impacts on health. Include “comfort” as an evaluation criteria.

## **6. Make safer streets legal**

**We want to see new concepts and ideas in this version of the ROWIM.** The following is an incomplete list of street classifications, safety tools, livable street elements, and intersection treatments that we hope are better defined and permitted for future use.

### *Street classifications*

#### **Street types new to Seattle**

- **Neighborhood greenways, protected bike lanes, advisory bike lanes, green lanes, shared streets:** Include links to how to engineer Neighborhood Greenways and shared streets to 20 mph or less. Call out if Greenways will have Resurfacing Priority. Discuss use of bollards and other devices to created protected

bike lanes and define street space. Speed bumps or rumble strips to tell you that you are approaching a greenway crossing. Indication signs that you are crossing a greenway or other “new” street type.

- **Transit streets.** Make them better for bikes & peds. Freight+Transit Only lanes.
- Play streets. Play and active street use on long term uses in a pilot project.
- **Home zones.** Create 10 mph grid of streets with diverters in residential areas.
- **Festival Streets** and other more permanent and dedicated market-type streets.
- **Speed Tables/Table Top** intersections.
- Parkways designated in Bands of Green Report may be a street type.
- **Reclassify arterials lined with residential** to “residential arterial streets” (for example: 23<sup>rd</sup> in Central, N 50<sup>th</sup> in Wallingford, NE 75<sup>th</sup> in Wedgwood, SE 35<sup>th</sup> in West Seattle, and 10th Ave. W in Queen Anne) with traffic calming to reflect residential standards
- **Intersections.** Define new intersection types. Roundabouts (the big kind where arterial streets meet, such as the intersections of Jackson, Rainier, Boren, and 14th.)
- Streets with Green Infrastructure (stormwater and trees)

### *Existing street types that need further definition*

- Proper placement of **sharrows**
- Rules about **view corridors**, sun and shading
- **Regional Connector Streets** that are re-engineered to be comfortable and attractive to all modes.
- **Alley improvements** in all zones: lays out width standards for alleys, dumpster management.
- **Stairways.** Define maintenance expectations and runnel standards.

### *Livable street elements*

- **Bicycle Parking** define rack style, facilities where racks needs to be provided, and site placement.
- Define broad category of “non-motorized public uses of street right of way” within public space management.
- **Trees.** Require all new development to add to our tree canopy, not just in industrial zone. Encourage dramatic increases in planting. Current rate of planting/replacement is too slow.
- **Allow play on street property.** Basketball, sandboxes, Little Free Libraries.
- Streets with Green Infrastructure (stormwater and trees).
- **Define street lighting expectations.** Call out human scale lighting and special lighting around intersection crossings and transit stops.
- Minimize permitting for healthy street activities such as parklets and play streets.
- **Opt out for bad infrastructure, make the good the standard,** have to justify not meeting it (Complete Streets, bike parking, safe pedestrian crossings)
- Allow planter boxes to act as curb bulbs or diverters.
- Allow liberal use of median or refuge islands and diverters.
- Create incentives for street art and play on the street for adults and children.
- **Streamline and liberalize sidewalk cafe regulations.** Restaurants, pubs, and cafes that provide street seating are adding to Seattle’s livability by creating street life, eyes on the street, and humanizing the ROW. The most important regulation to overturn is the one requiring [railings](#). Railings are a holdover from old thinking where every use must be demarcated. The future we are trying to build is one where life spills out onto sidewalks. Field review fees of \$172 should also be waived in lieu of digitally submitted photographs. Also consider ways to reduce the one time \$516 fee, especially for small business owners.

### *Traffic Management related to ROWIM*

- Mode prioritization with people first. Mode prioritization → Comp Plan
- Extensive 20 mph zones.
- **Ban right on red turns at busy intersections.** Drivers, busy watching out for other cars, often don’t see pedestrians crossing the street on green lights

- **Intersection signals.** Define crossing times, bike signals, RRFB, others. Allow flexibility of crossing times to exceed 3.5 ft./second to favor people walking.
- **Service vehicles, short-term parking.** Discuss conflicts with bike lanes.
- Non-MUTCD signage for demonstration and pilot projects purposes. Requiring director level approval stifles innovation and experimentation.
- Allow pilot projects with temporary curb ramps.
- Non standard intersection treatments as pilots.
- **Recognize Dutch CROW manual** for bicycle planning guidance.

### *Traffic calming elements*

- **Maximum lane width 10 feet.** Discuss buffer zones.
- **Maximum turning radii.**
- Extensive 20 mph zones. Ideally a **default of 20 mph** on all Seattle streets with 30mph on major arterials where signed.
- **Minimum grid** of safe all ages and abilities street infrastructure (although ALL streets should be safe).
- Warrants for signals and crosswalks reflect use. Use often doesn't happen until infrastructure is in place. **Change warrant policy.**
- **Minimize driveways** and other curb cuts for vehicles.
- Let SDOT put curb bulbs anywhere, without requiring justification, because curb extensions reduce pedestrian crossing distances while making pedestrians more visible to drivers, while still protected on the curb. Remove the bit about requiring all curb bulbs to accommodate freight and transit. Only on transit/freight corridors. Large curb radii lead to single-occupancy vehicle turn movement speeds that endanger pedestrians and children riding bicycles.
- In-lane stop bus bulbs should be allowed anywhere busses don't lay-over.
- Remove the 3+ lane requirement for pedestrian pass-through refuge medians. SDOT already regularly installs pass-through refuge islands on two lane roads like at E Olive Way at Boylston Ave E, for example. We want SDOT to be empowered to protect pedestrians and not be held back by rules like 3+ lanes. SDOT is doing great work, let's adapt this rule to support what SDOT is already doing to help protect people walking.
- Crossing islands should be encouraged anywhere SDOT sees the need, without requiring additional paperwork or hurdles.
- **Build safe crossing infrastructure that encourages walking and biking.**

### **7. Collaborate interdepartmentally on right-of-way improvements.**

From a community perspective, public land is public land. We should not need to care if our public property is managed by Parks, SDOT, SPU, Schools, Libraries, Metro etc. It belongs to all of us. Let's start making plans and rules for our public spaces collaboratively. For example

- **We need safe routes for people walking and biking to and through our parks.**
- We need connections through institutional property such as Schools and Major Institutions as we walk and bike.
- **Build the idea of concept plans and demonstration pilot areas into ongoing ROWIM updates.**
- What makes permitting different if it is private use of public streets v. a public use of public streets? 2.8 talks about private encroachments in ROW, but what if these offer public benefits?
- The current ROWIM is missing discussions of equitable, safe, healthy, local places with historic character. All of these elements could be defined through a collaborative City/community process.
- **Bioswales** mitigate the impact of combined sewer overflows by treating ROW runoff on-site. Bioswales are also useful as traffic maintainers, chicanes, multi-function self-beautifying curb extensions. Stormwater management provides SDOT with additional funds to solve transportation issues, let's make the best of that opportunity.
- Seattle Public Schools are the most widely distributed public property type other than streets and parks. We are investing millions annually into giving children safe routes to schools. Continue to

prioritize investment within school walk and bike zones. Recognize and **transform the relationship between Seattle Public Schools and SDOT into a collaborative effort to define safe public space.**

### **8. Format ROWIM for easy use.**

The ROWIM needs to be aspirational. The manual needs to be able to dynamically incorporate changes to City policies and practices and not be filled with out-of-date links. We need the ROWIM **to be visionary**. The ROWIM needs to be reframed to go above and beyond existing Washington State standards, especially as Seattle roads are used differently than other roads in the state.

- The manual needs to be readable by the general public. **ROWIM needs an average citizen friendly introduction and lots more pictures.**
- **ROWIM should be designed to update the hyperlinks to updated plans**, and include “consistency” references to the upcoming Freight Master Plan, Transit Master Plan, Transit Community Strategy, Complete Streets Ordinance, and “Bands of Green” Report. In addition, the last paragraph (which references the MUTCD and WSCCDS), should also reference the NACTO Urban Street Design Guide, NACTO Urban Bikeway Design Guide, and multi-modal level-of-service guidelines.
- **We’d like to see non-binding references to the CROW Manual and other best practice guidelines** from around the country and world and make a specific statement that the ROWIM guidelines shouldn’t just meet the state WSCCDS and other roadway standards, but do even better. For example, the state sets minimum lane widths; in cities it’s frequently better to have maximum lane widths that are even narrower than the minimum lane widths.
- **Reference and keep up to date Client Assistance Memos about specific details** including driveways, complete streets, alleys, parking, utilities, shorelines, grading, curbs, sidewalks, construction impacts, environmental hazards, parks & boulevards, landscaping and street trees, historic preservation.
- **Construction mitigation.** When the ROW is impacted, it impacts more than just people in vehicles though this is an assumption throughout this document. Need for permits and language that make it incumbent upon developers to provide safe walking and biking during construction. How is construction that takes over the street and sidewalk for long periods of time fairly charged for this public disruption?
- Street Improvement Permits are required for “Significant, permanent improvements in the ROW including paving, widening street or extending the public storm drain” Is that the extent of improvements?
- **The people who will use this manual.** Please interview people at the permit desk and get answers to these questions: How do people typically try to “game” the system? What are some loopholes? What are the most common permits people apply for? What dumb problems with permits come up over and over again? What solutions can the Permit Desk technicians think of to deal with this? Who are the coaches or Street Improvement Project Managers? Are there enough of them? Do they understand and are they amenable to street narrowing, park streets, play streets? Can someone explain why both DPD Drainage and SPU review preliminary applications?
- “Temporary” permits can be revoked in 30 days, not long for an appeal. Explain how appeals process works.
- **Include a Glossary of terms** that includes SDOT values of safety, preserving our environment, Complete Streets.

*With gratitude for the work you do as public servants,*

Cathy Tuttle, representing the views of the Right of Way Improvement Manual review committee  
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### Figure 3: Framework of guiding principles for the Right of Way Improvement Manual

Under an umbrella of overall **Safety and access for all ages, abilities, and communities as an integral part of daily life** the design goals and principles for Seattle’s public right-of-ways can be grouped and further defined under the following criteria:

**OUR CITY IS COMMITTED TO:**

- providing streets in which all ages and abilities can use them safely;
- providing an infrastructure that allows for multiple forms of transportation;
- connecting street use so that people can move from neighborhood to neighborhood effectively;
- providing all it’s neighborhoods with equal access to safe street use;
- ensuring that people on foot and on bike have access to commercial districts;
- providing that different transportation systems connect with each other and support each other;
- ensuring that it’s residents can choose an active form of transportation for basic needs;

	<b>Health and Well-being</b>	<b>Public Spaces</b>	<b>Environmental Health</b>	<b>Spirit of Seattle</b>
Quality of life	**	**	**	**
Convenient connectivity	***	*	*	**
Support physical / mental health	***	*	*	**
Active transportation	**	*	**	**
Multi-modal hierarchy	***	*	***	**
Universal design	***	**	*	*
Economic vitality (local /City spending)	*	**	*	***
GHG and energy consumption	**	*	***	*
Support biodiversity	*	*	***	*
Water quality	**	*	***	**
Sustainable design	*	**	***	***
Beautification	**	***	*	***
Historic character	*	**	*	**
Democratic social space	**	**	*	**
Active transport amenities	***	*	*	**
Place-making	*	**	*	***
Culture	*	***	*	***