AMADEUS

Traffic Management Approval System for the AMA

Doris Stroh (Network Traffic Control Manager)
Auckland Motorways

- Start 1 Oct 2008 – 10 year contract to operate and maintain the Auckland Motorway network
- Led by NZTA in conjunction with Fulton Hogan, Beca, Opus International Consultants, Resolve Group and Armitage Systems Ltd
- 220 km of motorway, with some areas of 200,000 vehicles per day and over 140 structures
OBJECTIVES

We will manage and deliver the maintenance and operation of our network to:

✓ Maximising the efficiency of the motorway and wider Auckland transport network
✓ Deliver excellent service to our customers and stakeholders
✓ Create a positive legacy
✓ Deliver value for money
✓ Grow our people
Values

Core to behaviour, we will

✓ Put safety first and everything else second
✓ Recognise that we can all make a difference
✓ Be prepared to challenge ourselves and others
✓ Welcome change for the good
✓ Work hard
✓ Work smart
AMA Challenge

1. AMA – Key Performance Indicators (KPI)

Communications Team
- Customer and Stakeholder driven Organisation

Traffic Operations Team
- Optimised Throughput - Delays due to road closures (TTM)
- Optimised Throughput – Congestion
- Reliability (of travel time)
Challenges for the TMC Team

- 40 Mobile Rolling closures
- 40 Semi Static closures
- 35 shoulder closures
- 20 lane closures

Contributors:
- 3 (soon 5) Major Capital Projects on SH16
- 2 Capital Projects around Auckland
- Maintenance work from the AMA
2008

Customers
- Be informed at all times
- No Congestion due to road works
- Less closures

Contractors
- User friendly system
- Bigger working windows

TMC Team
- User friendly system
- Happy customers
- Happy contractors
What can we do?
Overview of the system

- Web-application hosted at the AMA
- Access at http://amadeus.org.nz
- Allows organisations (e.g. contractors) to place a formal request to put closures out on the AMA network
- User Based Security
- SSL Security
Welcome to Amadeus

The approval system for Traffic Management

On the left you will find links into Closures and TMPS. Across the top of the page are links to create New TMPs, and on the right are links to useful resources.

Links

- CoPTTM
- AKL traffic & CCTV
- AKL Roadworks
- AKL regional map
- EED Template
- TSL Template
- Amadeus User Guide
Different states of a TMP:

- **TMP in Draft**: Contractor drafts TMP, EED, TSL and layouts.

- **TMP Pending Approval**: Contractor submits TMP for approval.

- **TMP Approved**: TMCT reviews and approves TMP.

- **TMP Confirmed**: 1 week before earliest proposed closure TMP confirmed.

- **TMP Live**: TMP Activated by confirmed activation of a closure.

- **TMP Not Live**: When last closure confirmed as Complete TMP becomes inactive.

- **TMP Closed**: When the TMP expiry dates comes up the TMP is closed.

- **TMCT reviews TMP and declines it**: When TMP is ‘Confirmed’ Closures cannot be edited.

- **An Active TMP is one that has had a closure commence, and there are still some closures remaining**.
# Daily Programme

<table>
<thead>
<tr>
<th>TNM No</th>
<th>SH</th>
<th>Location</th>
<th>Start Time</th>
<th>End Time</th>
<th>Closure Type</th>
<th>Description</th>
<th>Contractor</th>
<th>STMS</th>
<th>STMS Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>10261</td>
<td>SH-01</td>
<td>SH-16, SH-18, SH-20, SH-20A, SH-20B, SH-22 Entire Length (both directions)</td>
<td>7:00</td>
<td>9:00</td>
<td>Shoulder</td>
<td>General inspection activities by MMA personnel</td>
<td>Auckland Motorways</td>
<td>Potte, Phil</td>
<td>027/1246 6087</td>
</tr>
<tr>
<td>24478</td>
<td>SH-01</td>
<td>All SHs Within AMA Network</td>
<td>22:00</td>
<td>5:00</td>
<td>Mobile Semi-static</td>
<td>SH-1 including SH-16, SH-18, SH-20 A&amp;B at various locations - Pavement</td>
<td>Auckland Motorways</td>
<td>Martin, John</td>
<td>027/2944 003</td>
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<tr>
<td>25545</td>
<td>SH-01</td>
<td>Fanshawe Street</td>
<td>21:00</td>
<td>5:00</td>
<td>Lane</td>
<td>Left lane closure northbound between Fanshawe Street and ramp and Curran Street on ramp to repair noise wall</td>
<td>Auckland Motorways</td>
<td>Tindal, Joe</td>
<td>027/2466 071</td>
</tr>
<tr>
<td>30048C</td>
<td>SH-01</td>
<td>Fanshawe Street</td>
<td>23:00</td>
<td>5:00</td>
<td>Close Ramp</td>
<td>Repair work on ramp northbound, SH-16, SH-18, SH-20A &amp; B part of the move, relief works, SH-16</td>
<td>Auckland Motorways</td>
<td>Tindal, Joe</td>
<td>027/2466 071</td>
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<tr>
<td>25468</td>
<td>SH-01</td>
<td>Newton Road Viaduct</td>
<td>7:00</td>
<td>7:00</td>
<td>Shoulder</td>
<td>Shoulder closure southbound between SH-16 and SH-18 - Pavement</td>
<td>MMA Newton North</td>
<td>Taitel, George</td>
<td>021/3915 1276</td>
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<tr>
<td>25129</td>
<td>SH-01</td>
<td>SH-16 between Newton Road and St Lukes</td>
<td>21:00</td>
<td>5:00</td>
<td>Close Ramp</td>
<td>SH-01 northbound to SH-16 westbound closed as part of the surfacing works - Detour to St Lukes</td>
<td>Auckland Motorways</td>
<td>Mansson, Steven</td>
<td>021/388 0011</td>
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<tr>
<td>25137</td>
<td>SH-01</td>
<td>SH-01 SB Hill Road</td>
<td>7:00</td>
<td>5:00</td>
<td>Shoulder</td>
<td>Hill shoulder southbound for surfacing works on SH-01 SB Hill Road</td>
<td>Downer EDI Ltd</td>
<td>King, Simon</td>
<td>027/489 1819</td>
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<tr>
<td>30004</td>
<td>SH-01</td>
<td>SH-01 N/B Hill Road On Ramp</td>
<td>21:00</td>
<td>5:00</td>
<td>Close Ramp</td>
<td>SH-01 N/B Hill Road on ramp closed - Detour to Manukau (Redoubt Road)</td>
<td>Auckland Motorways</td>
<td>Range, Roger</td>
<td>027/2440 0935</td>
</tr>
<tr>
<td>24478</td>
<td>SH-01</td>
<td>All SHs Within AMA Network</td>
<td>21:00</td>
<td>5:00</td>
<td>Mobile Semi-static</td>
<td>SH-1 Takapuna to Gilluss Mews - Sweeping</td>
<td>Auckland Motorways</td>
<td>Barber, Joseph</td>
<td>027/246 0935</td>
</tr>
<tr>
<td>24478</td>
<td>SH-01</td>
<td>All SHs Within AMA Network</td>
<td>21:00</td>
<td>16:00</td>
<td>Shoulder</td>
<td>SH-1 southbound between Papakura interchange and Park Estate - Pavement</td>
<td>Auckland Motorways</td>
<td>Barber, Joseph</td>
<td>027/246 0935</td>
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<tr>
<td>4935</td>
<td>SH-01</td>
<td>Between Drury and Takapuna (both directions)</td>
<td>18:00</td>
<td>6:00</td>
<td>Mobile Rolling</td>
<td>Mobiles for site access &amp; maintenance (both directions) at night semi-statics on N/B On Ramps</td>
<td>HEB Traffic</td>
<td>Harris, John</td>
<td>027/244 0626</td>
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<tr>
<td>4935</td>
<td>SH-01</td>
<td>Between Drury and Takapuna (both directions)</td>
<td>21:00</td>
<td>4:30</td>
<td>Mobile Semi-static</td>
<td>Semi-statics for emergency paving works</td>
<td>HEB Traffic</td>
<td>Harris, John</td>
<td>027/244 0626</td>
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<td>25379</td>
<td>SH-05</td>
<td>Mt Wellington Interchange</td>
<td>7:00</td>
<td>7:00</td>
<td>Signs Only</td>
<td>Signs only throughout Mt Wellington interchange for works on the local road</td>
<td>NZ Traffic</td>
<td>Van Pary, Michael</td>
<td>021/396 9133</td>
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<tr>
<td>25410</td>
<td>SH-01</td>
<td>N/B between Takapuna and Manukau</td>
<td>21:00</td>
<td>5:00</td>
<td>Close Ramp</td>
<td>Takapuna northbound on ramp as part of the total closure</td>
<td>Auckland Motorways</td>
<td>Range, Roger</td>
<td>027/2440 0935</td>
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<tr>
<td>25412</td>
<td>SH-01</td>
<td>N/B between Takapuna and Manukau</td>
<td>22:00</td>
<td>5:00</td>
<td>Total Closure</td>
<td>Total closure northbound between Takapuna and Manukau for bridges</td>
<td>Auckland Motorways</td>
<td>Rane, Roger</td>
<td>027/2440 0935</td>
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</tbody>
</table>
Traffic Operations Centre – Integration
### Traffic Operations Centre Integration

<table>
<thead>
<tr>
<th>Description</th>
<th>Contractor</th>
<th>STMS</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(#14048) Southbound lanes 1 &amp; 2 closed</td>
<td>Victoria Park Alliance</td>
<td>Kelly, Steven ((027) 289 3993)</td>
<td>28-Oct-2010 3:37 PM</td>
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</tbody>
</table>

**Note:**

- **A**
- **D**
- **N**
- **V**
## JTOC integration

### Closure Activation/Deactivation

<table>
<thead>
<tr>
<th>TMHP</th>
<th>State Highway</th>
<th>Location</th>
<th>RP</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Start Time</th>
<th>Finish Time</th>
<th>Closure</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>15329</td>
<td>SH60/O → SH16/O</td>
<td>SH-01 5/B Grafton Road Over Bridge</td>
<td>SH-01 (O) → SH16 (O)</td>
<td>Link, 01 to SH16 (O)</td>
<td>28-Jun-2013</td>
<td>06:00 a.m.</td>
<td>07:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 North Western Link to SH-01 Southbound Link Closed for crack repairs and installing new pedestrian access on the Grafton Road Overbridge. Detour for the Grafton Road Southbound On-Ramp</td>
</tr>
<tr>
<td>15341</td>
<td>SH16</td>
<td>SH-01 1/B Nelson St to Parnell St. Detour via Nelson St at Rangitoto St (both SH-16 and SH-15) and Parnell St off ramp</td>
<td>SH16 (Port) → SH15 (Port)</td>
<td>Link, 11 to SH15 (Port)</td>
<td>22-Oct-2009</td>
<td>11:00 a.m.</td>
<td>12:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 Port to SH-01 Link Closed. Detour via SH-15 to SH-16 and SH-15 to SH-16 and SH-15 to Parnell St on ramp</td>
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<tr>
<td>15361</td>
<td>SH16</td>
<td>#2014 HTS-TDM-126</td>
<td>SH-16 Port to SH-01 5/B Link</td>
<td>SH16 (Port) → SH15 (Port)</td>
<td>31-Mar-2010</td>
<td>10:30 a.m.</td>
<td>10:30 a.m.</td>
<td>Total Closure</td>
<td>SH-16 east to SH-01 northbound link closed</td>
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<tr>
<td>15497</td>
<td>SH16/O → SH16/O</td>
<td>TMP 2014 Link A</td>
<td>SH-16 150 to SH16 190 Link/Ramp</td>
<td>SH16 (O) → SH16 (O)</td>
<td>28-Jun-2013</td>
<td>06:00 a.m.</td>
<td>07:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 North Western Link to SH-16 Southbound Link</td>
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<tr>
<td>15488</td>
<td>SH16/O → SH16/O</td>
<td>SH-01 Nelson Ramp B</td>
<td>SH16 (O) → SH16 (O)</td>
<td>Link, 01 to SH16 (O)</td>
<td>28-Jun-2013</td>
<td>06:00 a.m.</td>
<td>07:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 North Western Link to SH-16 Southbound Link</td>
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<tr>
<td>15489</td>
<td>SH16/O → SH16/O</td>
<td>SH-01 Nelson Ramp B</td>
<td>SH16 (O) → SH16 (O)</td>
<td>Link, 01 to SH16 (O)</td>
<td>28-Jun-2013</td>
<td>06:00 a.m.</td>
<td>07:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 North Western Link to SH-16 Southbound Link</td>
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<tr>
<td>15490</td>
<td>SH16/O → SH16/O</td>
<td>SH-01 Nelson Ramp B</td>
<td>SH16 (O) → SH16 (O)</td>
<td>Link, 01 to SH16 (O)</td>
<td>28-Jun-2013</td>
<td>06:00 a.m.</td>
<td>07:00 a.m.</td>
<td>Total Closure</td>
<td>SH-16 North Western Link to SH-16 Southbound Link</td>
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**Auckland Motorways**

New Zealand Government
<table>
<thead>
<tr>
<th>SH</th>
<th>TP#</th>
<th>Closure#</th>
<th>Description</th>
<th>Closure Type</th>
<th>STMS</th>
<th>Actual Time</th>
<th>SCH</th>
<th>DBI</th>
<th>TOC Operator</th>
<th>Note</th>
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<tbody>
<tr>
<td>016</td>
<td>24892</td>
<td>2110646</td>
<td>Lincoln Road eastbound off ramp closure - detour via Te Atatu Road</td>
<td>Close Ramp</td>
<td>Araipu, B(ly) (021) 288 2611</td>
<td>21:25</td>
<td>21:00</td>
<td>00:25:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2110646 activated.</td>
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<tr>
<td></td>
<td>2106874</td>
<td>Total Closure between Te Atatu and Lincoln Rd</td>
<td>Total Closure</td>
<td>Araipu, B(ly) (021) 288 2611</td>
<td>22:22</td>
<td>21:00</td>
<td>01:22:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2106874 activated.</td>
<td></td>
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<tr>
<td></td>
<td>2106931</td>
<td>Te Atatu Rd westbound on ramp closed as part of total closure</td>
<td>Close Ramp</td>
<td>Araipu, B(ly) (021) 288 2611</td>
<td>22:21</td>
<td>21:00</td>
<td>01:21:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2106931 activated.</td>
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<tr>
<td></td>
<td>25172</td>
<td>2151122</td>
<td>Lane 2 &amp; 3 closure eastbound Causeway to Great North Rd</td>
<td>Lane</td>
<td>Martin, Lester (0227) 676 8894</td>
<td>19:12</td>
<td>21:00</td>
<td>02:18:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2151122 activated.</td>
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<tr>
<td>01N</td>
<td>23310</td>
<td>1903366</td>
<td>Gilles Ave northbound on ramp closed for road works - detour to Grafton</td>
<td>Close Ramp</td>
<td>Barber, Joseph (0227) 247 0663</td>
<td>19:38</td>
<td>22:00</td>
<td>02:32:00</td>
<td>Wayne Sharplin</td>
<td>Closure #1903366 activated.</td>
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<tr>
<td></td>
<td>2088263</td>
<td>Southbound LP Highway off ramp</td>
<td>Lane</td>
<td>Mansson, Stefan (021) 588 011</td>
<td>20:22</td>
<td>21:00</td>
<td>00:38:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2088263 activated.</td>
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<td>2088325</td>
<td>Northbound LP Highway on ramp</td>
<td>Lane</td>
<td>Mansson, Stefan (021) 588 011</td>
<td>20:22</td>
<td>21:00</td>
<td>00:38:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2088325 activated.</td>
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<tr>
<td></td>
<td>24942</td>
<td>2104734</td>
<td>Total Closure northbound between Papakura NPI off ramp and diamond on ramp Detour via Great South Rd</td>
<td>Total Closure</td>
<td>Harris, John (0227) 214 0126</td>
<td>21:12</td>
<td>21:00</td>
<td>02:12:00</td>
<td>Ben Paul</td>
<td>Closure #2104734 activated.</td>
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<td>24948</td>
<td>2105967</td>
<td>Papakura northbound loop on ramp closure - detour via northbound diamond on ramp or Great South Rd</td>
<td>Total Closure</td>
<td>Harris, John (0227) 214 0826</td>
<td>21:12</td>
<td>21:00</td>
<td>02:12:00</td>
<td>Ben Paul</td>
<td>Closure #2105967 activated.</td>
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<td>25164</td>
<td>2144582</td>
<td>Lane 1 &amp; 2 closure northbound between Onewhero Postbridge and the Newmarket Viaduct</td>
<td>Chicane</td>
<td>Tate, George (0221) 081511170</td>
<td>20:44</td>
<td>22:30</td>
<td>01:46:00</td>
<td>Wayne Sharplin</td>
<td>Closure #2144582 activated.</td>
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</table>
The near Future

ROAD CLOSURES & EXPECTED DELAYS
Before AMA

9pm – 5am
### CIA - Prototype

**SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB - Sun**

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Rs</th>
<th>Rp</th>
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</thead>
<tbody>
<tr>
<td>SH</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Day**
- Weekday

**Closure in Place at**
- 8:00 am Mon

**Road Cleared by**
- 8:00 am Mon

**Worst Queue Delay**
- 10.1 min/km

**Worst Site**
- SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB

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**SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB - Mon**

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Rs</th>
<th>Rp</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Day**
- Weekday

**Closure in Place at**
- 8:00 am Mon

**Road Cleared by**
- 8:00 am Mon

**Worst Queue Delay**
- 10.1 min/km

**Worst Site**
- SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB

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**SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB - Fri**

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Rs</th>
<th>Rp</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

**Day**
- Weekday

**Closure in Place at**
- 8:00 am Fri

**Road Cleared by**
- 8:00 am Fri

**Worst Queue Delay**
- 10.1 min/km

**Worst Site**
- SH 1 Market Rd Off Ramp to Greenlane East Off Ramp SB
Create Stability

**BAU**

- **Current System**
  - Variable standards of forward works planning
  - Difficult to advise customers
  - 50 – 60 closures day / night
  - Customers get stuck in congestion
  - No Value for money
  - Frustrated customer

**BLUE SKY**

- Advanced logging of closures
  - Forward works planning together
  - Customers informed in advance
  - Fewer closures
  - Planned journey
  - Value for money
  - Happy Customer

Auckland Motorways

New Zealand Government
Map View – need to change to other map
TMP 15000

SH 1 Barrier Cleaning

Sun 9/01/2011 – Thu 13/01/2011
21:00 – 5:00 Full closure
2008

Customers
• Be informed at all times
• No Congestion due to road works
• Less closures

Contractors
• Bigger working windows
• User friendly system

TMC Team
• User friendly system
• Happy customers
• Happy contractors