

COMMISSION MEETING SIGN IN SHEET

Date: 19 Dec 2018

NAME - (<u>PRINTED</u>)	ITEM #	EMAIL ADDRESS	PHONE #	WARD
Tony Robinson	Roumbsouts	TonyRVT99@EMAIL.COM	343-6616	2
Andy Simon	# 6	sanschagrins@gmail.com	⁸⁰² 999-5275	5
Jack Daggitt	# 6		802.540-0760	3
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To: Chapin Spencer and Tiki Archambeau,

I am submitting this comment for the Dec 19, 2018 DPW Commission meeting on the topic of roundabouts.

I live in Wharf Lane Apartments at 57 Maple St just a block from the intersection of Pine and Maple. I navigate this intersection daily. Twice a day during the morning and afternoon rush hours there is a serious bottle neck – in one direction heading west cars are backed up all the way down Maple St, around the corner and up the hill on Battery St all the way to Main St. In the other direction cars are backed up from the intersection south down Pine St to Kilburn St and sometimes even further. The idling cars create a health hazard for those living in houses along the route. The build-up of exhaust from idling cars is especially difficult for those suffering from asthma and respiratory difficulties. During the summer months we can not open our windows else we'd be breathing in the toxic fumes. We were really disappointed that we would not be getting a roundabout to alleviate the bottleneck at this intersection.

In addition to the higher capacity that roundabouts have to handle traffic more efficiently than traffic signals and stop signs, they also significantly reduce climate change emissions. Traffic that is smoothly flowing isn't wastefully idling. We should adopt a goal to install more roundabouts as a city-wide effort to reduce climate change and improve the respiratory health of city dwellers. This is a very concrete step we can take to be part of the solution instead of part of the problem. With the recent national and global reports citing the increased sense of urgency around climate change, we can't afford to be designing roads with 20th century technology. Every department in our city, including the DPW, should be re-examining steps they can take to be part of the solution. We should be installing roundabouts everywhere space permits instead of traffic signals and stop signs.

Many people in the South End applaud the efforts of the Pine Street Coalition who has worked tirelessly to bring commonsense, up-to-date improvements to the Champlain Parkway project. Roundabouts could and should be one positive step that our city could take to help reduce climate change emissions. Even AARP advocates their usefulness with an ever-watchful eye on the health of the aging population. Please commit to installing roundabouts around town so we can experience the positive impact they can have. It's one small, yet concrete step we can take to help us meet our climate change goals.

Thank you for considering this request.

Donna, Ward 5

Item 5
Roundabouts

Tony and Nicole

Thank you for alerting me to this. Unfortunately I am out of town, otherwise for sure, I would be at the meeting to express my strong support for roundabouts. You already know how important this is for me. I (for years) have viewed it as a critical (preferable) mechanism for intersection traffic safety. Aside from the (what seems obvious) safety benefits, atheistically, functionally, for efficiency, roundabouts seem so preferable in most intersections. The possibility of no electrical use at intersections is also very appealing. If either of you wish to make my feelings known at tonights' meeting- you more than have my blessing.

Thanks again,
Serrill Flash

Nicole Losch

From: Phil Hammerslough
Sent: Wednesday, December 19, 2018 12:22 PM
To: Nicole Losch
Cc: chapincspenser@burlingtonvt.gov; TONY Redington; Burlington Walk/Bike Council
Subject: A round & roundabouts

Dear Nicole,

This should really be a no brainer. Despite the many years Tony has been a voice in the wilderness, it's about time we accepted his research, findings, and determination to have Burlington join the 21st Century and the rest of the world in using roundabouts rather than traffic lights & stop signs whenever it is possible.

Here are some of the less obvious reasons roundabouts are superior to traffic light & stop signs.

1. during power outages roundabouts still work.
2. roundabouts use no electricity and therefore reduce carbon emissions
3. Unlike traffic lights, roundabouts don't require complex and costly programs to monitor their timing.
4. Unlike traffic lights roundabouts don't blow in the wind or fall down.
5. Roundabouts don't get stolen and end up in dorms and apartments!
6. Roundabouts might reduce the need for crossing guards. (This might be a loss since crossing guards are a friendly bunch.
7. Roundabouts create green spaces for flowers & shrubs .

These are just a few of the seldom mentioned advantages of roundabouts that compliment the more important functions such as reducing crashes and fatalities , creating a safer way for pedestrians and cyclists to cross intersections, etc. etc.

Cordially,
Phil Hammerslough

12/2018

Burlington Traffic Signals (75) Death List 1998 to Date

There are now and estimated 8,000 roundabouts in the U.S. and Canada—only one pedestrian and one cyclist fatality has occurred to date since the 1990 introduction of roundabouts to North America. Burlington with its 75 traffic signals is the site of more pedestrian fatalities (two) than at all 8,000 roundabouts and an equal number of cyclists (one).

AAA has been the national advocate for Vision Zero (no serious and fatal injuries on our highways). Our City Council will shortly vote on adopting a Vision Zero policy. The most important AAA treatment to obtain a huge reduction in serious fatal injuries—30% of the AAA goal? The roundabout!

Bruce “Sam” Lapointe, 63, Winooski, pedestrian, vehicle crash, Barrett Street crosswalk at Colchester Avenue, **2011**

Kaye Borneman, 43, Burlington, Dealer.com employee, driver, two-vehicle T-bone crash, Main and St. Paul Streets, **2010**

Raymond Herbert, 23, Vergennes, driver, Main and Spear Streets, two-vehicle crash, **2005**

Charles Burch, 72, Burlington, advertising executive, bicyclist, vehicle crash, Manhattan Drive/VT 127, **2004**

Linda Ente, 48, Winooski, supermarket employee traveling from work, pedestrian, Home Avenue/Shelburne Street crosswalk **1998**

- Notes:**
1. The 2017 planBTV Walk Bike identified 17 intersections, “the Dirty 17”, averaging one injury per year, most with traffic signals. Five downtown Vermont roundabouts recorded one pedestrian non-major injury in a half century, one injury per decade overall.
 2. Of 14 Vermont roundabouts built since 1995, not one on a busy Chittenden County street.

3. For those aged 4 to 34 highway crashes remain top cause of death.
4. At busy intersections, a roundabout cuts by about 30% gasoline use (annual reductions in 1,000s of gallons) and as well as climate change emissions and other pollutants
5. NY State Department of Transportation "roundabouts first" policy adopted in 2005 and since adopted by several states and two Canadian provinces.
6. Mini roundabouts applicable to tight right-of-way locations like along Pine Street constitute a low cost (as little as \$60,000) treatment that takes only weeks to design and build.
7. "Burlington Transportation Plan" (2011) terms safety consideration in roadway investments as "critical."
8. Nationally a surge in highway deaths since 2015 is unprecedented in a half century, includes a 46% increase in pedestrian deaths since 2010.
9. Roundabouts cut serious and fatal injuries "about 90%" (Insurance Institute for Highway Safety).
10. Statistically valid studies of single lane roundabouts show up about 90% reduction in pedestrian crashes and substantial reductions in cyclist injuries.

Tony Redington

Walk Safety Advocate

TonyRVT99@gmail.com

Item 5. Roundabout

Good Evening,

My name is Charles Simpson. I'm a retired urban sociologist with the State Univ. of New York. I'm no expert on roundabouts, but I have done published research on highways and the urban fabric. I'm on the Winooski Ave. Corridor advisory group and with the Pine Street Coalition.

At least two locations in Burlington cry out for single lane roundabouts. I say single lane because in my experience, these take the least space and eliminate the hazards of switching from an inner to an outer lane in order to exit the roundabout.

The first location is a blank slate, the point where the south end of Pine street crosses the dormant Champlain Parkway and connects to Queen City Park Road. A roundabout here will do four things:

1. it will slow traffic transitioning from the interstate into the city
2. It will be an aesthetic focal point, in effect a gateway feature saying to motorists, you are now on a city street.
3. It will retain connectivity between Burlington and South Burlington, currently planned to be cut off.
4. It will provide for safe pedestrian and bicycle access between the two cities, which currently and in the plans do not exist.

The second location is the intersection of Main Street and South Winooski Ave. This is perhaps the busiest intersection in the city and on or close to the highest accident locations.

Here there are also four reasons to locate a roundabout there:

1. It is also an aesthetic gateway feature, telling drivers that they have entered Burlington and its more dense network of streets.
2. It is a safe motorist transition to So. Winooski Avenue which is likely to be reduced to two travel lanes, one in each direction.
3. It is intensely used by pedestrians, cyclists, those pushing child carriages and in wheel chairs. Cross walks at the four quadrants of the roundabout operated by on-demand flashers will add up to pedestrian and cyclist safety even as traffic in the absence of walkers moves smoothly.
4. As a heavily used intersection in a dense area of the city a block from a public school and our city's civic center, toxic emissions from internal combustion engines should be minimized. Idling times at roundabouts are considerably less than at signal crossings.

I thank you for opening up the discussion of highway safety and efficiency to include the mechanism of the roundabout, something that Europe, Canada, and other cities in Vermont including our state capital, have endorsed for many decades.

Item 5: Roundabout

Commissioners,

Thank you for taking up the question of roundabouts tonight. I want to briefly explain – as a walker, cyclist, a driver and a grandfather – two reasons why Burlington needs to get over its outdated attachment to signalized intersections.

One is vehicular emissions. We are killing this planet, our home, with a wasteful lifestyle and greenhouse gas emissions from cars and trucks represent a significant portion of the problem. Convincing Americans to drive less has not been successful, but re-designing intersections with modern roundabouts that immediately cut emissions up to 65% would be a fast, efficient way to address the issue. This would truly be a way to act locally to reduce climate change. There is a cost constraint, you say. But in fact, for new intersections, roundabouts are ^{as inexpensive} cheaper to install and ^{cheaper to} maintain than signals. And what is the cost of losing our home to the floods, storms, droughts and catastrophes of global warming?

My other point is about safety. You will have noticed that, at every major intersection in Burlington, drivers are shaving red lights closer and closer. It is now the norm rather than the exception for drivers to speed through red lights. There is a potential disaster, injury or death in every one of these incidents. There are no lights at a roundabout, few delays. Traffic accidents, injuries and deaths are dramatically reduced. There is a cost, you say. But what is the cost of your child's life? What would be the cost of a debilitating injury to your neighbor or co-worker?

I urge you, as Public Works commissioners, to approach this question of roundabouts with an open mind. Listen, ask questions, learn. Then please take action.

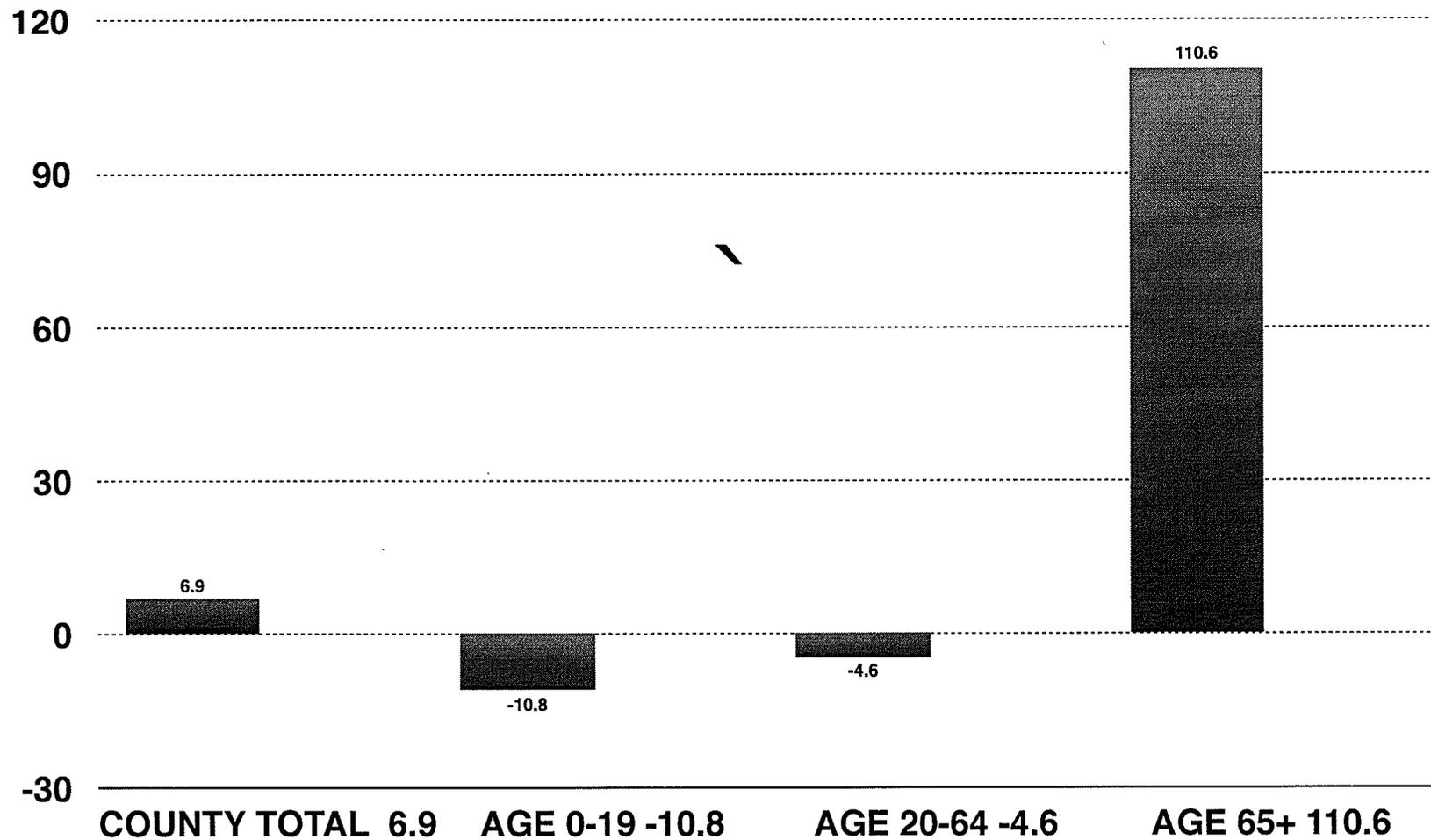
Andrew Simon

54 Locust St
Burlington, VT
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U.S. Highway Safety Record since 1990— Descent from 1st to 17th place

- U.S. twice the rate per vehicle of co-leader with us in 1990, UK, and new co-leader Sweden
- U.S. excess deaths over 20,000 a year and more than a million excess injuries
- Finally both federal law (2011) and current first strategic goal of Federal Highway Administration: safety and reducing casualty rates
- Primary cause of death age 4 to 34: highway crash
- Unlike opioid and gun violence, government controls highway safety and we know how to return to first tier nation—not rocket science

Table 2: Chittenden County Age Group Percent Population Change Projection 2010-2030



CHITTENDEN COUNTY 2010-2030

1. County population under 65 DECLINES about 15 per month (~200/year)
2. County population 65 and above CLIMBS about 80 per month (~1,000/year)
3. Statewide—annual senior population growth equal the Town of Stowe
—annual decline of under 65 equals the Town of Johnson

SAFETY FIRST STEP?

First step for safety is safe street design and most agree that means first and foremost modern roundabouts!

AAA, AARP, Federal Highway proven safety measures, GEICO—all put roundabout first or second on the list.

U.K. originated the roundabout and #1 in safety Sweden boasts more roundabouts than signals and now converting 40% of remaining signal to roundabouts!

**US FIRST
NATIONAL
ROUNDABOUTS
WEEK
SEPTEMBER 17-21,
2018**

THE MODERN ROUNDAABOUT

— *The Intersection Safety Belt*

— *The iPhone of Intersections Composed of
Stone Age Materials*

1. Cuts serious/fatal crashes ~90%
2. Slashes busy intersection climate change emissions about a third (gas use and other pollutants ~1/3)
3. No delay for pedestrians (single lane cuts pedestrian fatalities ~90%) and vehicle delay
4. Definition of scenic quality
5. Fights sprawl
6. Low maintenance cost, no electric bills

Keck Circle, Montpelier (Main/Spring) 1st VT modern roundabout, 1995, 19th in US

First roundabout east of Vail, CO and north of
Maryland

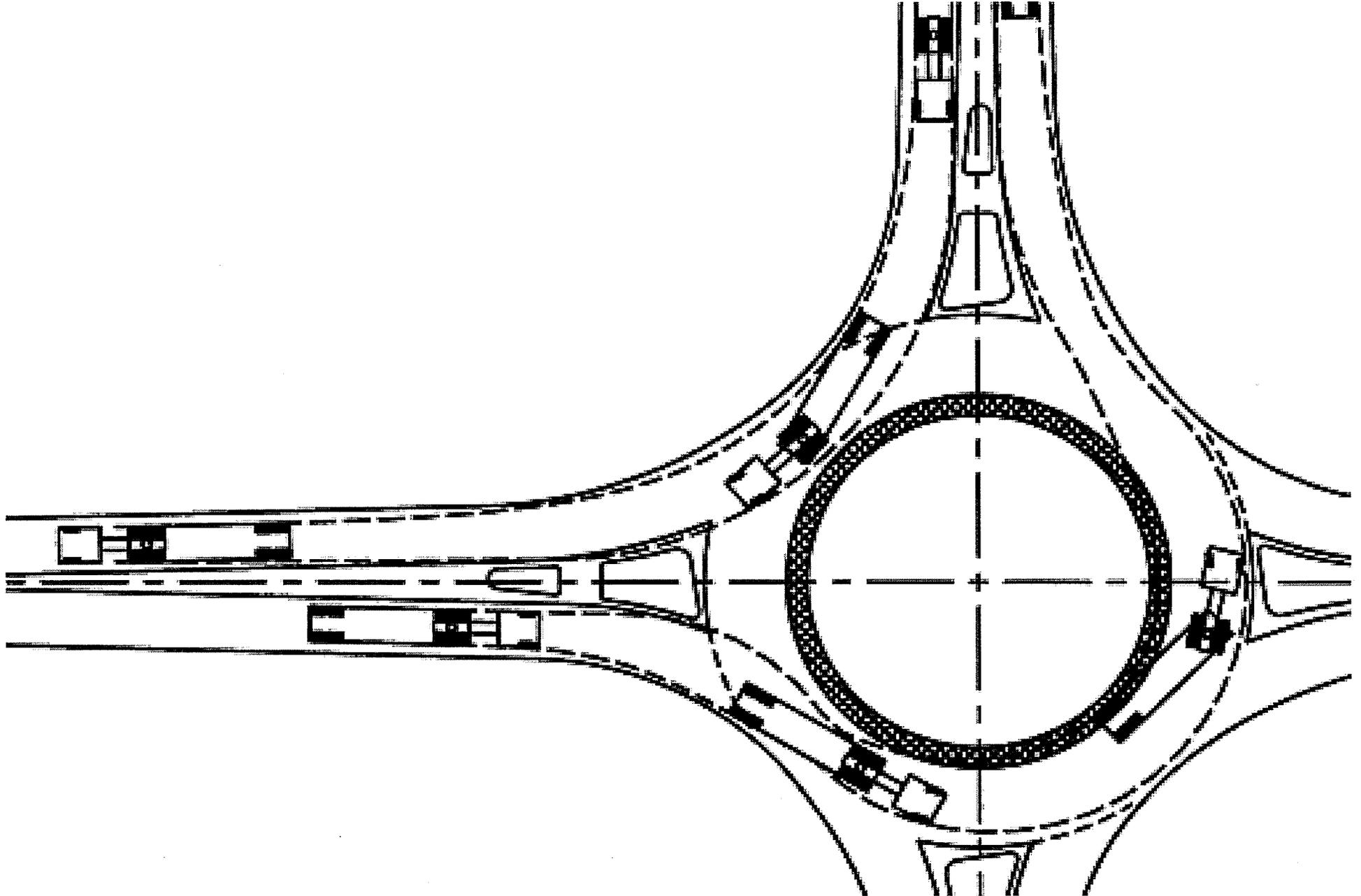
— Five downtown roundabouts in VT (Montpelier, Middlebury and Manchester Center [3]). In a half century just one pedestrian injury (not serious) and four minor car occupant injuries



TWO PRIMARY FACTORS FUNCTION TO INSURE ROUNDAABOUT SAFETY

1. Deflection of vehicles from straight path at entry, thereby reducing speeds
2. Holding diameters reasonably short thereby insuring continued vehicle speed management to exits

DEFLECTION—KEY TO SAFETY



U.S. Study — roundabouts cut incapacitating injures/ fatals “about 90%”

Single lane roundabouts cut pedestrian injuries

about 90% and decrease bicycle injuries

significantly

600 foot diameter Traffic Circle

200 foot diameter Modern Roundabout inside—Kingston, NY 1999



**Traffic Circles: Winooski
Downtown — 200x500
Feet, about the size of
Barre's Thunder Road 1/4
mile racetrack
Several times the size of a
modern roundabout**

Roundabouts are circular intersections designed so that:

- 1. Entering traffic must yield to circulating;**
- 2. Entering vehicles are deflected by splitter islands, creating a low / similar speed environment;**
- 3. Circulating vehicles must travel around a non-mountable center island.**



Typical Roundabout Design

Note pedestrian safety keyed by moving crosswalk back from circulating traffic, pedestrian crosses only one direction of traffic at a time, and is provided a median, a refuge, separating traffic directions

An Equality Street: separate, safe vehicles, bicycle and pedestrian ways

Each travel mode provided their own travelway.

So, each mode enjoys a highly safe travelway!



Equality Intersection

This Dutch design provides an “equality intersection” with separate lanes for pedestrians, bicyclists and vehicles.

In urban area roundabouts with limited space, bicyclists are given the choice of moving to shared space with pedestrians or “taking the vehicle lane” to travel through the vehicle travelway



**Next two photos – Manchester
Center “Function Junction” (VT
7A/VT 30) and mini roundabout
(VT 7A/VT 30) followed by two
photos of Waterbury VT 100/
US 2 East roundabout, last
photo, Middlebury Roundabout
facing new municipal building**



Burlington Pedestrian/Cyclist Fataals at 75 Signals Exceed All U.S. and Canada Roundabouts

From 1990 first roundabout through 2017 Burlington recorded at least three pedestrian and cyclist deaths at its 75 signalized intersections—two pedestrians and one cyclist.

For 8,000 roundabouts built to date just one pedestrian and one cyclist fatality.



- **“THE ONLY GOOD ARGUMENTS AGAINST A ROUNDABOUT IS THERE ARE NO GOOD ARGUMENTS”**



--BARRY S. CROWN, U.K. ROUNDABOUT EXPERT PRACTITIONER AND SOFTWARE AUTHOR, AND INITIAL ROUNDABOUT DESIGN ADVISOR TO THE NY STATE STATE AND NEW HAMPSHIRE DEPARTMENTS OF TRANSPORTATION







12/8/2018 North on Union St. at Main St.

Proposed addition to Draft Minutes for November 28, 2018 PWC Meeting

Item 7: Permit Reform Update

Proposed added text:

Regarding permit reform, Commissioner Overby suggested that guidance provided by Robert N. Ford in his book Why Jobs Die & What to Do About It, Job Redesign & Future Productivity, be considered as part of the re-arrangement of job functions during the proposed physical co-location of the zoning, trades permits and life-safety code enforcement functions at Pine St. A copy of pages 54 through 59 of the book were provided to staff, listing four aspects of good job design: 1) Functional completeness in the module of work; 2) Consistency in the Work Situation; 3) Enough control to meet responsibilities; 4) Direct feedback when problems arise (rather than second-hand from a supervisor).

