

12 February 2007

Public Works and Infrastructure Committee Toronto City Hall

Re: Proposed Toronto streetsigns ("street-name signs")

To the Committee:

Transportation Dept. staff are eager for your committee to rubber-stamp a new design for streetsigns. But the design has not been tested to prove it works in the real world, as in the following scenarios:

- o Inclement weather
- Reading by people with disabilities (like low-vision people and wheelchair users)
- Reading by cyclists
- Reading by drivers seated behind tinted windows at night

Transportation Dept. staff speak all but exclusively about the *appearance* of the signs, which may be of interest but is not important. *Function* is important.

Background

I work in the field of accessibility for people with disabilities (media, not buildings – I wrote a book on Web accessibility, for example). I have a 25-year interest in typography, which includes a body of published articles and presentations. I am not really in any field of endeavour that could vie for or receive a contract from the City of Toronto concerning streetsigns. I am merely an informed outside observer.

For those new to signage, Clearview is a family of typefaces (not just one) that was developed for U.S. highway signage over a period of ten years. Some Clearview variations have been subject to extensive field testing and have usually been shown to be more readable and provide better *performance* than other fonts. Clearview is the font used in new black-on-white and white-on-blue Toronto streetsigns and on large signs attached to light standards at major intersections (the "blue Clearview" signs).

History

Here's what's been happening on the streetsign file:

- Kramer Design Associates won a contract to design a candidate replacement for current streetsigns. Some homeowners and a few commenters on blogs (like Spacing) dislike the City's own newer streetsign design, often for debatable reasons. Kramer's candidate design was shown at four public meetings in 2006.
- 2. Those meetings may have been a useful method to gauge how many attendees not Torontonians as a whole like or dislike the design. But that's all it tells us, and whether or not individual people like the design is not actually important.
- 3. For functional typography like signage, what actually matters is *how well it works*. And the only way to establish that is through testing.

- 4. I asked Jeremy Kramer directly if any testing had been done. Not only was the answer no, he defensively implied that testing isn't even necessary. I was later informed that Kramer Design tacked up a few candidate signs on poles near its office, which Kramer Design and city staff looked at and liked. That's the extent of the testing regimen the Transportation Dept. wants to propose for the largest city in the country.
- 5. Toronto already has a history of testing streetsigns. Blue Clearview signs were tested and shown to improve driver response times compared to the tiny all-uppercase signs they would replace. (Alison Smiley et al., "Required letter height for street-name signs: An on-road study," Human Factors North Paper Nº 01-2225, 2001.) Yet city staff see no reason to test a design that might be replicated on 60,000 signs.
- 6. I had a meeting with Transportation staff in November 2006 in which I asked, again directly, about plans for testing. There were none.
- 7. I also handed staff an information request, and followed up with E-mails and a letter. There was no response to any of the foregoing.
- 8. I complained to Gary Welsh, head of Transportation, again with no response.
- 9. Curiously, one day after I complained to the chair of this committee, I received an E-mail stating that the proposed signs' font had been changed to Clearview and that, given the city's experience with Clearview thus far, the new design should work out fine. But those *old* signs weren't tested either.
- 10. Kramer Design is a firm heavily favoured by City of Toronto staff. The City's own signs, which the Kramer design will replace, were thrown together in-house. Staff consider it a bother to have to deal with any complaints at all about something so trivial as streetsigns.
- 11. Staff and Kramer Design want to rush through the candidate design as quickly as possible. The four public consultations were meant not only to actually consult the public but to insulate the entire process from later criticism. (Staff could attend a meeting of your committee and say "We met with the public and X% liked the design." What people *like* isn't the issue.)

Deficiencies in staff report

The Transportation Dept.'s staff report of 2007.01.10, "Street-Name Signage Program," makes a range of unproven or false assertions.

1. There is a stated concern for "legibility," but no testing data are provided to prove the candidate design really is legible. It's the opinion of Kramer Design and city staff that the signs are legible, but those opinions are unimportant and meaningless without empirical research.

Page 4 notes that "[t]he principal objective... is the clear and legible identification of streets and intersections," but actions speak louder than words here and it is clear that Transportation Dept. staff think the principal objective is to get this project done and over with as quickly as possible.

- 2. The section on BIA branding (page 7) lays bare the actual interests of city staff, which are, in order, "first, street-name signs [must] have a homogeneous look...[;] second, ensure that street-name signs are commensurate with the beautification of... streets[;] and third, improve... functionality." If we were to believe city staff, it's all about what people think looks nice. It isn't: It's all about what performs well.
- 3. Page 4 of the report claims that "the project team considered... [a] review of the

- experience with the font style, mix of upper- and lower-case letters, size, and reflectivity... gained in the manufacture and installation" of previous signs. "Experience" doesn't mean "testing"; it means "opinions."
- 4. The candidate design uses brushed-aluminum panels on upper and lower thirds. The addition of up to 120,000 mirrorized surfaces to city streets cannot possibly be contemplated without full testing, including testing in summertime at dawn and dusk when reflections are most likely to occur. I repeat: City staff propose installing mirrors on every streetsign without testing.
- 5. City staff actively falsify part of the record of public comments on the new design. I attended the seminar at Metro Hall on 2006.09.26 and am one of the few people who took notes (and the only person to publish them; see attached). Nobody at the meeting voiced any support for the new design, and at least one BIA representative tried several times to ask if it were possible to pay to retain the existing signs.

I later asked for the results of the city's online poll and was ignored. To the list of assertions that city staff cannot prove, we may add the claim that members of the public like the sign design. At any rate, liking or disliking it is unimportant compared to actual testing in the field.

- 6. Examples shown in the report conveniently depict very short street names. Some street names in Toronto use nearly 30 characters (e.g., Colonel Samuel Smith Pk. Dr.), but only the tidiest and most compact names are shown, the longest being Hammersmith Ave. (15 characters). At least 27 street names in Toronto run over 19 characters.
- 7. The report requires the use of confusing abbreviations (*Cr* and *Ct* are easy to confuse) and unnecessary ones (*Wy* is harder to understand than *Way*).
- 8. The report's appended "City of Toronto Street-Signage Program Standards Manual" does not even use the right fonts in its own text and does not provide any warnings to sign manufacturers not to deviate from the specified design. The blue Clearview signs have been criticized by a codesigner of Clearview because they use nonstandard letterspacing and have a border; similar deviations would be possible under the terms of the proposed signage manual.
- 9. The report proposes to sell off old signs to the public, but city staff refuse to answer a question I have posed in person twice: What happened to the many blue or yellow illuminated box signs that used to be in place on city streets? (They're rare now, but some are still in place right outside City Hall at Queen and Bay.)

Requested remedies

- i. Instruct city staff to develop, devise a realistic budget for, and bring to the committee for approval a testing protocol for the candidate sign design.
- ii. Answer my information requests.
- iii. Explain what happened to the blue and yellow illuminated box signs.

More information

Available online at joeclark.org/signage/.

Notes from Toronto streetsign introduction

Last night (2006.09.26), I attended the last of four public viewings of proposed new Toronto streetsigns (see **Flickr photos**). I got there early and chatted with the amiable David Nagler, who urged me to walk over and talk to the designers (from Kramer Design Associates). "But I'll just get into an argument!" I protested. I later relented and struck up a conversation that, inevitably, turned into an argument.

In the discussion below, I'll use the term "white Clearview sign" (black text on a white ground) to refer to the new residential streetsigns that <u>Spacers</u> and commenters on their blog seem to hate so much. It is to be distinguished from the blue Clearview signs (white text on blue) that are mounted adjacent to traffic lights at major arterial intersections. The <u>Spacers</u> and commenters hate those too, of course, but that doesn't matter, since they work better than the old ones. No one actually said "white Clearview sign"; I am using it in these notes for clarity.

"Acorn signs" are the old cast-metal signs, which some people think always have embossed metal lettering. They certainly have a knob at the top, hence the name "acorn."

There were about a dozen people in attendance, maybe 20 by the time the show got underway in earnest. On the **panel** were Myles Currie, Toronto transportation; Joe Colafranceschi, sign manufacturing; David Monaghan, Kramer; Roberto Stopnicki, Toronto transportation; and Jeremy Kramer.

Kramer: We are aware of the different varieties of streetsigns. For many people who live in the downtown area, they've known one shape of signage and think that it is representative of the entire city. A new sign was added at the majority of intersections [blue Clearview] with the aim of added legibility and reaction time.

We drove around and did an audit of function, condition, state, and method of attachment of existing signs. There's a lot of personalization or expression of different districts and BIAs throughout Toronto. Probably what evolved earlier was a kind of stretching of the existing streetsign design [to accommodate notations of BIAs and communities].

Our objectives were:

- Clearly legible message hierarchy for street names; street numbers; and districts and BIAs. Sometimes the BIA branding was so successful on older signs that it was overpowering.
- Coordinate the design with overall streetscape improvements, like hardware and fittings.
- Raise quality standards, construction methods, modes of attachment. There are signs posted now that are decaying and rusted to the point of the name of street is being confused.
- Lay groundwork for expansion.

- Accommodate the wide range of message lengths. Type was stretched or manipulated [actually shrunk] in the past. We started with the longest and shortest names possible.
- District and BIA branding.
- Fasten securely to a range of posts and surfaces.
- Coordinate with streetscape programs.
- Efficient replacement of signage.
- Eliminate parts prone to rust, discoloration, fading.

A single pole can have three different kinds of signage [many more if you include warning and parking signs].

We looked at new streetsign designs in Houston, Chicago, Santa Monica. How did we choose or propose a certain graphic approach, a certain typography? Each city uses a slightly different typography that is appropriate to achieve their goals. Each struck a balance among excellent legibility, functionality, and distinctiveness of that place. It is a combination of elements that produces an impression of a city.

<u>Initial sketches</u> started out with a silhouette in the existing size; then a curved arch shape with a rectangular sign panel; an entirely curved sign; then the current form of blade with backing panel.

(Shows hardware system.) No stamped-metal-with-band-frame system (too fragile). Uses extrusion system with interchangeable parts. [I was never sure that "extrusion" is the right word, but it is the one he used.] You can install one, two, or even three sign panels on square or rounded poles or even a rebar extrusion.

Designation of areas will evolve. Names of BIAs may change over time [e.g., Beach(es)]. An extrusion system allows signs to evolve. Top and bottom sections are interchangeable [and removable].

Can mass-produce the components. Material is aluminum [but the physical <u>model</u> resting on an easel in the room appeared to be enamelled steel]. Curved shape has precedents, like the new bus shelters. (Shows BIA variations.) Can be strapped to a lamppole. Can identify the city of Toronto.

Sizes:

- Street name: 5" cap height, lower case 3½" high. [An oddly precise statement, given that Kramer does not control the x-height of the mockup type]
- Street numbers: 2" high

Reflective white type on a blue background [though physical mockup on site had **reflective blue**, **too**].

There's a link between the blue Clearview signs and ours. The first-time visitor or resident of the city will recognize to look for blue signs [except that up to 60,000 of them are white].

Bolts and metal strappings are to be replaced, i.e., not be as ugly.

Q&A

I did not always jot down who gave the answer. There was only one woman in the room, hence all questions but hers came from males.

1. Q. Replacement schedule?

Stopnicki: Trying to get to first meeting of the new council. We'll continue with the replacement program – 2,000 to 2,500 signs a year. That's the budget we have. It's a maintenance project, not a replacement one.

- 2. [Next question unintelligible from my notes]
- 3. Q. Is this it for public input? Anything else going on?

Stopnicki: Will present at the Works Committee, which is another opportunity for involvement.

Q. Will this be up on the Web?

Stopnicki: In about two weeks we'll have something up, which will last till February.

Q. You're going to Works Committee in January?

Stopnicki: Or February.

4. Q. Did you talk to residents' associations?

Stopnicki: Not specifically to them. Reps have come to meetings. They have had some very interesting questions about cost, the process to replace, the process to get their logos on the signs.

A. from Nagler a few minutes later: Which residents' associations? A notice went out to all of them that were on file. If you know we missed some, let me know.

5. Q. I learned about this meeting from an **article** in the *National Post*. Was it mentioned anywhere else?

Stopnicki: We had an ad in Now and in all the Metroland community papers.

Q. So that was the only way people knew about this meeting?

Stopnicki: Yes.

Q. I don't read those papers. Was it on the city Web site?

Stopnicki: No.

Q. Why not?

Stopnicki: It was on the **Transportation Web site** [in a PDF]. We consulted with our communications people and they told us that the amount of information we provided to the public was sufficient.

Q. Are you satisfied with this turnout, then?

Stopnicki: I cannot judge the attitudes of people. Some are more interested, some less. People went to the other meetings.

Q. There are maybe 30 people in the room. You really need to get the media onto this. It's a major issue of branding the streets. I spent 15 minutes tooling around the city Web site and found nothing.

Stopnicki: Thank you for that. In two weeks, it will be clearly posted.

Q. from second man: Won't it be too late then? Isn't *this* the forum for public input?

Stopnicki: We were told this would be sufficient.

Kramer: It was on the cover of the *Post*. We can assume people already saw the signs [that way].

Q. You can guess.

6. Q. In the street images you showed, were those real models or Photoshopped images?

Kramer: We built mockups. We affixed the new design to signs and showed them to groups of stakeholders that are very important to us. [This is a somewhat inaccurate paraphrasing.]

7. Q. When seen against a blue sky, dark-on-light is more legible. Look at how startlingly different the examples read in Santa Monica.

Currie: The best ratio for legibility is white on blue. The signs are reflective. If we did the opposite, then the white would be totally washed out at night.

8. Q. The Post said you wanted to make it match the [new, proposed] street furniture.

Kramer: I don't believe—

Stopnicki: No. We consulted you about street furniture. We're still in the initial stages. The Works Committee directed we move ahead with a modern, contemporary style. We change 2,000 to 2,500 signs a year. Street furniture is still an RFP.

9. Q. What are the maximum and minimum number of component parts that would be found in every variation?

Kramer: Are still consulting about that. All signs will have street name and street number.

10. Q. Why the City of Toronto logo? It's redundant when there's no BIA logo. You know that you're in Toronto!

Kramer: We were asking ourselves the very same question.

II. Q. Why two panels on top? [Another not-very-accurate paraphrase. I think he meant: Why not a single very thick and three-dimensional sign panel instead of two discernible and separated ones?]

Kramer: We're still considering one vs. two. A lot of people missed the dimensionality of the old signs. We want something cost-effective and efficient to assemble, but somewhere between cast components forming a box [like the old signs with embossed metal type] and a 2D surface. Single panel or two? Two is more substantial in appearance.

12. Q. Won't these gather snow? Ice could shoot off them. With a square chamfer, snow builds up on them.

Kramer: When we do final testing, we'll look at that.

Stopnicki: At another meeting, someone asked if wind would whistle through them.

13. Q. Who advised you to advertise in the Metroland papers?

Stopnicki: Communications department. Steve Johnson.

14. Q. You have two different sign sizes there [in the illustrations - smaller, larger].

Kramer: The different sizes serve traffic considerations. Many people complained that the white Clearview signs are overscaled.

15. Q. Did the Works Committee instruct you to slant your design to a contemporary one? Based on *what* did you decide to abandon a style we have been working with for five decades?

Kramer: It had already been given up in some ways. Fully-dimensional signs

had ceased to exist.

Stopnicki: This whole thing really started ten years ago with amalgamation. We had 15 different sign stocks in our warehouse – aluminum, sheeting, colour, and many, many different kinds of attachments. A year or so ago we designed a replacement sign [the white Clearview]. North York used white on blue. Three years ago, the Clean & Beautiful City roundtable [started] and we heard concerns about the white Clearview. One year ago, Works Committee considered modernization; people were dissatisfied and the committee asked us to take another look.

Kramer: This sign would replace signs in all parts of the city.

16. Q. What's the longest and shortest? You have five sizes here.

Kramer: There are two sign forms.

- 17. Q. What is the cost of the 3D acorn signs?
 - A. \$160-\$170.
 - Q. Well, a guy I talked to in the sign department said \$70.
 - A. Not for the 3D signs it isn't.
- 18. Q. Will any of these be electrically illuminated at night or use LEDs, or did you just assume these are OK no matter what the conditions?

Currie: They're reflective. There isn't really a need for internally illuminated signs or LEDs.

19. Q. The slide at Dupont and Bedford: Is the distance between the pole and the sign variable?

Kramer: We've built it four different ways.

Q. But can you extend them farther out? They seem too close together.

Currie: That's an interesting sign design, but our intention is to minimize the number of poles with two signs. Our preference is for near-right corners with one sign per approach.

20. Q. I've been making those [3D acorn] signs since 1993 with my private company, and the cost is \$65.

Currie: We met you four years ago when you brought us your samples. You could talk to us later.

21. Q. Have you had any focus groups on this design?

Stopnicki: No.

Q. So....

Stopnicki: We had staff in Urban Design and Transportation, and we had our consulting firm. We showed it to the administration of TABIA. Met with Clean & Beautiful City roundtable. While I'm not trying to influence your decisions, we got pretty strong endorsement of these designs. There are these meetings.

22. Q. When would we see these signs everywhere?

Stopnicki: We have 60,000 to 75,000 signs. So you can imagine....

23. Q. not from me: Is this the actual font or are you going to use Clearview?

Kramer: That is the font that we have proposed. We looked at Clearview. Through mockups, we believe it will function adequately. It's been used worldwide for signage for many decades. It strikes a nice balance between distinctiveness and high legibility. Designers are all aware of Clearview and know of its successes. But if every sign used Clearview, then there would be homogeneity. It's a balancing act. It's something that's still being considered and contemplated. We tested [Akzidenz]. It has a weighting to it that is conducive to the extreme length changes in street names. We wanted to avoid distorted lettering.

24. [Q. about deadlines for comment forms.]

Stopnicki: October 10, preferably. Web site will be up and receiving comments till the end of the year. Then we go to Works Committee. They may ask for wider audiences.

25. Q. What do you do with the old signs as they're retired?

Stopnicki: A very interesting question. The sign at the corner of my street has been stolen three times. Ottawa actively replaces signs. We will be proposing a program for decommissioning signs. There will be a cost for communities that want to add their branding.

26. Q. That's still an issue. There are logos for the old East York signs. Will you be retaining those logs?

Stopnicki: We did consider it and decided to move forward with this design. Name of community is on the top.

27. Q. Can we get a copy of this presentation?

Stopnicki: It'll be up on the Web site [no doubt as a PowerPoint, which of course everyone can load and read].

28. Q. from me: What happened to the old blue and yellow illuminated signs? What has been done with the hardware?

Currie: Good question. The electrical side decommissioned them.

Q. So they might have been destroyed?

Currie: Possibly.

29. Q. Cost of old signs vs. white Clearview vs. proposed?

Kramer: We're trying to get very close to the white-Clearview cost. It's a challenge. We've done pre-costing and believe we can come very close. It's always two panels bolted together. Can update just the sign blade.

Q. OK, but what's the cost?

Kramer: \$65.

Q. My guy at the sign department said \$35, \$40.

A. I manage that shop. Who did you talk to?

A. from other panellist: The straight rectangular signs in North York were \$40.

30. Q. Vandalism. Are these easy to replace?

Currie: They're computer-cut vinyl [or at least the type is], so yes.

- Q. You can't scrub them clean, though? Don't you have to replace the whole sign?
- A. After an hour beyond the point at which the vinyl is affixed, it's there forever. We'll see once they're built.
- 31. Q. from woman: What's the timeline here? If everything passes, when can we see them? Our BIA has been kind of held hostage for capital improvements because of this right-of-way issue, now with construction. We just want to spend our money and finalize our streetscape.

Stopnicki: April or May if everything goes tickety-boo.

32. Q. Can we get our signs replaced even if they're not damaged?

A. Our budget is just for replacement.

Kramer: Unless a BIA asks for a replacement.

Q. If I really take care of my sign.... If my residents' association paid for

replacement acorns [note well: he did not say *replacement signs in the new style*] – we don't want the new ones.

Meeting ended 2006.09.26 20:24.

The foregoing posting appeared on Joe Clark's personal Weblog on 2006.09.27 14:10. This presentation was designed for printing and omits components that make sense only onscreen. The permanent link is: http://blog.fawny.org/2006/09/27/streetsign-viewing/