

A GUIDE TO LOW TRAFFIC NEIGHBOURHOODS



PEOPLE LIVING IN AREAS OF WALTHAM FOREST WHERE LOW TRAFFIC NEIGHBOURHOODS, AND OTHER WALKING AND CYCLING SCHEMES, HAVE BEEN IMPLEMENTED ARE WALKING AN EXTRA 32 MINUTES A WEEK, AFTER JUST ONE YEAR, AND CYCLING AN EXTRA NINE.

THE DETAIL

The big picture for decision-makers is “Low Traffic Neighbourhoods: An Introduction For Policy Makers” Read that document first, then for more nitty-gritty detail read on...

This guide is from London Cycling Campaign and Living Streets and draws on expertise from those who've designed, implemented and campaigned for award-winning low traffic neighbourhoods. It is a companion document to “Low Traffic Neighbourhoods: An Introduction For Policy Makers”, designed to help officers, designers and others begin to understand some of the complexities, nuances and capabilities of these schemes in more detail.

WHAT SIZE AND WHERE SHOULD NEIGHBOURHOODS BE?

Each neighbourhood or “cell” is a group of residential streets, bordered by main or “distributor” roads (the places where buses, lorries, lots of traffic passing through should be), or by features in the landscape that form barriers to motor traffic – rivers, train lines etc.

- You should be able to walk across a neighbourhood in fifteen minutes at most. Larger, and people start driving inside the neighbourhood. We suggest an ideal size of about 1km².

- Groups of cells or neighbourhoods should be clustered around key amenities and transport interchanges in a 6-10km radius (with 1-2km walking journeys key). This is typically what you get in Dutch suburbs and towns. People walk and cycle within their area, and to the station etc.

- Cells should link together with crossings across distributor roads or other cell boundaries – this enables people to walk and cycle between cells from home to amenities, transport hubs etc.

- The positive benefits of low traffic neighbourhoods can be further enhanced by providing high-quality cycle tracks and pavements along the distributor roads also.



PHOTO: WALTHAM FOREST COUNCIL



WHAT ARE THE DIFFERENT TYPES OF MODAL FILTERS?

BOLLARDS/GATES/PLANTERS

Rows of objects to block motor vehicles, but not other modes. You may need to remove some car parking spaces (either side) for turning circles. Leave 1.5m gaps between bollards and building lines to allow wider cycles (but not cars) to pass through. You can use extra space to provide places to sit, small play areas, pocket parks etc. Include lockable or bendy bollards for emergency services. Locate filters in the middle of a cell to allow residents to park either side; and/or at cell boundaries along main roads, to enable direct cycling/pedestrian crossings and minimise motor vehicle turning movements across any cycle track; and/or set back from main road to separate waiting/loading bays for shops and residents' parking.

OPPOSING ONE-WAYS

Areas of one way streets running in opposite directions can be designed to ensure motor vehicle traffic cannot progress through an entire cell. But one ways can increase traffic speed, there's less opportunity for public realm improvements, and potential enforcement issues. To avoid disrupting cycle networks, "contra flow" arrangements are required, but are far less cycle-friendly than two-way streets with bollards/gates etc.



PHOTO: ROSEHILL

BUS GATES

Allow access for buses (and/or delivery and resident vehicles), often via triggered rising bollards or Automatic Number Plate Recognition (ANPR) cameras. Rising bollards can incur maintenance costs, and while ANPR can generate revenues, the lack of a physical barrier means they can be ignored by some drivers. Bus gates work very well to ensure buses can pass through an area and don't need rerouting, while an entire cell can still be filtered to other motor traffic.



PHOTO: PAUL GASSON@GMAIL.COM

TIME-LIMITED/SIGNAGE ENFORCEMENT

Sign a no entry (even in both directions at once), or sign one on time-limited basis. But without regular enforcement, such signs, when attached to a short distance of road, are often ignored.

SCHOOL STREETS

These are time-limited filters based on or around streets with schools on them. Bollards can be raised or lowered for an hour around school start and end by school staff – preventing through traffic and parents dropping off close to the school; or camera or warden enforcement can enforce a wider exclusion zone for non-residents at school pick up/drop off times. These can be easier to build support for, and can lead to full-time filtering later on, but do not offer the all-day or area-wide advantages other schemes can. So they are unlikely, for instance, to lead to children playing out outside of school hours or increased community interactions among residents.



PHOTO: BEN KNOWLES

WIDTH RESTRICTIONS

Width restrictions to keep out HGVs from residential streets, or one-ways that cut off a steady flow of through traffic that mostly goes in one direction, reduce traffic. While sometimes such schemes are easier to get residents to accept, they often don't deliver a broader range of benefits. Traffic may still be too high for children to play out, and traffic speeds can increase rather than decrease on such roads.



AROUND 15% OF DISPLACED TRAFFIC DISAPPEARS FROM THE AREA ENTIRELY AS DRIVERS ADJUST ROUTES AND BEHAVIOUR.



PHOTO: WALTHAM FOREST COUNCIL

WHAT TO DO AT THE EDGE OF A LOW TRAFFIC NEIGHBOURHOOD

With a reduction in motor traffic, there are increased opportunities to improve the public realm for people living and working locally who use those streets every day.

CONTINUOUS FOOTWAYS/BLENDED CROSSINGS

These continue the pavement (and cycle track) directly across side street entrances, on a raised table. They are ideal for reinforcing pedestrian/cycling priority and the boundary to a low traffic neighbourhood. They can raise concerns among those who are visually-impaired or who have children, as they purposefully reinforce the pavement rather than road, but where they have been implemented in the UK so far and in Europe they have a very good safety record – better than simple raised tables. And they can really help reinforce the message to drivers that they are entering an area of low, calm and slow traffic.



PHOTO: PAUL.GASSON@GMAIL.COM

MAIN ROAD CYCLE TRACKS

Where low traffic neighbourhoods are implemented, the number of turning movements into and out of the neighbourhood drops dramatically. So side streets become far easier to cross for pedestrians (see “continuous footways/blended crossings” above). Placing filters at the junction with a main road ensures motor vehicle turning movements drop to zero. This enables cycle tracks on the main road to be built without a concern over motor vehicles turning across the track. Where turning movements are permitted but low in number, a cycle track can be designed to run across the side road alongside a continuous footway (see above).

PARKLETS

Modal filters often offer opportunities to reclaim space from the carriageway and/or parking spaces. This space can be used for seating, “parklets” or other greening (including wildflower plantings, sustainable urban drainage etc.), activity space (seats, bike racks, but even outdoor table tennis tables, slides and swings etc. are possible) or other public realm improvements.



PARALLEL CROSSINGS

To join multiple modal cells across main roads parallel cycle/pedestrian crossings are ideal (e.g. “tiger” crossings or parallel signalised crossings, rather than combined/shared ones such as “toucans”). If a filter is located at the junction of a side street, then the crossing can be run directly across the main road from the side street.



PHOTO: PAUL.GASSON@GMAIL.COM

COMMON MISCONCEPTIONS AND MODAL FILTER CELL MYTHS

“DISPLACED” TRAFFIC BUNGS UP THE MAIN ROADS

There is sometimes concern that modal filters will increase congestion and therefore pollution on main roads. The evidence shows this not to be the case. It can take months for traffic patterns to settle, but medium-term “traffic evaporation” (<http://rachelaldred.org/writing/thoughts/disappearing-traffic/>) is well-evidenced. Around 15% of displaced traffic disappears from the area entirely as drivers adjust routes and behaviour – avoiding the area, changing modes or even cancelling journeys. The result is a couple of minutes extra on some resident journeys as they have to drive further round the edge of the cell before entering, but little substantive change to main road congestion (see also Waltham Forest “village scheme” figures here <http://www.enjoywalthamforest.co.uk/work-in-your-area/walthamstow-village/comparison-of-vehicle-numbers-before-and-after-the-scheme-and-during-the-trial/>).

THE “DISPLACED” TRAFFIC MAKES OTHER NEARBY RESIDENTIAL AREAS WORSE

Often the opposite is true, as cut-through drivers give up on a route because it is disrupted by a cell. Where through traffic is an ongoing issue in a neighbouring residential area, the installation of a low traffic neighbourhood nearby can stimulate resident demand for a similar treatment.

RESIDENTIAL SIDE STREETS ACT AS AN “ESCAPE VALVE”

When a main road is disrupted, such as by a collision, the restricted capacity of side streets doesn't help and the extra turning movements created by drivers seeking to avoid the main road, can even generate extra congestion. The end result is there is little benefit from residential areas being open to through traffic during such events.

SCHEMES DISADVANTAGE EMERGENCY SERVICES, THE MOBILITY IMPAIRED AND ELDERLY

Emergency services have generally been very positive about such schemes. They are statutory consultees and typically see no change in response times, with most common concerns raised being placement of lockable bollards for access during extended incidents, and their GPS systems being updated appropriately. The elderly and mobility-impaired may face slightly longer car journeys, as will others, but will also benefit from quieter, less car-dominated streets to cross and use.

MODAL FILTER CELLS CAN INCREASE THE LIKELIHOOD OF CRIME AND SEVERANCE, LIKE CUL-DE-SACS

Many cul-de-sac estate and street layouts feature rear and side public access that can increase risk of burglaries and/or are in developments where car use was designed as the primary transport mode, with severed connections for walking and cycling.

By contrast modal filter cells do not increase side/rear access to properties, but do retain direct cycling and walking routes, while discouraging car use by making car routes marginally more circuitous. So modal filter cells retrofit the experience of kids being able to play out on their streets to more traditional suburban and urban street layouts, without many of the disadvantages that can come with cul-de-sacs.

SCHEMES SHOULD BE COMMUNICATED SIMPLY, CLEARLY AND ENGAGINGLY – SO EVERYONE CAN UNDERSTAND THEM AND THEIR BENEFITS, AND SO RESIDENTS FEEL THEY HAVE A STAKE IN THE SCHEME.

HOW TO GET A LOW TRAFFIC NEIGHBOURHOOD

The infrastructure needed to produce low traffic neighbourhoods is easy to implement, but they can also be controversial. Doing some or all of the following can help you deliver higher levels of support and less controversy (and these ideas should be useful for consultations in general).

DO AN ENTIRE AREA

Low traffic neighbourhoods must be planned as an entire continuous area bounded by main/distributor roads. Attempts to reduce traffic in part of an area without regard to neighbouring streets can often result in the same traffic concentrating on fewer streets and/or a backlash at consultation stage.

That said, some boroughs plan an area, then consult on a few filters within it at a time – maximising buy-in and demonstrating the benefits to other residents nearby, before moving on. This is a similar approach to many Controlled Parking Zone consultations. And like those, does risk rising resident dissatisfaction on remaining streets left open. It's also slower and leaves potential gaps if some streets reject the scheme.

START A REAL CONVERSATION

An ideal scheme starts with a more general conversation with residents about their perceptions of their area. If this conversation highlights issues to do with motor vehicle traffic volumes and speeds, then the area is a possible contender for a cell (giving residents good data on through traffic is also worthwhile). But some areas are already quiet enough. Letting residents tag all sorts of issues, including crime, anti-social behaviour and traffic issues on a map of their area is a great way to check support for schemes and gain general insight into resident concerns.



PHOTO: WALTHAM FOREST COUNCIL & COMMONPLACE IS

MAKE IT A GENUINE CONVERSATION

If initial surveying and data does identify a need or desire for a low traffic neighbourhood, do not wait until you have a detailed design for public consultation before talking to residents. Give residents options, hold workshops and use tools such as "Community Street Audits" to engage residents, businesses etc. Let residents understand the principles and evidence, and co-design a scheme with officers. There will be some who will try to cut out elements that inconvenience them, but by being clear about the principles, officers can ensure key benefits are prioritised and realised, while community expertise is also effectively used. Sometimes, presenting a more aspirational scheme will enable more residents to buy in to a vision, but also allow room for sensible negotiation and compromise, while leaving an effective scheme on the ground. But don't allow a scheme to move forward that won't deliver real benefits for the whole neighbourhood.

ENSURE COMMUNICATION/ENGAGEMENT

EXPERTISE

Social media is changing the consultation process dramatically. Relying on officers untrained at communicating large schemes to the public risks backlash. Schemes should be communicated simply, clearly and engagingly – so everyone can understand them and their benefits, and so residents feel they have a stake in the scheme. Negative language (road "closures", "blocks" etc.) should be avoided too. And community benefits for all should be emphasised – low traffic neighbourhoods are not just a "walking" or "cycling" scheme, they make local streets safer and healthier places for everyone. Consider using specialist communications and/or engagement officers around these schemes. And be prepared to devote a significant proportion of the overall budget to communications.

BUILD SUPPORT

Start with other officers and councillors throughout the borough – everyone needs to understand the scheme and support it, particularly councillors in the wards affected and the entire cabinet. These will be the people residents turn to with queries and concerns. Build as broad a coalition of support as possible – local MPs, GPs (activity-related health benefits), religious leaders, heads of schools (relating to active travel plans) etc. Again, these stakeholders should be engaged and on board before the scheme goes fully to public consultation. Businesses in or abutting the area should be similarly engaged early, particularly if they need to deliver into, out of, or through the area – with design ideas suitable for them already in officers' plans, but these should be as flexible as possible.

EMPHASISE COMMUNITY-WIDE BENEFITS

Even if funding is for a cycle or walking route, emphasise community-wide benefits of these schemes for everyone. Children playing out, people able to cross the road easier, pollution reduction etc. And be realistic about the negatives also – slightly longer and more circuitous car journeys into/out of the cell; the likely period of increased congestion during construction and for up to a year after etc. You need to be able to sell a vision to residents who may not know much about "modal filter cells". Pictures, testimonials and data from other areas helps make schemes "real". Diagrams showing how people can access an area are worth considering. Similarly, officers should use the space freed up by filters, and often the filters themselves, to deliver public realm benefits for the entire community – play equipment, "pocket parklets", seating, lighting, trees/planters, rainwater gardens etc.



REMOVE ALL THE THROUGH TRAFFIC

Leaving in any through routes, unless they are very circuitous, simply focuses traffic on fewer streets. This will reduce the benefits of the scheme and could lose it goodwill over time. It also ensures there is less or no "traffic evaporation". When through traffic is completely removed, the experience in general is that main roads have far more capacity to cope than the residential side streets – so increases in motor vehicle volumes seen on main roads are low in percentage terms, and after an initial period of bedding in, traffic settles to broadly where it was before. 15% or so of traffic over the area is likely to "evaporate" in such schemes – moving out of the area entirely or switching mode. In other words, congestion doesn't go up with these schemes, in general.

BE READY TO HANDLE CONTROVERSY

Handle persistent dissenting and abusive voices that can "stir up" those who otherwise would only have minor concerns quickly, countering any misinformation. Similarly ensure misinformation from any source on social media is quickly flagged and rebutted or dealt with before it gains traction. A public FAQ listing top concerns and answering them is worth considering, that is modified through the life of the consultation, engagement, trial, build and post-implementation process. Use councillors, comms/engagement officers, positive local campaigners and community groups, as well as the press to communicate benefits and dispel myths.

"The average road with the Village saw a 44.1% reduction in vehicles on the road and a reduction in speed from 21.6mph to 19.5mph" Chris Proctor, Programme Manager, Enjoy Waltham Forest.

The Waltham Forest schemes have in one year seen people in the areas with changes walking over 30 minutes more and cycling nearly 10 minutes more a week – because the roads are quieter, cars are slower and it's nicer to get around by walking and cycling.

CONSIDER A LIVE TRIAL

A long trial – ideally six months or more – can allow councils and residents to see the benefits in situ, and even allow officers and residents to work together to solve any emerging issues or tweak and re-test designs. It is vital, however, that residents do not feel it's an option to stop trials early etc. And trials likely mean consulting twice.



PHOTO: ALAN SLINGSBY / BRIXTON MEDIA

DON'T MAKE IT A YES OR NO VOTE

Use of sliding scales of approval rather than yes/no answers should be considered. This allows residents to express a preference on a scheme without turning consultation into a perceived referendum, or turning mild concerns into outright opposition. In a similar vein, it's well worth considering the results on the basis of smaller areas of influence over the scheme rather than the entire neighbourhood in one go – it's not at all unheard of for residents to approve of a modal filter on their street, but not one on a street nearby, which they might want to use to drive through the rest of the area.

GET DATA

Use data to demonstrate current car ownership and use in the area, through traffic numbers and proportion, congestion, pollution levels etc. Use surveys and early engagement results to showcase why the scheme is proposed, as well as traffic speeds. Use data to demonstrate likely outcomes. And gather data across a wider area – including main roads nearby and outside the cell – before, during and after any scheme to demonstrate outcomes (and often, that congestion hasn't increased on main roads).

STAY STRONG AND GET POLITICAL BUY IN

Even small schemes can rapidly generate controversy in this social media age. Political engagement and will is vital. If councillors aren't committed to these schemes, they will back down when faced with any opposition, and schemes will fail. For that reason, everyone involved in the council hierarchy must buy into these schemes and early – so it's vital before schemes come under any fire they not only understand why they're proposed, and what they can deliver, but back them. Every scheme like this will generate some backlash – but a few years down the line, the (hopefully few) residents who fought to keep the schemes out, will fight to keep them in if threatened. For this reason, plan schemes according to the political cycle, to avoid schemes derailing local elections, allowing them the time to bed in and become well-accepted and popular. This maximises political gain for the schemes and minimises risk that opposition politicians will try and get schemes removed – costing the council extra money.

USE YOUR SUCCESS TO BUILD MORE

Build a high-quality pilot scheme which neighbouring communities will be able to see and experience, and then ask for their own version of. But try to avoid making the first scheme particularly high budget or unique – delivering lower quality elsewhere risks leaving the communities in later schemes feeling cheated.



London Cycling Campaign and Living Streets consultancy services teams have joined forces to offer cycling & walking consultancy to help boroughs with Liveable Neighbourhood bids and on Low Traffic Neighbourhoods.

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