Purpose:

The purpose of the monitoring exercise is to undertake a time series analysis of the operation of each QBC in the Dublin Region. The following information has been measured:

- Bus Journey Time (one-way)
- Bus Speed (one-way)
- Bus / Car Journey Time comparison (one-way)
- Mode Share (canal cordon points)
- Count of bus passengers (canal cordon points)

Scope:

15 QBCs have been analysed over a 4 week period every November. Please refer to figure 1 for a map of the geographical extent of the QBCs monitored.
Data Sources:

Graph 1 – Bus Journey Time:
The one-way bus journey time (AM & PM) for the corridor, as described in each section, is provided by Dublin Bus. It is an extract from their AVL (Automatic Vehicle Location) database covering the month of November. AM journey times refer to the inbound route while PM refers to the outbound.

Graph 2 – Bus Speeds:
The bus speeds are also provided by Dublin Bus, from the AVL database.

Graph 3 – Journey Time Comparisons:
This graph compares one-way bus and car journey times along a shorter section of the QBC. The car journey time data is derived from Sat-Nav units. These units provide up to date but also historic data for journey times across the road network. It is possible to extract the month of November so the data corresponds to the bus AVL data.

Graph 4 – Mode Share:
The mode share data is provided by the Dublin City Council annual cordon count. It is supplemented with the Dublin Bus Cordon Count.

Graph 5 – Bus Passengers:
This graph shows the number of bus passengers at QBC canal cordon points. This data is provided by the Dublin Bus Cordon Count.
1. Blanchardstown Quality Bus Corridor

Monitored Corridor – Navan Rd/Morgan’s Place to Bachelors Walk
Monitored Section – Navan Rd/Morgan’s Place to Manor St.

Monitored Corridor:
The Bus Journey Times on the Blanchardstown QBC Corridor have seen some fluctuations over the previous 3 years.

In 2014, journey times have marginally increased in both the AM and PM from 2013 levels.

AM Journey Time: 0:37:06
PM Journey Time: 0:48:27

Monitored Corridor:
The Bus Speeds on the monitored corridor have been steadily reducing from 2012 to 2014.

In the last year both AM and PM speeds have decreased by 2% and 5%, respectively.

AM Speed: 12.29kph
PM Speed: 10.70kph
**Monitored Section:**

There has been fluctuation in bus and car journey times over the 2011 -2014 period.

In 2014, car times are slightly faster (1\frac{1}{2} mins) than bus journey times.

Bus Time: 0:22:34  
Car Time: 0:21:11

The Canal Cordon crossing points for the Blanchardstown QBC are Blackhorse Avenue, Old and New Cabra Roads.

Car has shown a decrease of nearly 2% while bus has increased slightly 0.8%.

Car – 37.3%  
Bus – 50.6%  
Taxi – 1.1%  
Cycle – 2.8%  
Walk – 8.2%

The number of bus passengers has increased by 4% since 2013.

Passengers: 7,679
2. Finglas Quality Bus Corridor

Monitored Corridor – Ballygall Rd. to North Earl St.
Monitored Section – Ballygall Rd. to Blessington Court

Monitored Corridor:

Between 2012 - 2014 the Bus Journey Times on the Finglas QBC Corridor showed similar increases in both the AM and the PM.

In 2014, the PM journey time is 28mins which is almost 2 minutes faster than the AM.

AM Journey Time: 0:30:43
PM Journey Time: 0:28:20

Monitored Corridor:

Bus speeds have been quite stable since 2012.

Bus speeds are slower than they were in 2013 by 7% in the AM and 6% in the PM.

AM Speed: 11.36kph
PM Speed: 11.49kph
Monitored Section:

Since 2011, car times have fluctuated while bus journey times have increased.

In 2014, both modes journey times have increased slightly. Bus by 1min and car by 2mins.

Bus Time: 0:23:11
Car Time: 0:24:34

The Canal Cordon crossing point for the Finglas QBC is Binn’s Bridge.

Since 2013, car has decreased by 0.7% while bus has increased slightly by 0.4%. Cycle has increased by 0.5%.

Car – 36.9%
Bus – 47.6%
Taxi – 2.4%
Cycle –4.6%
Walk – 8.6%

The number of bus passengers has increased by 6% since 2013.

Passengers: 7,645
3. Lucan Quality Bus Corridor

Monitored Corridor – Ballyowen Rd to Capel St
Monitored Section – Ballyowen Rd to Ellis St

**Monitored Corridor:**

The Bus Journey Times on the Lucan QBC Corridor had remained relatively constant since 2011 with the exception of an increase in the 2014 AM.

In the past year the AM journey time increased by almost 2 1/2 minutes. There is an 11 min difference between the AM and PM.

AM Journey Time: 0:31:57
PM Journey Time: 0:20:49

**Bus Journey Time**

![Graph showing bus journey times from 2011 to 2014 for AM and PM.]

**Monitored Corridor:**

Bus Speeds for both the AM and PM have taken a fall over the 2012-2014 period.

AM speeds have fallen by 7% while PM has only slightly decreased by 1%.

AM Speeds: 24.35kph
PM Speeds: 37:04kph

**Bus Speeds**

![Graph showing bus speeds from 2011 to 2014 for AM and PM.]
Over the period 2010-2014, car has varied in speed while bus journey times have remained generally the same.

In 2014, the difference in journey time between the bus and car for the Lucan QBC is 12 1/2 minutes.

Bus Time: 0:24:35
Car Time: 0:37:04

The Canal Cordon crossing points for the Lucan QBC are St. John’s Road West and Conyngham Road.

Since 2013, bus and walk have increased by 6.2% and 0.3%; while car and cycle have decreased by 7.3% and 0.1%.

Car – 31.7%
Bus – 62.7%
Taxi – 1.8%
Cycle – 1.6%
Walk – 2.3%

The number of bus passengers has increased by 19% since 2013.

Passengers: 9,911
4. Malahide Road Quality Bus Corridor

Monitor Corridor – Malahide Rd to Nth Strand Rd
Monitored Section – Malahide Rd to Griffith Ave

Monitor Corridor:
The AM Bus journey time on the Malahide Rd QBC has varied considerable while the PM shows a more even deviation.

In 2014 the AM and PM journey times differ by 3mins.

AM Journey Time: 0:24:04
PM Journey Time: 0:20:38

Monitor Corridor:

In 2014, AM speeds have returned to 2012 levels while PM speeds have remained stable.

The difference in bus speeds between AM and PM in 2014 is 2 kph, approximately.

AM Speeds: 12.42kph
PM Speeds: 14.05kph
Overall car journey times have decreased between the years 2010-2014. In comparison bus times had steadily increased up to 2014. The difference between Car and bus journey times in 2014 is approx. 5 mins. Bus journey time has increased by 6% in the last year while car has decreased by just over a minute.

Bus Time: 0:17:35
Car Time: 0:12:39

The Canal Cordon crossing point for the Malahide QBC is Newcomen Bridge.

In 2014, bus and car have decreased slightly by 1.1% and 2.8%, respectively. Conversely, cycle and walk have increased by 2.1% and 1.1%.

Car – 23%
Bus – 54.7%
Taxi – 4.1%
Cycle – 9.1%
Walk – 9.1%

The number of bus passengers has decreased by 0.5% since 2013.

Passengers: 7,307
5. North Clondalkin Quality Bus Corridor

Monitored Corridor – Ballyfermot Rd to Fishamble St
Monitored Section – Ballyfermot Rd to High St

Monitored Corridor:
Both AM and PM Bus journey times have increased between 2012 and 2014.

The AM journey time is nearly 5 minutes longer than the PM in 2014.

AM Journey Time: 0:46:06
PM Journey Time: 0:41:19

Monitored Corridor:
There has been a decrease in bus speeds since 2012.

2014 continues this trend for both time periods. AM and PM speeds have decreased by 3% and 5% with a time difference of 1 1/2 kph, approximately.

AM Speeds: 10.14 kph
PM Speeds: 11.45 kph
Bus journey times have increased since 2011 while car has fluctuated up and down.

Car journey time has decreased by almost 7\(\frac{1}{2}\) mins since 2013 while the bus has increased by just over a minute. Car is 5 mins faster than bus in 2014.

Bus Time: 0:43:32
Car Time: 0:38:26

The Canal Cordon crossing point for North Clondalkin QBC is Old Kilmainham.

Bus has decreased by 2.1% while car has remained unchanged in the last year. Walk and cycle have increased by 0.9% and 0.8%, respectively.

Car – 55.9%
Bus – 38%
Taxi – 1.5%
Cycle – 1.8%
Walk – 2.8%

The number of bus passengers has decreased by 8% since 2013.

Passengers: 1,525
6. Rathfarnham Quality Bus Corridor

Monitored Corridor – Rathfarnham Rd to George St / Exchequer St
Monitored Section – Rathfarnham Rd to Aungier St / Peter Row

Monitored Corridor:
Since 2011, Bus Journey Times on the Rathfarnham QBC have been increasing in the AM while the PM has decreased.

The 2014 AM Journey Time is almost 5 mins slower than the PM. AM journey time has increased by 3 1/2 mins since 2013.

AM Journey Time: 0:41:37
PM Journey Time: 0:36:42

Monitored Corridor:
Since 2012 bus speeds in the AM have decreased while PM has remained relatively stable.

In 2014, AM speeds have decreased by 9% and are approx. 1 1/2 kph slower than the PM.

AM Speeds: 8.19kph
PM Speeds: 9.62kph
Monitored Section:

Car journey times have been displaying the same increases as bus over the last four year period.

In 2014, the car journey time increased by 4% while the bus increased by 11%.

Bus Time: 0:39:14
Car Time: 0:43:41

The Canal Cordon crossing point for the Rathfarnham QBC is Harold's Cross.

In 2014, bus has increased by 3% while car and walk have decreased by 3.5% and 0.3%. Cycle has increased slightly by 0.9%.

Car – 36.9%
Bus – 37.5%
Taxi – 1.7%
Cycle – 12.8%
Walk – 11%

The number of bus passengers has increased by 10% since 2013.

Passengers: 2,732
Monitored Corridor – Stillorgan Rd / Springfield Park to Appian Way
Monitored Section – Stillorgan Rd / Sycamore Crescent to Appian Way

7. Stillorgan Quality Bus Corridor

Monitored Corridor:
The Bus Journey Times on the Stillorgan QBC Corridor steadily increased in the AM. PM times remained constant over the 4 year period.

In 2014 there was a 7 min. difference between the AM and PM journey times.

AM Journey Time: 0:35:33
PM Journey Time: 0:28:20

Monitored Corridor:
Bus speeds have been relatively constant over the 2011-2014 period with little variation in speed.

Since 2013, the difference in speeds between the AM and PM is just over 3kph.

AM Speed: 13.60kph
PM Speed: 16.81kph
Monitored Section:

Bus journey times have remained constant since 2011. Car journey times increased between 2011-2012, with a drop in 2013 followed by a rise in 2014. Since 2013, bus journey times increased by 3% while car increased by 20%.

Bus Time: 0:21:34  
Car Time: 0:25:40

The Canal Cordon crossing point for the Stillorgan QBC is Leeson St.

Car and cycle mode share have decreased since 2013 by 8.2% and 0.5% while bus and walk have increased by 6.8% and by 2.8%, respectively.

Car – 38.9%  
Bus – 40.5%  
Taxi – 2%  
Cycle – 5.6%  
Walk – 13%

The number of bus passengers has increased by 13% since 2013.

Passengers: 4,349
8. Swords Quality Bus Corridor

Monitored Corridor – Swords Equestrian Centre to O’Connell St
Monitored Section – Swords Equestrian Centre to Drumcondra Station

Monitored Corridor:

The Bus Journey Times on the Swords QBC Corridor have been relatively constant since 2011.

The AM journey time was 3 mins faster than 2013 levels. In 2014 the PM journey time was 7 mins faster than AM.

AM Journey Time: 0:55:39
PM Journey Time: 0:48:10

*No AM Peak Hour AVL data available for 2011

Monitored Corridor:

Bus speeds decreased in both the AM and PM between 2012 and 2013.

The 2014 bus speeds are 12% slower than 2013 in the PM but 4% faster in the AM.

AM Speed: 14.59kph
PM Speed: 14.42kph

*No AM Peak Hour AVL data available for 2011
**No AM Peak Hour AVL data available for 2011**

**Monitored Section:**
There has been a steady reduction in bus journey time since 2012. The car journey time has fluctuated a little more.

In 2014, there has been a 4 minute reduction in both the bus and car journey time.

Bus Time: 0:43:48  
Car Time: 0:39:02

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The Canal Cordon crossing point for the Swords QBC is Binn’s Bridge.

Since 2013, car has decreased by 0.7% while bus has increased slightly by 0.4%. Cycle has increased by 0.5%.

Car – 36.9%  
Bus – 47.6%  
Taxi – 2.4%  
Cycle – 4.6%  
Walk – 8.6%

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The number of bus passengers has increased by 6% since 2013.

Passengers: 7,645
9. Tallaght Quality Bus Corridor

Monitored Corridor – Tallaght Rd to Rathmines Rd / Military Rd
Monitored Section – Tallaght Rd to Rathmines Rd / Military Rd

Monitored Corridor:
Over the last 4 years, the Bus Journey Times on the Tallaght QBC Corridor have increased in both time periods but more markedly in the AM.

In 2014, the AM journey time increased dramatically by over 9mins compared to 2013. There was a slight decreased in the PM (<1min).

AM Journey Time: 0:45:39
PM Journey Time: 0:49:38

Bus Journey Times

Monitored Corridor:
Bus speeds have continually decreased in the AM since 2011 while PM speeds have fluctuated.

In the last year, AM speeds have dropped significantly by 20%. PM speeds have risen by 2% in the same period.

AM Speed: 9.52kph
PM Speed: 10.91kph

Bus Speeds
Monitored Section:

Bus and car performed similarly between 2012 and 2013 with both modes showing an increase in 2014.

2014 displays increases in journey time of 10 mins for bus and 30 mins for car.

Bus Time: 0:45:39
Car Time: 1:02:31

The Canal Cordon crossing point for the Tallaght QBC is Rathmines Road (Portobello).

Bus and car mode share have decreased by 3.5% and 4.2% in the last year. Cycle and walk have both increased by 2% and 6.1%, respectively.

Car – 17.5%
Bus – 43.3%
Taxi – 1.2%
Cycle – 14.1%
Walk – 24%

The number of bus passengers has decreased by 6% since 2013.

Passengers: 3,950
10. Ballymun Quality Bus Corridor

Monitored Corridor – Ballymun Rd to Parnell St
Monitored Section – Ballymun Rd to Blessington St

Monitored Corridor:
The Bus Journey Times on the Ballymun QBC Corridor have remained relatively constant in both the AM and the PM since 2012.

In 2014, there was a 3 min change in the AM journey time while the PM varied by 1 min. The journey time difference between AM and PM was 6 mins.

AM Journey Time: 0:41:19
PM Journey Time: 0:35:16

Monitored Corridor:
AM and PM Bus speeds have been increasing since 2011.

In 2014, both the AM and PM speeds have increased by 9% and 2%, respectively.

AM Speed: 11.56kph
PM Speed: 13.62kph
Monitored Section:

Car and bus journey times remained stable throughout 2012 – 2014. Although bus did decreased by 2mins in the last year.

In 2014 there was a 3min difference between car and bus journey times from 2013.

Bus Time: 0:32:18
Car Time: 0:28:28

The Canal Cordo crossing point for the Ballymun QBC is Binn’s Bridge.

Since 2013, car has decreased by 0.7% while bus has increased slightly by 0.4%. Cycle has increased by 0.5%.

Car – 36.9%
Bus – 47.6%
Taxi – 2.4%
Cycle – 4.6%
Walk – 8.6%

The number of bus passengers has increased by 6% since 2013.

Passengers: 7,645
11. Bray Quality Bus Corridor

**Monitored Corridor:**

The Bus Journey Times on the Bray QBC Corridor have been improving overall since 2011.

The 2014 AM journey time is marginally faster than 2013 (<1min). However, there is a significant difference of over 15mins between the AM and PM times.

**AM Journey Time:** 0:20:01
**PM Journey Time:** 0:35:58

*There was no PM AVL data available for 2012 & 2013*

**Monitored Corridor:**

Bus speeds have been quite stable since 2011.

The 2014 AM bus speed is 3% slower than 2013 with less than 1kph difference between the AM and PM speeds.

**AM Speed:** 18.82kph
**PM Speed:** 19.71kph

*There was no PM AVL data available for 2012 & 2013*
Bus and car journey times have remained relatively constant since 2011 with car being lower in general than bus.

In 2014, bus journey times are approx. 6 mins higher than car journey times.

Bus Time: 0:20:01
Car Time: 0:13:25

The Canal Cordon crossing point for the Bray QBC is Leeson St.

Car and cycle mode share have decreased since 2013 by 8.2% and 0.5% while bus and walk have increased by 6.8% and 2.8%, respectively.

Car – 38.9%
Bus – 40.5%
Taxi – 2.0%
Cycle – 5.6%
Walk – 13%

The number of bus passengers has increased by 13% since 2013.

Passengers: 4,349
12. Clontarf Quality Bus Corridor

Monitored Corridor: Clontarf Rd to Fairview Footbridge
Monitored Section: Clontarf Rd to Fairview Footbridge

**Monitored Corridor:**

The Bus journey time on the Clontarf Rd QBC have primarily been increasing in the AM while decreasing in the PM.

This trend continues in 2014 with only a slight difference in journey times of $1\frac{1}{2}$ mins between the AM and PM.

AM Journey Time: 0:13:26
PM Journey Time: 0:11:51

**Monitored Corridor:**

AM and PM bus speeds decreased between 2011 and 2012. Following this AM speeds have trended downwards while PM have trended upwards.

Since 2013, the AM speed has decreased by 2% while PM has increased by 1%.

AM Speed: 13:47kph
PM Speed: 14:50kph
In the last four years the bus journey time has marginally increased while the car journey time dramatically increased between 2012 and 2013.

Car journey times increased by 10% since last year. Bus has shown only a 2% increase in the same period.

Bus Time: 0:13:26  
Car Time: 0:17:29

The Canal Cordon crossing point for the Clontarf QBC is Newcomen Bridge.

In 2014, bus and car have decreased slightly by 1.1% and 2.8%, respectively. Conversely, cycle and walk have increased by 2.1% and 1.1%.

Car – 23%  
Bus – 54.7%  
Taxi – 4.1%  
Cycle – 9.1%  
Walk – 9.1%

The number of bus passengers has increased by 0.5% since 2013.

Passengers: 7,307
13. Howth Quality Bus Corridor

Monitored Corridor – Howth Rd / Station Rd to Fairview Footbridge
Monitored Section – Howth Rd / Station Rd  to Fairview Footbridge

Monitored Corridor:

The Bus journey times on the Howth QBC are quite similar in the AM and PM over the four year period.

There is <1min difference in journey time between AM and PM in 2014.

AM Journey Time: 0:17:58
PM Journey Time: 0:17:02

Monitored Corridor:

The bus speeds have decreased overall between 2011 and 2014 with the exception of a brief increase in the AM in 2013.

Both time periods speeds have decreased in 2014. AM by 8% and PM by 3%.

AM Speed: 14.58kph
PM Speed: 14.61kph
Bus journey time remains considerably lower than car journey time between 2011 and 2014. In 2014, car has decreased by 14% while bus has increased by 9%. There is an 11min difference between bus and car journey times.

Bus Time: 0:17:58
Car Time: 0:29:05

The Canal Cordon crossing point for the Howth QBC is Newcomen Bridge.

In 2014, bus and car have decreased slightly by 1.1% and 2.8%, respectively. Conversely, cycle and walk have increased by 2.1% and 1.1%.

Car – 23%
Bus – 54.7%
Taxi – 4.1%
Cycle – 9.1%
Walk – 9.1%

The number of bus passengers has increased by 0.5% since 2013.

Passengers: 7,307
14. South Clondalkin Quality Bus Corridor

Monitored Corridor – Grange Castle to Custom House Quay
Monitored Section – Grange Castle to Patrick St

**Monitored Corridor:**

The Bus Journey Times on the South Clondalkin QBC Corridor have tended to increased in both the AM and PM since 2012.

However, in 2014 AM journey time increased while the PM reduced slightly. AM and PM journey time show almost a 10min difference.

AM Journey Time: 1:12:34
PM Journey Time: 1:02:46

**Monitored Corridor:**

AM and PM bus speeds have fluctuated between 2010-2014, culminating in a convergence in 2014.

The 2014 bus speeds are 8% slower than 2013 in the AM and 1% less in the PM.

AM Speed: 13.14kph
PM Speed: 13.01kph
Monitored Section:

Bus and car journey times fluctuated over the 2010-2014 period with car journey times being marginally lower.

In 2014, both bus and car journey times have increased by $4\frac{1}{2}$ and $7\frac{1}{2}$ mins, respectively.

Bus Time: 0:58:24
Car Time: 0:54:49

The Canal Cordon crossing point for the South Condalkin QBC is Dolphin’s Barn.

Since 2013, both bus and car mode share have decreased by 0.5% and 1.3%. Cycle and walk have increased by 0.9% and 0.5%, respectively.

Car – 51.9%
Bus – 38.1%
Taxi – 2.7%
Cycle – 3.9%
Walk – .4%

The number of bus passengers has decreased by 1.3% since 2013.

Passengers: 2,293
15. Rock Road Quality Bus Corridor

Monitored Corridor – Frascati Rd to Clare St
Monitored Section – Frascati Rd to Northumberland Rd

**Monitored Corridor:**

The Bus Journey Times on the Rock Road QBC Corridor increased in the AM while decreasing in the PM during 2011-2012. Between 2012-2014 both AM and PM more or less plateaued.

This pattern means that AM journey time has improved slightly while PM has reduced slightly.

AM Journey Time: 0:35:05
PM Journey Time: 0:34:28

**Monitored Corridor:**

There was a decrease in AM bus speed between 2010 - 2011, following which speeds stabilised during 2012-2014. PM speeds increased between 2011-2012 but then stabilised.

In 2014, bus speeds converged but are 2% slower than 2013 in the AM and 1% faster in the PM.

AM Speed: 11.32kph
PM Speed: 11.32kph
Monitored Section:

Bus journey times have steadily increased since 2011 while higher car journey times remained relatively constant until 2014 where it spiked.

In 2014, both bus and car journey times have increased. Car has increased by 22% while bus shows an increase of 1%.

Bus Time: 0:26:07
Car Time: 0:33:46

The Canal Cordon crossing point for the Rock Road QBC is Mount Street.

Bus and car have decreased by 1.8% and 0.9% since last year. Cycle and walk have both increased by 1% and 1.8%.

Car – 49.8%
Bus – 23.2%
Taxi – 3.6%
Cycle – 10.4%
Walk – 13%

The number of bus passengers has decreased by 2% since 2013.

Passengers: 1,083